WELL-BEING IN EDUCATION SYSTEMS

Conference abstract book. Locarno 2017

Jenny Marcionetti, Luciana Castelli and Alberto Crescentini (Eds.)

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PREFACE

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This book collects the accepted contributions presented at the "International Conference on Well-being in Education Systems", held in Locarno on 20-21-22 November 2017 and organized by the *Center for Innovation and Research on Education Systems* (CIRSE).

The aim of the conference was to promote the discussion and the exchange of ideas between researchers, teachers and practitioners from the Swiss and the international scientific community on the topic of well-being in education systems.

The amount and the quality of contributions received and published in this book, as well as their diverse origin, confirm that this initiative has captured the interest of both the scientific and school communities.

The conference was made possible with the financial and logistic support of the *Department of Education and Learning of the University of Applied Sciences and Arts of Southern Switzerland* (SUPSI), of *Ticino's cantonal Dipartimento dell'Educazione, della Cultura e dello Sport* (DECS) and of the *Swiss National Science Foundation* (SNF).

However the entire event would not have been possible without the efforts of all the people working at CIRSE, especially the researchers and promoters Jenny Marcionetti, Luciana Castelli and Alberto Crescentini, and the help of the *Risorse didattiche, eventi e comunicazione* (REC) and the *Servizio informatica e multimedia* (SIM) of our department.

The "Introduction" describes the general structure of the book and the thematic organization of the contributions presented. Further information regarding the conference is available on the conference web site: www.supsi.ch/go/wellbeing

Enjoy your reading,

Prof. Michele Egloff
Head of CIRSE

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INTRODUCTION

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The "International Conference on Well-being in Education Systems", held in Locarno on 20-21-22 November 2017, drew on the theoretical framework of positive psychology (Seligman & Csikszentmihályi, 2000) to investigate the role of individual-context interactions in the development of individuals across their life cycle, the mutual adaptation of individuals to organizational contexts and the adaptation of organizations and education systems to social and cultural macro systems.

Well-being is meant here as the pursuit of a positive psychological state as well as the expression of human virtues and the realization of individual and social potential (Diener, 1984; McGregor and Little, 1998; Deci & Ryan, 1991; Ryff, 1989). In addition, well-being is seen as the result of a dynamic process of constant interaction between individual factors and environmental, cultural and social factors (Alvesson & Willmott, 2002; Cable & Judge, 1996; Csikszentmihályi, 1997; Mininni, Manuti, Scardigno, & Rubino, 2010; Kamdar & Van Dyne, 2007; Ryan & Deci, 2000), as well as a desirable condition for groups, organizations, communities and society.

Four keynote speakers provided the contextual and theoretical framework for the Conference, setting the scene for the contributions presented.

Emanuele Berger (Director of the school division and coordinator of Ticino's cantonal Dipartimento dell'Educazione, della cultura e dello sport - DECS) presented the perspective of a decision maker who is called on to make choices regarding the education system and hence needs constant information from the scientific research to rely on.

Fabian Gander (Post-Doc researcher at the Institute of Psychology, Diagnostics and Personality Psychology, Universität Zürich) presented a literature review on the efficacy of positive psychology interventions, showing that hard work still needs to be done to deepen our knowledge of the topic and define a suitable scientific reference frame that can be readily used.

Laura Nota (Associate Professor of developmental and educational psychology at the Department of philosophy, pedagogy and applied psychology (FISPPA) of the University of Padua) explored the relationship between well-being and inclusion, presenting

several intervention programmes aimed at overcoming school exclusion and providing well-being for all.

Michel Janosz (Full Professor and Dean of the School of Psychoeducation and of the Research group on school environment at the University of Montréal) presented his 20 years' experience in the field of research and intervention focusing on the relationship between student school experience and wellbeing.

The 70 papers collected here are research papers, theoretical dissertations and field interventions submitted by academic researchers and practitioners from 20 different countries around the world.

The selected contributions cover six areas, namely: student well-being, learning and emotions, bullying and prevention, the well-being of children with special educational needs, teacher burnout and resilience, and well-being promotion in schools.

More in detail, several research contributions investigate factors associated with student and teacher well-being. For example, life skills and negative behaviours associated with the cognitive dimension of well-being are presented in a number of studies involving students; learning abilities and academic success related to the affective dimension of well-being are presented in studies which involved both teachers and students; school alienation and aspects related to academic motivation are also investigated in relation to students' well-being.

Another group of contributions focuses on the relation between the promotion of a positive learning environment and well-being, exploring the interaction between systems and individuals: they discuss how territorial resources and social support, as well as the presence of school operators, or even a certain classroom spatial organization can improve the well-being of school actors. The association between school environment, professional identity, resilience and teacher well-being is also investigated.

A conspicuous group of papers is devoted to prevention policies and interventions on the field. Several papers address the topic of school bullying and the possible actions to prevent victimization in schools.

Finally, several contributions explore the topic of the promotion of well-being among students with special educational needs, strictly connected with school inclusion.

Although a wide range of topics has been investigated by the papers presented at the Conference, many issues still remain uncovered. Just to provide some examples: methodological aspects, political and economic implications, the mutual influence between the school environment and the world "outside" school. One goal of the conference was to build a community of thought on the subject of well-being in education systems where views and contributions are developed and can be shared over time.

Hopefully, that will promote a positive culture for the study of social contexts – including education systems – in the belief that this is a real opportunity for improving the life, educational and work contexts of individuals.

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WELL-BEING PROMOTION IN TICINO SCHOOLS

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The School of Cantone Ticino has been actively paying interest to the issues of wellbeing and health of students and teachers from many different perspectives. It is in fact important for policy makers to have soundly information to rely on, in order to take position and consequent piloting actions for the issues considered to be the most relevant.

With regards to research, the topic of well-being in education systems has been explored through several different studies. To this respect, a very significant work has been the one of the "Questionnaire on the socio-educational climate" (QES), which focuses on the topic of school climate as it is perceived by students, teachers and school personnel. The theoretical model of the study (Janosz, Georges & Parent, 1998) includes three main dimensions: the school climate, the educational practices and the socio-economic context of the school institute. In each school two different surveys are conducted: one addresses to students, the other addresses to the teachers and administrative staff. Furthermore, a working group composed by the school board members, teachers and students is created. At the end of the investigation, the school receives a detailed and yet dynamic report, where strengths and weaknesses are identified. Those data bring to a realistic picture of the school climate, and lead, in turn, towards the developing of ad-hoc projects for improving the school climate.

A similar and yet broader project, is the DAASI (in Italian "Dispositivo di Autoanalisi, Autovalutazione e Sviluppo dell'Istituto scolastico) (Pedrazzini-Pesce, F. & Tozzini Paglia, L., 2013; Berger, E. & Pedrazzini-Pesce, F., 2006; Berger, E., & Ostinelli, G., 2006; Berger, E., Ghisla, G., Gusberti, L., & Vanetta, F., 2001). The DAASI project has been conducted in various middle schools among the region, and has allowed drawing the profile of the schools involved. This kind of projects leads to a fruitful work on the identification of the strengths and weaknesses, with the aim of planning interventions to improve the actual situation. The two above mentioned projects have allowed for a "meso" level evaluation, by considering and analyzing each and one school institute and implementing actions for improving the specific situation under analysis.

However, there are other studies which propose a "macro" level approach; those studies allow to get a global overview of the situation, as, for instance, the Health Behaviour in School-aged Children (HBSC) survey, formerly known as ISPA survey. This survey is conducted at an international level every 4 years; Ticino participates to the project on a regular basis. The data collected are of relevance since allow to collect important information regarding health and wellbeing-related behaviors of youngsters aged between 11 and 15 in our region, and to follow their trajectories along time (Perrini, Tomada, Quaglia, Gianinazzi & Merlani,2012).

Another international survey that explores, among others, factors related to well-being in school is the PISA study (Programme for International Student Assessment) (OCDE, 2017). Aside data regarding students' literacy, the PISA study collects information on a more general level through the contextual questionnaire that is administered together with the test. Such information allows for a more general consideration regarding, for instance, the student sense of belonging to the school community, bullying, or the impact of physical activity on student wellbeing.

Information collected through the above mentioned surveys are regularly included in the book "Scuola a tutto campo – Indicatori del sistema scolastico ticinese" (Berger, Attar, Cattaneo, Faggiano & Guidotti, 2005; Cattaneo et al. 2010; Cattaneo, 2015) – a publication issued every 5 years which provides a global picture of the Ticino school system on various topics of interest.

More recently, within the LINEA project (which will be more precisely discussed later) the DECS has included, among others, the initiative n.2, aiming at conducting a qualitative and quantitative research project on teacher work stress and its repercussions on teachers' health conditions (www.ti.ch/linea).

Under this perspective, the Centre for Innovation and Research on Education Systems (CIRSE) has been appointed to conduct a research on the topic of teacher well-being. Researchers have investigated the issue by administering questionnaire to the whole population of teachers of all grades, and discussed the results through face-to-face interviews. This study, of which some results will be presented within the conference, is of high relevance from a political perspective, since it allows having specific information regarding the situation of our teachers.

In previous paragraphs I have recalled several research projects conducted in the field of health and well-being at school. Collecting evidences is fundamental. More than that, the use that politicians and decision makers make of research results is crucial. It is in fact essential that results emerging from researches are used as a tool for guiding education systems. To this respect, is it relevant to mention the various initiatives implemented by the DECS in order to enhance well-being in the Ticino school system.

The Forum salute e scuola (Forum for health and school), was born in 2003 in collaboration with the governmental unit for health and society (Dipartimento Sanità e Socialità, DSS), and aims at promoting networking between school and public health operators, in order to identify shared guide lines to address, assess and support the promotion of health and prevention among schools. Within the Forum, several interesting initiatives started, as for instance the Carta della promozione della salute nella scuola (the charter for health promotion in school), which was created in 2005 and updated in

2016. Furthermore, the Forum committee adopts every four years its own guidelines (Forum per la promozione della salute nella scuola, 2016), in order to address the forthcoming quadrennial activity.

Other projects emerging from the Forum activity are strictly connected to affectivity and sex education, with a group specifically working on this issue, the Gruppo di lavoro per l'educazione sessuale nella scuola (GLES). The GLES is an interdepartmental group composed by representatives from this area of interest and from the bodies responsible for sex education at school. The GLES has developed the guidelines for sex education in schools and, at the same time, has drawn attention to teacher training and to the family-school relations.

Then, the GLES has addressed its attention towards the development of didactical materials, through a specific publication in 2015 (Divisione della scuola, 2015). The book is an interdisciplinary text that develops relevant topics of the general education and specific transversal skills. It represents an appropriate tool for implementing a skill-oriented didactical approach, as recommended by the actual curriculum of Ticino compulsory school. Under this perspective, the TES group (Team per l'Educazione alla Sessualità e all'affettività), composed by teachers from different school sectors and health and social workers specifically trained for the purpose, is available for school and teachers, to accompany them in planning and implementation of affectivity and sex education classes in schools.

A second initiative to which the Forum has successfully contributed is the creation of a working group for the assessment and evaluation of projects for health and well-being in schools.

The group, is composed by representatives from the DECS and the DSS, and has developed an assessing procedure that allows verifying to what extent projects implemented in schools respond to criteria and needs of the school system for the promotion of health and well-being in schools. Through such a procedure (which submits the projects to several standardized criteria), the group can produce evaluations and orient the decision making process of school actors, allowing proponents to adapt and improve their projects at the same time.

Another initiative worthy of interest is the one known as Rete cantonale delle scuole che promuovono la salute - Ticino. The network has been promoted in Ticino by Radix Svizzera Italiana (within the Rete svizzera delle scuole che promuovo la salute e la sostenibilità - Rete Scuole 21), and aims at promoting schools as a place where students live and relate to others, where self-confidence and the confidence in one's psychosocial skills are enhanced. School institutes interested in being included within the network, receive support in planning and organization of their project; financial support is also provided. Furthermore, they can participate to meetings and workshops organized at a regional and national level.

As already anticipated, the DECS furtherly proposes initiatives specifically dedicated to teacher well-being. The LINEA project (Laboratorio per INsegnanti per mantenere e /o recuperare l'Energia e consolidare l'Empatia tra i diversi attori attraverso l'Ascolto e l'Accompagnamento) was born in 2013 after the report of the project "Sostegno ai docenti in difficoltà" has been published by the DECS. The four operating groups of the

project proposed ha final report where 14 initiative were proposed in order to prevent teacher stress and promoting their wellbeing. Eleven of the 14 initiatives have been approved by the State Congress. From that, projects of prevention, awareness, education, research and support to teachers started.

It is yet a very important project for the Ticino school system, since its main purpose is to address the issue of teacher work stress. Bringing up those issues is in fact still a taboo, and is of great importance to pay attention to it, in order to provide teachers of the appropriate tools to prevent and cope with the occurring difficult circumstances.

School is a vast and complex organism composed by various organs and parts, which need to be constantly monitored, trough research, and cured and cultivated with development initiatives. In this paper the main initiatives undertaken by the Ticino school system have been presented, with the intent to show how much importance is given to the promotion of health and well-being in school.

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Progetto LINEA www.ti.ch/linea

POSITIVE PSYCHOLOGY INTERVENTIONS: ARE THEY EFFECTIVE FOR INCREASING WELL-BEING?

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Positive psychology interventions are "[…] treatment methods or intentional activities that aim to cultivate positive feelings, behaviors, or cognitions" (Sin & Lyubomirsky, 2009; p. 468). Since the advent of positive psychology, research in such interventions has steadily increased. Due to two independent meta-analyses (Bolier et al. 2013; Sin & Lyubomirsky, 2009), the effectiveness of these interventions for increasing well-being and ameliorating depression is now well-established. However, *when* (i.e., under what circumstances and for whom) and *how* (i.e., involved working mechanisms) such interventions work, is still largely unexplored.

Although research efforts in positive psychology interventions have flourished in the last couple of years, research within positive psychology did not start from scratch, but built up on several earlier important contributions. Michael Fordyce (1977, 1983) was among the first to empirically study such interventions. Fordyce's idea was as simple as brilliant: He started by studying how happy people differ from less happy people. In this process, he came up with a list of fourteen such characteristics and instructed people to adapt them. These characteristics ("14 fundamentals") consisted of short goals, such as "spend more time socializing" or "become present oriented" (Fordyce, 1983). In a series of seven experimental studies, Fordyce (1977, 1983) varied the degree of involvement with these fundamentals (e.g., just providing information on the fundamentals vs. instructing participants to conduct activities) or the content (i.e., comparing the full program with interventions that trained a subset of the fundamentals). Fordyce (1983) concluded that "[...] the program has a noticeable and perhaps long-lasting effect on happiness" (p. 483). Fordyce's studies provided initial invaluable insights into positive psychology interventions: Happiness can be deliberately increased, and addressing happiness directly and on purpose is an effective strategy for increasing it (contradicting the widespread notion that seeking happiness directly is detrimental; e.g., Martin, 2007).

Unfortunately, only few studies continued Fordyce's endeavor for the next decades. Around the beginning of the new millennium the interest in this area was rediscovered and researchers began developing and testing interventions aimed at increasing well-

being again. Among the most famous, was King (2001) who instructed participants to write about their best possible future self and their life goals and compared this instruction with writing about upsetting events. Whereas both instructions decreased illness, only the positive writing instruction led to an increase in well-being. Emmons and McCullough (2003) instructed participants to write down five things they were grateful for in the past week ("counting blessings") and compared this with conditions in which participants wrote down five hassles or five neutral events. Results showed, compared to the other conditions, an increase in well-being in the gratitude condition.

With the availability of the Internet, new possibilities for intervention studies emerged. Seligman et al. (2005) conducted a seminal study and tested five positive psychology interventions in a randomized, placebo controlled online intervention study. Three of these interventions lead to positive effects for well-being and depression compared with the placebo control condition (i.e., writing about early childhood memories). These interventions were the "gratitude visit" (i.e., writing and delivering a letter of gratitude to someone who they have not properly thanked so far), "three good things" (i.e., writing down three good things and why those things happened), and "using signature strengths in a new way" (i.e., participants completed a questionnaire on character strengths, received a feedback on their top five strengths, and were then instructed to use one of these strengths in a new way). These one-week exercises lead to long-lasting positive changes (for up to six months) in well-being compared to the control condition. These findings have since been replicated by two independent research groups (Gander, Proyer, Ruch, & Wyss, 2013; Mongrain & Anselmo-Matthews, 2012), and stimulated numerous further studies in this area.

Existing interventions so far cover a wide area of topics, and formats. Several interventions have been developed that are based on training specific characteristics, such as gratitude (see above), optimism ("another door opens": writing about a negative event that had unforeseen positive consequences; Gander et al., 2013), kindness ("counting kindness": counting self-performed kind gestures; Otake et al., 2006), or humor ("three funny things": writing down the three funniest experiences of the present day; Gander et al., 2013). Whereas a large amount of research has been conducted on such self-administered interventions (i.e., performed without guidance of a psychologist), other formats have been developed as well, such as group-based programs that additionally use group-based exercises and discussions (e.g., Proyer, Buschor, & Ruch, 2013), while also clinical programs exist (e.g., Positive Psychotherapy, Rashid, 2015).

Based on the meta-analyses and several single studies we already know to some degree *when*, that is, under which circumstances and for whom, such interventions are effective. For example, interventions are most effective when delivered as individual therapy, followed by group-based programs, while self-administered interventions yielded the smallest effects. Further, longer interventions are more effective, although some studies suggest that a high variety in the exercises is important (see also Sheldon & Lyubomirsky, 2012) since simply prolonging the duration might event destroy potentially positive effects (Gander et al., 2013). With regard to participants' characteristics, effectiveness increases with participants' age, their level of depression (Sin & Lyubomirsky, 2009), and their intelligence (Proyer, Gander, Wellenzohn, &

Ruch, 2016). Although most of these moderating effects have been found repeatedly across studies, they are usually rather small in size and do *not* speak against the general use of these interventions.

Largely unresolved is the question *how* positive psychology interventions are effective in increasing well-being. Numerous "candidates" for working mechanisms have been suggested, most importantly, the elicitation of positive emotions (Cohn & Fredrickson, 2004). Several studies support their importance in positive interventions (e.g., Fredrickson et al., 2008). Lyubomirsky and Layous (2013) suggested a framework for potential working mechanisms (and moderators) of positive psychology interventions assuming that changes in well-being are mediated by positive emotions, positive thoughts, positive behaviors, and need satisfaction.

An additional working mechanism that has received empirical support is a shift of attention: Exercises such as writing down three funny things on a daily basis might lead to an increased focus on positive experiences during the following days (Wellenzohn, Proyer, & Ruch, 2016). Overall, the knowledge on working mechanisms is still very limited and no theoretical model accounting for the empirical findings that also allows for the development of new interventions has been developed yet.

One specific field of application is the educational context. Several programs have been developed within positive psychology (and also integrating several exercises, as described above), focusing on several positive characteristics, such as hope, gratitude, or resilience (for an overview see Shankland & Rosset, 2017; Waters, 2011). One such program is the *Penn Resilience Program* for students between 8 and 15 years that aims at promoting optimism and other positive characteristics that are expected to increase resiliency and help students to handle daily stressors and problems. This program was found to prevent symptoms of depression, anxiety, or behavioral problems (Gillham et al., 2006).

Finally, several programs have been developed and evaluated that focus on promoting individual character strengths (see Linkins, Niemiec, Gillham, & Mayerson, 2015) or aim at fostering those character strengths that are considered relevant in the classroom (Wagner & Ruch, 2015). Examples for strengths-based school programs are the *Strathhaven Positive Psychology Program* (Seligman et al., 2009), and others (e.g., Madden, Green, & Grant, 2010).

Overall, results of empirical investigations on the application of positive psychology interventions in schools are optimistic, although it might be too early for a general conclusion on the effectiveness of positive psychology interventions in schools, since only few controlled studies have been conducted so far and there is a large diversity with regard to contents, samples, and assessed outcomes.

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INCLUSION AND WELLBEING IN SCHOOL FOR ALL

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Children and youth of the Twenty-first century live in a society characterized by rapid economic and technological changes, the so-called 'knowledge society', or 'information society' because of the substantial production and distribution of information. They live in contexts characterized by complexity and heterogeneity, and the sociologist Vertovec (2007; 2010) coined the concept of super-diversity referring to some current levels of population diversity, due to a plot of variables associated with nationality, ethnicity, language, religion, migration paths, disability, etc., that are significantly higher than before. School contexts are representative of this social heterogeneity and complexity, and similarly to social contexts, this variability should be respected, valued, and recognized as a resource and strength (Nota, Ferrari, Sgaramella, & Soresi, 2016).

Although the advantages of such heterogeneous school contexts are now known, phenomena of micro- and macro-exclusion and victimization against individuals with disability and vulnerability (e.g., members of ethnic and racial minorities, low socio-economic status, migration, etc.) are still occurring (Foster & Wass, 2013). Research consistently shows that being placed in an integrated classroom does not guarantee that students with disabilities will be accepted, valued and included (Nota, Ferrari, & Soresi, 2005; Ostrosky, Mouzourou, Dorsey, Favazza, & Leboeuf, 2015).

Children's negative attitudes toward peers with disability have been widely documented in preschool, elementary and secondary school settings (Lindsay & Edwards, 2013). Additionally, the duration of inclusion (the number of school years of a student with disability in the same school environment) does not seem to favor satisfactory relationships with typically developing classmates: the acceptance level tends to decrease over time and, in any case, to remain low even after long periods of inclusion. This condition can be considered as suffering from social inequity and addressed in the literature as a "minority issue". It is associated, in fact, with a limited sense of belonging, a perception of limited support, experiences of stereotyped interactions, longer periods needed to manage university life, and discomfort. An issue of "bias in concentrations" arises in some higher education contexts, particularly within some environments where

more homogeneous groups of individuals are openly welcome. This is what happens in more scientific contexts where even more consistent under-representation of diversities and disabilities is reported (Harvard University, 2015).

Based on this, the provision of inclusive and accepting social climates within school contexts is necessary to decrease the likelihood that students with disability and vulnerability will be socially excluded from their peers. Children and youth with disability and vulnerability often miss out on classmate relationships and are excluded from experiences on which a sense of inclusion and belonging is constructed (Witten, Kearns, & Carroll, 2015). From this point of view inclusion as central to the wellbeing of individuals and society (Curtis, 2004). There is in fact ample evidence of a strong relationship between inclusion and wellbeing, that people in more equal and socially inclusive realities are better-off and report greater amounts of wellbeing than in more unequal ones where status competition is particularly pronounced (Wilkinson & Pickett, 2010).

One key strategy for improving inclusive environments is through school interventions aimed at promoting opportunities for interaction and social reflection and at developing a range of skills and attitudes useful for living in complex and heterogeneous contexts. Among these skills, we can include flexibility, ability to recognize and respect diversity, ability to embrace culturally appropriate strategies that honor the dignity and uniqueness of each person, ability to avoid personal biases and prejudices, ability to accept uncertainty, creativity, and knowing how to dialogue with and confront others (Nota, Ginevra, & Santilli, 2015). A systematic review of disability awareness interventions for children and youth (Lindsay & Edwards, 2013) found 42 programs published from 1980 to 2011 aimed at improving children's knowledge about and attitudes toward peers with a disability or vulnerability. The number and type of components involved in the interventions varied greatly: presentations, academic/curriculum based, stories, video, movies, simulations, role-playing, discussions, etc.

All this clearly highlights the richness of ideas, suggestions and actions that could be realized to improve inclusive environments within classrooms. Different interventions may be in fact implemented to enhance the awareness of diversity and heterogeneity in school environments, to improve knowledge, attitudes and acceptance of people with disability and vulnerability, and to give value to the unicity of each classmate. Furthermore, interventions may be implemented to promote social skills and ability to initiate and maintain positive social relationships with different classmates, despite the wide variety of difficulties and vulnerabilities (Lemos & de Minzi, 2014). Lastly, interventions could be realized aimed at favoring positive and hopeful attitudes in overcoming problems and difficulties that can be experienced in heterogeneous and complex situations.

Among these programs, we would like to mention *"Good Actions"* (Nota et al., 2016) for kindergarten children. The program aims at enhancing the ability to highlight peer differences; the ability to emphasize their own strengths and those of others (with or without disability); the ability to involve, help and support peers; and the ability to rely on their own positive aspects to establish positive relationships. With primary and secondary school children the training "*Collaboration, help, and solidarity: Three ways to have a better time together*" (Nota, Ginevra, & Soresi, 2015) structured over ten two-hour didactic units can be implemented. The aim is to highlight diversity within the class,

increase positive attitudes toward classmates with disability, thus favoring school inclusion of classmates with intellectual disability and of all the diversities in the classroom in line with the International Classification of Functioning. Finally, for university students, we think the course *"Human Rights and Inclusion"*, carried out in 2016/2017 at the University of Padua, is certainly worth mentioning. This is a cross-disciplinary course for bachelor and master students developed to promote greater awareness of diversity, human rights, the importance and benefit of an inclusive society and how different professionals can contribute to inclusive contexts.

Alongside students, teachers should be also involved in order to improve inclusive environments (Yu et al., 2016). According to UNESCO guidelines (2005), special attention should be paid to ensure that teachers and professionals are trained to be sensitive to individual and cultural differences and able to act in contexts characterized by diversity, plurality, heterogeneity and complexity. It is crucial that teachers are taught to acquire skills, competences, knowledge, tools, but also attitudes and values that are useful to building an inclusive community. It is important to act with teachers in order to encourage positive attitudes toward students with disability and vulnerability, especially because their attitudes influence the quality and quantity of their interactions with students and the support they provide to their learning. Their attitudes may encourage discrimination and stereotypical attitudes toward students with disability and vulnerability, facilitate school drop-out, and thus affect the wellbeing levels of their students (Hunt & Hunt, 2000). It is important also to increase teachers' knowledge about the strengths and social skills of their students with disability and vulnerability, and discourage massive attention to their deficits. Lastly, teachers should be trained to value the individuality and uniqueness of each student using personalized actions; to look at diversity as a treasure and not as a threat to be protected from; to enhance individual differences and different cultural traditions and use them as a guide to build school activities; and above all to be agents of change in favor of inclusion. In this regard, they should be 'inclusive sentinels' in defense of individuals' rights and wellbeing, acting to alert contexts (e.g., health, education and training, labor and social participation) and ensure that they take care of unfavorable events and of the threatening approach of "enemies" and negative circumstances which might undermine individuals' right to wellbeing, to self-determination, to inclusion, especially of those who are more vulnerable and more greatly at risk of marginalization (Nota & Soresi, 2017).

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THE SCHOOL SOCIOEDUCATIONAL ENVIRONMENT MODEL: BACKGROUND, UTILITY AND EVOLUTION

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Background

For more than 20 years, with the help of colleagues and students, I have asked myself, «how does the schooling experience contribute to the development and well-being of children and adolescents»? In the early 90s, I was working as a psycho-educator in a secondary school to help prevent and reduce drug use, school violence and dropout. Psycho-Education is a discipline that emerged in the province of Québec (Canada) in the early 70s (Gendreau, 1978). Along many things, this discipline recognized that child and adolescent social maladjustment are the results of an interaction between the child personal potential of adaptation and the educational potential of its environment (family, school, etc.), which refers to the capacity of the environment to meet the child developmental needs. This transactional and ecosystemic view of human development is common nowadays. Hence, two major observations stroke me at the time as a young psychoeductor, and motivated my decision to pursue an academic career. First, in the eyes of the principal or the teachers, the problem has always seemed to lie within the student (he or she is lazy, not motivated, etc.) or within the family. Second, when searching for instruments that could help diagnose the strength and weaknesses of the school, I was left with nothing satisfying. There was no instrument validated in French and the existing questionnaires suffered, from my point of view, of major conceptual and operational flaws: school climate, educational practices and school problems were treated indifferently, all lumped together within different scales. I felt that these concepts needed to be intellectually clarified. Moreover, the practitioner in me needed an evaluation tool that would help identify more clearly the target for change in the school environment.

The socio-educational model and the socio-educational questionnaire (SEQ)

Our goal with the development of the SEQ was to better understand the role of the school environment in the school and social adjustment of students so that effective

educational practices and strategies may be implemented (Janosz, Georges & Parent, 1998). Hence, we focused on understanding and assessing the educational potential of the school environment. In our view, the educational potential of an environment depends on its ability to meet children's developmental needs. To meet these needs, the environment must first ensure the protection and safety of the children so that they may use their personal resources to take advantage of the learning opportunities presented to them. Then, the school must offer stimulating learning activities (academic, cultural, physical and social). It must supervise student learning and behaviors in order to regulate its educational intervention, as it needs to provide the necessary support for all students to achieve success. Finally, the school must make sense, meaning (the Five S principle). It is the meaning that students attach to school that will support the effort required to learn and behave. Lastly, the school must be a place that facilitates social integration allowing students to meet their needs for attachment and interpersonal relations, to bond with peers and other significant adults and develop their social and life skills. The SEQ was built to assess the school educational potential but also to guide intervention. This is why we thought it was important to clearly identify components of the environment that were more easily modifiable by interventions. Hence, we proposed to disentangle the socioeducational environment in three major components: the school climate, the organizational and educational practices, and the diversity and intensity of problems experienced by students and teachers. School climate reflects the descriptive norms, that is the perceptions of what is commonly done by others in a specific setting or situation and consequently guides organization members' interpretation of situations and orients their actions. By reflecting the school's values, norms, and expectations, school climate communicates the environment's normative expectations of individuals. School members are socialized within a specific climate and internalize organizational standards. We, furthermore, proposed to look at different aspects of school climates, as we hypothesized that norms can vary according to different aspects of the school experience: relation (or social) climate, educational climate, climate of safety and order, climate of fairness and climate of belonging. However, school climate is not so tangible nor directly under the control of teachers and educators, as it relies on broad impressions and feelings. Organizational and educational practices refer to what people actually do in schools. They can shape or operationalize school climate, but more interestingly, they can be the targets of intervention for organizational change. Moreover, what principals and especially teachers do is expected to affect more directly the students. The SEQ measures multiple practices: the support and guidance system (clarity and implementation of rules, consistency in the application of rules, supervision of student behaviors), classroom management practices (behavior management, teaching, time on task); support for at-risk students and beliefs of teachers of students teachability; opportunities for extracurricular activities; student involvement in schools decision-making; school-family and school-community collaboration, principal leadership, teachers team work and openness to change. Finally, the SEQ seeks to estimate the diversity and the intensity of the problems students, and to some extent teachers, experience in the school. The portrait of the school problems relies on the perceptions of students and teachers of the frequency of several indicators of minor and major school violent behaviors, on the fre-

quency of victimization (by students or teachers), on the gangs' presence and behaviors, on drug accessibility, etc.

Utility

The SEQ has been used for research and intervention purposes. Regarding research, the SEQ has been used, for example, to demonstrate the multidimensionality of school violence. In a transcultural study (Janosz, Pascal & Galand, 2012), we showed that exposition to school violence was better explained when combining indicators of witnessing (perception of violence), of victimization and of perpetuating violence (aggression). We also showed the specific importance of perception of violence, of witnessing violence in school (Janosz et al., 2008; submitted). In a first paper, we demonstrated that witnessing violence frequently at the beginning of 7th grade, controlling for victimization and aggressiveness, predicted, at the end of the school year external behavioral problems and student engagement. Interestingly, it did not predict internalizing problems or school grades. In an ongoing paper (Janosz et al., submitted) we show that witnessing school violence in Grade 8 predicts psychosocial and academic impairments two years later beyond victimization and other confounders. Witnessing covert and major violence primarily predicts externalizing problems. Witnessing minor violence primarily predicts internalizing problems and student engagement. Again, we found no effect on student achievement. There are many studies reporting a link between the school environment and externalizing problems, but much less with internalizing problem behaviors. In a large-scale multilevel prospective study (Brière, Pascal, Dupéré & Janosz, 2013) we found that school-level socioeducational environment in grade 8 was predictive of student depressive symptoms in grades 10 to 11, even after adjusting for potential school and individual confounders. Other school level factors, including school size, were not predictive of depressive symptoms once socioeducational environment was taken into account. We also investigated the relations between school climate dans dropout. In a one-year longitudinal study, we observed that social climate between students; educational, security and climate of belongingness were the dimensions of climate best predictive of school dropout (Archambault & Janosz, 2006). The SEQ was also used to study the influence of teachers' beliefs. In a 2-years multilevel longitudinal study (Archambault, Janosz & Chouinard, 2012). We found that the perception of secondary school teachers about students teachability (their capacity to succeed), predicted student achievement but not cognitive engagement. More recently. We demonstrated in a multilevel study that school educational climate and student school composition were the best predictors of teachers' beliefs of students teachability (Brault, Janosz & Archambault, 2014). The SEQ is also used for intervention. It has been extensively used to assess the quality of the school environment by French-Canadian schools, but also with some adaptation, by secondary schools in France and Switzerland. Following an intensive training of four days in average, and using the graphic and table results provided by a web-based survey completed by students and school staff, school practitioners can analyze the quality of the school socioeducational environment. There is a secondary and a primary school version of the questionnaire. The SEQ can be used at the beginning of

a process of school improvement plans to establish a baseline measure and portrait on the initial situation. It can also be used to assess change over time after interventions. At a more macro level, like a school district, it can be used to identify schools that may need additional support. In a 6-years large-scale longitudinal evaluation study of a governmental program to improve school success in secondary schools from disadvantaged communities, we found that the use of the SEQ was associated with improvement in school climate and reduction of school violence (Janosz et al., 2012).

Evolution

After 15 years of use and experiments with the SEQ, time has come to revise the instrument and for more theoretical elaboration. Although the tridimensional model of climate, practices and problems is very well received by practitioners and easily understood, we have failed to empirically establish the independence of those dimensions. For example, and without any surprise, educational climate, teachers' classroom practices and student motivation are correlated; as security climate, school rules and student violent behaviors are (Janosz et all, 2011). A structural equation model of school environment more closely linked to our Five S principle appear more empirically valid than our initial 3 dimensions structure. At the present time, in our research activities we now tend to use aggregate indicators of the school environment, according to the question of interest. Nevertheless, our attempts with practitioners to move towards more integrated conceptual measures have not been very successful; they like the distinctions between climate, practices and problems because it is easier to pinpoint modifiable determinants. Furthermore, we recently developed shorter versions of the SEQ (60-80 items, 30 minutes) in response to the critics of the time-consuming original version (150-200 items, 60 minutes). Finally, the work done with the SEQ helped us to elaborate an integrated multilevel and developmental theory of school dropout and perseverance (Janosz, 2010).

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STUDENT WELL-BEING

THE SUBJECTIVE WELL-BEING OF PRIMARY SCHOOL CHILDREN

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Introduction

At the Zurich university of teacher education, prospective teachers attend a course on research as part of their curriculum. This course enables students to gain an understanding of scientific research by identifying relevant research questions, applying an exemplary scientific research method and discussing results in the context of relevant literature and their own practice experiences in schools.

Under the heading «The subjective well-being of primary school children», students in our course apply «Photovoice» (see below) to find out more about the well-being of primary school pupils.

Well-being at school is important to a child's quality of life and a potential factor for motivation and learning outcomes (Hascher & Lobsang, 2004, Hascher & Hagenauer, 2011, Gysin, 2017). By choosing this topic we hope to raise the students' awareness of the importance of well-being in education and of potential factors that improve well-being.

The course has been running for four years and has so far involved approx. 80 prospective teachers and 80 primary school children.

Research questions

The research project aims at answering the following questions: What do primary school children understand by «well-being»? When do they feel well in general? When do they feel well in school? What do they need to feel well and what do they do to achieve it?

Method

The students apply «Photovoice» (Wang & Burris, 1997), a qualitative method that enables participatory research and is well suited to children. Children get actively involved by taking pictures which are later used as stimuli in interviews. This method enables

children to illuminate their own perspective on well-being and allows students to gain insight into this perspective and to reflect on their own preconceptions concerning pupils' well-being.

As part of the research process, the students research, read and discuss literature on children's well-being and on research methods that are suited to children (with focus on photovoice). After specifying the research questions they equip the children with single-use cameras and instruct them to take approx. 15-20 photos of situations when or where they feel well. The students then develop an interview guide (Helfferich, 2014) based on their research questions and the photographs and carry out individual interviews with the children. The transcribed interviews are analysed through thematic analysis methods (Braun & Clarke, 2006). Based on the results, the students then discuss implications for their own teaching practice and school health promotion.

Results

The students document their research process in a report (unpublished) and present it at our university.

The research of our students shows that children see three major domains contributing to their well-being: locations (e.g. nature, sports grounds, garden, classroom, their own room at home), relationships with people (family members, relatives, teachers, peers, friends) and sometimes with animals, and certain activities (playing, doing sports, working for school, shopping, hanging out with friends etc.). In addition to these rather obvious results the students could identify certain recurring themes in the interviews. These themes connect the favourite locations, relationships and activities to the fulfilment of certain individual needs: the need for belonging and relatedness, for trust and security, the need to experience competence and success as well as the need for autonomy and justice. Children are looking for fun and challenges, but sometimes also for peace and quiet. Some interviews also show that children feel well if they experience their daily activities as meaningful and if they have a vision of the future. Referring to the school setting, pupils cite positive interactions with teachers and peers, interesting tasks and fun in the classroom and success in learning as conducive to positive emotions in school. Additional factors mentioned concern the school climate (e.g. no bullying) and the school environment: the building, the classroom and the school grounds can make the children feel welcome and safe and allow activities and interactions that support their well-being.

These results are in line with relevant psychological theories, e.g. self-determination theory (Deci & Ryan, 1993), self-efficacy (Schwarzer & Jerusalem, 2002) and with many of the results found in relevant studies (e.g. Hascher & Lobsang, 2004, Hascher & Hagenauer, 2011, Gysin, 2017, Hurrelmann et al. 2013, Marent & Marent, 2013, Sixsmith et al., 2007). They also mirror a biopsychosocial and salutogenetic approach to health and well-being (Antonovsky, 1997).

School can play an important part in fulfilling these needs and thus contribute to the well-being of children.

In their conclusion the students relate the results to health promotion principles and strategies that they have studied in an earlier course.

Our poster will present methods and results on two levels:

– Researching the subjective well-being of children through « Photovoice »: How do the students apply this method? What are their main results? How do the findings fit in with the current state of research and the prospective teachers' preconceptions of children's well-being?

– Teaching students about researching the subjective well-being of children (and research in general): What are the experiences of the students in the research process? What goes well and what obstacles do they face? What do they learn about research on the one hand and about the importance of well-being in education for their teaching practice on the other?

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RESILIENCE, ANXIETY AND SCHOOL BURNOUT: ACADEMIC STUDENTS IN ITALY

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Introduction

Academic students' life dramatically changes from school to university experience in terms of new challenges they have to face. The university context could exert problems and difficulties for several students (De Beni, Zamperlin, Fabris, & Meneghetti, 2015). For example, it is very common to be anxious over tests and exams, especially in the Western culture, where being able to pass exams represents the main condition to secure a career. Although low anxiety levels are related to better performances (Lader & Marks, 2013), too much anxiety and stress can compromise the academic path of students and the realization of their goals. Maslach (1997) showed that anxiety and fear are the two main negative emotions that contribute to the onset of burnout, defined as a state of physical, mental and emotional exhaustion due to an improvement in emotionally demanding situations (Pines & Aronson, 1981). More specifically, anxiety predicts the rise of burnout syndrome, above all with regard to emotional exhaustion (Richardsen, Burke, & Leiter, 1992). Despite burnout is typically referred to helping professions, like teacher, nurse or social worker (Jackson, Schwab, & Schuler, 1986), latest research in this field has focused on academic burnout. Academic burnout can be defined as a tridimensional construct composed of emotional exhaustion, detachment and feeling of inadequacy as a student (Schaufeli et al., 2002). Palacio and colleagues (2012) showed that several factors could predict the rise of academic burnout: for example, bad relationships between student and teacher, no feedback from peers, competitiveness and conflicts. Coherently, some studies (e.g., Santen et al., 2010) reported that first-year medical students are usually at risk for burnout, above all with regard to emotional exhaustion and depersonalization levels. Moreover, these students are shown to reach higher levels of risk and symptoms during their academic career (Santen et al., 2010). The risk of burnout was higher in stressed-out students, with less control of their life and less support (Santen et al., 2010). On the contrary, when students are more engaged in academic context and perceive more social support they show higher resilience and coping abili-

ties (Dyrbye et al., 2010). Resilience has a main role in overcoming particular adverse conditions that may occur in academic context. Students have to manage different challenges and tasks during their university career and can experience failure and sense of frustration; the possibility to count on personal resources, like resilience, allows reading the setbacks in a positive way. Resilience is characterized by an amount of capability and skills that, interacting with each other, allow to face and overcome adversity and stressful situations (Rutter, 1993). There are several factors that can determine resilience: intra-personal factors (optimism, creativity, and correct coping strategies) and interpersonal variables, like the levels of perceived social support. An effective stress reaction is not only due to a single process, but is the result of a dynamic interaction between coping strategies, personality traits, social support and a biological reactivity genetically determined (Tusaie & Dyer, 2004). Recently, Martin (2013) has made a distinction between "academic buoyancy", the capability to face everyday challenges that happen in academic context, and "academic resilience", that allow dealing with acute and chronic adversities that can complicate the education and the development of each student.

Objectives

Existing studies show that university students are at risk for developing academic burnout (e.g., Santen et al., 2010). With this regard, anxiety seems to act as a risk factor for developing emotional exhaustion, detachment and inadequacy, while resilience may act as a protective factor against the syndrome. This study aimed to verify which factors are associated to and explain burnout of university students. More specifically, the study aimed to:
1. Verify whether students resulted at risk for burnout.
2. Verify the association among age, gender, burnout, anxiety and resilience;
3. Verify whether age, gender, anxiety and resilience explain academic burnout.

We expect anxiety and burnout to be positively associated and resilience and burnout to be negatively associated. Consequently, we expect anxiety and resilience to explain burnout levels, with opposite directions.

Methodology

Participants and Procedure

Two hundred and sixty-nine Italian university students (F=79.6%) were involved in the study. Overall students' age ranged from 19 to 38 years (M=23.5, SD=2.36). Participants studied various disciplines, in universities from Northern (16.6%), Central (70.2%) and Southern (13.2%) Italy. Participants were asked to anonymously complete an online form on Google Modules. Overall, the study was presented as aiming to identify which aspects of everyday academic life may reduce students' wellbeing. Each scale had a brief description, which included instructions to answer. In case of need, a researcher's e-mail address was provided.

Instruments

Two questionnaires were administered:

1. School Burnout Inventory (SBI; Salmela-Aro et al., 2009; It. tr. By Fiorilli et al., 2014), which measures academic burnout with nine items evaluated with a 6-points Likert scale (1 = "I totally disagree", 6 = "I totally agree"). Three subscales are measured: Emotional exhaustion (4 items), Detachment towards university (3 items), Sense of Inadequacy (2 items).

2. Italian Questionnaire for Anxiety and Resilience (Questionario per l'Ansia e la Resilienza, QAR; De Beni et al., 2014). This questionnaire is part of a larger Italian battery, called AMOS, which measures studies abilities, cognitive styles and emotional/motivational aspects of learning processes of students from secondary school and university. The QAR scale measures, with fourteen items on a 5-point Likert scale (1 = "Not at all", 5 = "Totally), two subscales: anxiety (7 items) and resilience (7 items).

Analysis and results

In order to verify whether students were at risk for burnout, students' mean levels for emotional exhaustion, detachment and inadequacy were compared with Italian norms (Fiorilli et al., 2014). Generally speaking, participants showed higher levels of emotional exhaustion, compared with detachment and inadequacy ones. Moreover, when considering Italian norms, participants resulted at risk for emotional exhaustion (M=13.15), but not for detachment (M=7.9) and inadequacy (M=6.02) levels, that were below the normative sample means (normative mean for detachment is M=9.7; normative mean for Inadequacy is 6.6).

In order to verify whether demographic variables, burnout, anxiety and resilience are associated, correlational analyses were run. Correlational patterns showed that gender and age were not associated with burnout levels (p>.05). On the contrary, anxiety showed a positive correlation (r=.599, p=.000) and resilience showed a negative correlation with burnout levels (r=-.515, p=.000).

In order to verify whether anxiety and resilience explained students' burnout levels, we run a hierarchical linear regression model. The first step included as predictive variables gender and age; the second step included anxiety; finally, the third step included resilience. The model that included only gender and age as predictive variables was not significant (F=1.859, p>.05). With regard to the second and the third model, they were both significant (p=.000). Despite this, the third model, which included both anxiety and resilience shows a significant variation of F (Variation of F=31.776, p=.000). Consequently, this model better explains burnout levels. Overall, the model explains 43.1% of students' burnout levels, with anxiety showing a positive effect (β=.457, p=.000) and resilience showing a negative effect (β=-.300, p=.000) on burnout levels.

Discussion

With regard to the first objective, students showed a higher risk for emotional exhaustion than for detachment and inadequacy. This may be due to the demands of academic

context, which, in turn, may stress out students when trying to manage time and resources in order to take part to lessons and studying for exams.

With regard to the second objective, the hypothesis is confirmed: significant correlations were shown between burnout and anxiety and burnout and resilience. According to our hypothesis, anxiety levels are positively associated with burnout, while resilience levels are negatively associated to it. Consequently, it is possible to further hypothesize that students with elevated levels of resilience may adapt better to academic environment and demands, showing adequate cognitive processes and coping strategies. According with previous literature, indeed, resilient individuals show a high academic achievement when compared with less resilient peers (Dyrbye et al., 2010). On the other hand, when students respond to academic life with anxiety, they can't adapt to their environment, with negative consequences for their general well-being and academic results.

With regard to the third objective, the best model was the one which included both anxiety and resilience. Age and gender were included, too, but they didn't explain burnout levels significantly. This model confirmed out hypotheses about anxiety acting as a risk factor and resilience acting as a protective factor for developing burnout in university students.

To the best of our knowledge, this study is one of the few considering, at the same time, anxiety, resilience and burnout in a sample of university students. Academic burnout, indeed, has been studied with regard to engagement (e.g., Stoeber et al., 2011; Lin and Huang, 2014), and, sometimes, to resilience (e.g., Dunn et al., 2008; Dyrbye et al., 2010). Despite this, the study is not without limitations. It may be of great interest to verify whether the associations and explanation effects vary according to students' conditions. It is not uncommon, for Italian students, to study and work at the same time: for this reason, it may be useful to verify whether burnout levels and anxiety and resilience effects are different for studying-only or studying-and-working students. Another condition to take into account is whether the degree is a first or a second degree: for example, it may be of interest to verify whether people taking a second degree are differently anxious or resilient if compared with students taking a first degree.

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WELL-BEING PERCEPTION AMONG TEENAGERS. A STUDY CARRIED OUT IN THE CANTON OF NEUCHÂTEL

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Introduction

This study provides a description of the well-being perceived by teenagers attending the secondary schools of La Chaux-de-Fonds, situated in the Canton of Neuchâtel (French speaking part of Switzerland), both in psychological and social terms. Specific attention is paid to "places" that are thought to enhance or attenuate this perception. Also the impact of the material dimension on both life satisfaction and unease of teenagers has been studied.

In fact, the individual well-being, as it has been shown, is higher when daily life events acquire a positive meaning (Fredrikson, 2001) but, at the same time, it is built in "socio-material spaces" with specific characteristics (Iannaccone and Zittoun, 2014). This work concerns adolescence, a specific phase of the life cycle characterized, as it is known, by cognitive changes due to several self-reflection perspectives. The innovative element of this research is the study of the existing link between the "positive" perspective and some past dimensions (here considered as the creation of emotional meanings from the specific elements of material cultures experienced by these teenagers).

Research question and objectives

This study deals with teenagers' well-being and has three objectives. The first is exploring teenagers' life satisfaction in a broader sense; the second is analyzing teenagers' life satisfaction in relation to certain places/human relationships and the third is exploring the practical well-being and unease situations experienced by teenagers. Potential differences due to the teenagers' neighborhoods or gender have also been taken into account.

Methodology, tools and sample

This research was carried out on 235 Swiss (58% female and 42% male) 13-14 years old teenagers and attending *collèges* situated in 4 different districts of the Swiss Canton of

Neuchâtel (20% for Collège des Forges= high concentration of low-income immigrant families and low-income Swiss families, 25% for Collège Numa-Droz=heterogeneous population, including both Swiss and immigrant families of middle socio-economic level, 42% for Collège Crêtets=high-income Swiss and immigrant families; 13% for Collège de Bellevue=heterogeneous population, including both Swiss and immigrant families of middle socio-economic level).

They received:

I. Two self-assessment questionnaires

I.I. The French version of the *Satisfaction with life scale* – SWLS (Diener et al., 1985) to measure satisfaction with people's lives, including 5 statements (item example: "in most ways my life is close to my ideal"). Answers were given on a seven-point Likert-type scale (ranging from 1=Strongly disagree to 7=Strongly agree). The analyses provide: average scores for each statement; higher scores correspond to higher life satisfaction.

I.II. A self-conceived survey to estimate life satisfaction in relation to certain micro-contexts (life places) of teenagers: school, family, friends and spare time. 7 statements (item example: "you can indicate your degree of satisfaction in different situations: in your classroom, in the schoolyard, …"). Answers were given on a three-point Likert-type scale (1= not satisfying, 2= satisfying, 3= very satisfying). Frequencies are obtained from data analysis.

II. Two semi-open questions about concrete situations linked to well-being and unease. The first part of each question asked participants if they could state a concrete situation linked to well-being and another linked to unease, inviting them to answer "yes" or "I don't know". The second part of each question asked them to give more details about it, if their answer was "yes". The content of the answers provided was analyzed. Two independent judges read the statements and identified categories. After having compared categories and agreed on them, the answers were codified. Eight categories were identified for well-being situations ("family" relational space, "friends" relational space, other space, "sport" corporal space, "self-care" corporal space, *loisir* corporal space, emotional space) and six categories for unease situations ("family" relational space, "friends" relational space, no-relationship space, other space, corporal space, stress).

Questionnaires have been submitted through an online survey (*qualtrics*) in IT rooms under the supervision of a teacher.

Results

The exploratory results obtained provide some useful information to estimate the well-being perceived by the teenagers of La Chaux-de-Fonds. Their answers highlight that:

– life satisfaction ranges from medium to high (but may be significantly reduced by the school context);
– teenagers attending Collège Crêtets are more satisfied with their life than their colleagues living in other districts/*collèges*;
– boys are significantly more satisfied than girls;

- teenagers' life satisfaction in relation to the micro-contexts (life places) considered is more satisfying during spare time, with friends and family instead than in the schoolyards and classrooms;
- from the content analysis, it results that teenagers frequently use the "stress" verbal category. It shows that teenagers experience quite a spread unease during class-room tests;
- spare time is thought to be the socio-material place providing most satisfaction to teenagers.

Discussion

The results of this first analysis provide some useful information about the well-being perceived by teenagers living in a working-class Swiss city. The answers given highlight medium to high life satisfaction, but school is the place in which satisfaction is perceived the least. Moreover, the content analysis surprisingly shows that "stress" is a quite spread unease factor among teenagers, especially during classroom tests. On the contrary, the "*loisir* space" spare time is thought to satisfy teenagers the most. A more deepened analysis shows some peculiarities linked to the gender and to specific districts/*collèges*. As far as gender is concerned, it is observed that women are less satisfied with their life, especially when comparing their real condition to expectations. Moreover, as found in literature, it can be stated that social and economic conditions contribute to explain the observed differences in life satisfaction. For example, teenagers attending Collège Crêtets (situated in a district hosting high-income Swiss and immigrant families) report higher levels of satisfaction than those living in other districts.

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TOWARD BUILDING SUSTAINABLE WELL-BEING LITERACY IN HIGHER EDUCATION: STRATEGIES AND INDICATORS OF SUCCESS

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A developing evidence base suggests that while university can be a productive and fulfilling experience for many students, an increasing proportion of students experience elevated levels of psychological distress in academic settings (Larcombe, Baik & Brooker, 2015; Larcombe et al., 2014; Stallman, 2011; Wierenga, Landstedt & Wyn, 2013). For example, a recent study assessing over 5000 University of Melbourne students using the Depression Anxiety and Stress Scales (DASS-21) found that one in four university students experienced severe levels of psychological distress (Larcombe et al., 2014). In his report to the Winston Churchill Memorial Trust, Veness (2016, p.1) surmises this state of affairs as, 'The wicked problem of university student mental health'.

Indeed, the collective societal costs of mental illness are projected within world economy estimations of $16 trillion over the next 20 years (Veness, 2016). This concerning evidence about university student wellbeing is likely to have corresponding impacts on student learning (Brackney & Karabenick, 1995; Slemp, in press; Stallman, 2008). Studies over the past few decades propose that education, wellbeing and social outcomes are interdependent (Kolbe, 2002). Wellbeing is integral to academic achievement in higher education (Tsouros, Dowding, Thompson & Dooris, 1998) and promoting wellbeing in this context promotes effective learning (O'Donnell & Gray, 1993; Ross & Wu, 1996).

Fortunately, encouraging scholarly attention has emerged about how to build sustainable wellbeing across university student populations — conceptually framed as a "positive university". Integrating wellbeing pedagogy within higher education courses has the potential outcome of building sustainable wellbeing literacy. Wellbeing literacy is, "the vocabulary, knowledge and skills that may be intentionally used to maintain or improve the wellbeing of oneself or others" (Oades, Slade & Jarden, 2017, p.1). Comprehensive acquisition of, and learning about wellbeing may enable control of language use and knowledge of wellbeing, toward improving individual and collective wellbeing. Where literacy is how we control the use of language, wellbeing literacy is how we control the use of wellbeing language. Language influences thought and behaviour, which

in turn may impact life outcomes (Oades & Johnston, 2017). We therefore view wellbeing literacy as a resource for navigating life's challenges, helping to build individual skills and establish community assets.

The focus of this Call for Experiences is on building wellbeing literacy through the positive university model. Thus, our aim in this session is to firstly examine how wellbeing is conceptualised within the broader framework of positive universities. Second, we will address what is currently known about wellbeing literacy in university students and higher education settings. Third, we will offer suggestions for the teaching and learning of wellbeing, including how wellbeing literacy can be reliably enhanced within higher education, highlighting an example of how positive psychology is currently being integrated within our subject offerings at the University of Melbourne Centre for Positive Psychology. Finally, we propose some key questions emerging within this context.

A positive university as a path to wellbeing

Drawing on the field of Positive Psychology, Oades, Robinson, Green and Spence (2011) advocate for the development of the Positive University, which they define as "… the development of educational environments that enable the learner to engage in established curricula in addition to knowledge and skills to develop their own and others' wellbeing" (p.432). If wellbeing can be defined as feeling good and functioning well (Keyes & Annas, 2009), when conceptualised within the context of universities, wellbeing can be understood as a resource enabling students to experience flourishing lives (Nutbeam, 1998; WHO, 1986).

Positive universities emphasise the importance of creating whole system approaches that support and maintain student wellbeing. The idea is based on the Ottawa Charter (WHO, 1986), which states that health is a fundamental human right, and involves individuals controlling their wellbeing within systems that promote building awareness and knowledge of the many determinants of health. To this end, positive universities create system-wide opportunities to build student capacity to initiate, develop, contribute to and sustain healthier decision-making toward achieving successful wellbeing and life outcomes (Baik et al., 2016, Veness, 2016). Thus, universities are potential pathways to enhancing wellbeing, and can therefore be viewed as partners in health improvement (Baik et al., 2016; Dooris et al, 2010).

Institutions around the world are increasingly using these system-wide approaches in the effort to become a positive university. While there is no universal approach, there are a few shared features amongst the adopting institutions, from which we can learn a great deal. TecMilenio University, Mexico, the University of Buckingham, UK, and George Mason University, US, are some of the more well established in their journey, and offer useful approaches about how wellbeing initiatives can be embedded within policies, culture and ways of working (Escamilla, 2016). At TecMilenio, for example, all students and university staff are required to study positive psychology. Following this lead, Buckingham is set to become Europe's first positive university, and George Mason University (GMU) is embedding positive psychology programs for students and staff towards achieving the status of the first U.S 'wellbeing university' (Slemp, in press).

Through the Centre for the Advancement of Well-Being, GMU's ten year vision is to build the vitality, purpose and resilience of ten million people through teaching wellbeing science and applications (GMU, 2017).

The emergent work in positive universities requires ongoing advocacy for the extension of positive education based research to entire organisations within the higher education sector (Oades et al., 2011). To this end, Baik and colleagues propose developing a 'whole-of-university' approach through the Framework for Promoting Student Mental Health and Wellbeing in Universities (Baik et al., 2016). Key strategies of this Framework include strengthening awareness and developing knowledge required to identify options and make decisions conducive to wellbeing (Baik et al., 2016). Within the field of positive education, the positive outcome of these key strategies is that students achieve wellbeing literacy (Oades, 2017; Oades & Johnston, 2017).

A key lever in improving the wellbeing of university students might involve engaging all staff and students in building wellbeing vocabulary, knowledge and skills. In this way, achieving wellbeing literacy may be necessary to reducing the preventable and treatable burden of mental ill health, and thus promoting the highest attainable standards of wellbeing, so that all students can fully participate in learning (Baik et al., 2016; Dooris et al, 2010; Veness, 2016). A bold vision for higher education might involve producing wellbeing literate graduates with the capacity to become active agents in economic development and social change.

Building wellbeing literacy in higher education

Critical to the success of building university-wide wellbeing is building staff and student wellbeing literacy. This would require a quantifiable set of targets, outcomes, and key performance indicators that gauge key aspects of individual wellbeing literacy in higher education, providing direction on what needs to be achieved in the short- and longer-term, guiding and strengthening efforts to achieve lasting change (Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000). Baik and colleagues' (2016) Framework identifies the development of student mental health knowledge and self-regulatory skills as key actions to embed in teaching and learning, toward building wellbeing literacy. Based on this Framework, the Centre for Positive Psychology (CPP) at the University of Melbourne has modelled core wellbeing literacy teaching and learning actions, thus acting as a vehicle toward establishing wellbeing literacy within the student population.

For example, current wellbeing literacy promoting activities within the curriculum of the CPP include our undergraduate subject Wellbeing Motivation and Performance, which aims to build an applied knowledge of core wellbeing literacy concepts such as mindfulness, neuroplasticity, character strengths, resilience, gratitude, optimism, hope, motivation, flow and relationship skills. This curriculum offering is designed to build students' self-knowledge toward enabling the application of wellbeing literacy skills to life decisions consistent with their values, interests and strengths. Toward better achieving wellbeing literacy outcomes, the Framework identifies potential self-monitoring indicators of progress, including:

- Development and provision of access to on-site and online information and resources customised to the local staff and student context that promote healthy behaviours, relationships and goal-setting; and
- Collaboration with staff and students on the development of program offerings that build system-wide resilience and capacities to integrate constructive feedback.

The following questions may inform how we conceptualise the future scope and direction of efforts toward building wellbeing literacy through teaching and learning in higher education:

- What are the observable elements of wellbeing literacy?
- How do we measure wellbeing literacy?
- What are the systems and structural supports required to build and sustain wellbeing literacy?
- How would we measure the success of systems and structural supports toward building and sustaining wellbeing literacy?

Developing students' wellbeing vocabulary, knowledge and skills is key to building wellbeing literacy. These assets, in turn, can significantly impact employability and life trajectories, post university study. Because university students are vulnerable to experiencing significant levels of psychological distress, building and sustaining wellbeing through learning about wellbeing within the higher education context can provide students with timely, personalised, system-wide opportunities to build student capacity in initiating, developing, contributing to and sustaining decision-making toward achieving successful wellbeing and life outcomes.

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DEVELOPMENTAL TRAJECTORIES OF GLOBAL SELF-ESTEEM AMONG STUDENTS AS PREDICTED BY FEELING OF SOCIAL ACCEPTANCE AT THE ONSET OF ADOLESCENCE: A SEVEN YEAR STUDY

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Introduction

Self-esteem is defined as a personal evaluation of a person about oneself (Harter, 2015). It is linked to short term psychosocial adjustment and well-being among teenagers, and is predictive of better adaptation during adulthood (Dubois, Bull, Sherman, & Roberts, 1998). It is a multidimensional aspect of the Self that can change with age, events, life experiences and relations (Harter, 2006). Therefore, self-esteem can differ not only between individuals, but also across time for a given individual. Yet there is still no real consensus among researchers about the evolution of self-esteem during adolescence. Some have shown an increase across this period, others observed a decrease, and still others concluded that self-esteem was quite stable over time. Taken together, those diverging conclusions point to heterogeneity among the adolescent population (Scheier, Botvin, Griffin, & Diaz, 2000; Baldwin & Hoffman, 2002; Erol & Orth, 2011; Orth, Maes, & Shmitt, 2015). Accordingly, some authors have tested the presence of different developmental trajectories. Some studies have demonstrated four groups (Hirsh & Dubois, 1991; Zimmerman, Copeland, Shope, & Delman, 1997; Morin, Maïano, Marsh, Nagengast, & Janosz, 2013), and others only three developmental trajectories (Diehl, Vicary & Deike, 1997; Birkeland, Melkevik, Holsen & Wold, 2012). Considering all the effects of self-esteem, a more robust methodological and statistical annual procedure during the entire course of adolescence would help clarify this corpus of knowledge in developmental psychology.

As a dynamic evaluative aspect of the person, the reconsideration of self-esteem during adolescence is linked to many changes attributable to puberty, the development of introspective abilities, the search for identity, as well as the new roles and need for support and approval related to this period. Moreover, as the importance of the social domain grows at the onset of adolescence, the evaluation of one's personal value can be affected by the feeling of acceptance within the peer group (Harter, 1986, 1990, 2015; Crocker, 2001, 2003; Hirsh & Dubois, 1991; Baldwin & Sinclair, 1996; Leary, 2001, 2012; Levpušček, 2006; Bédard, Bouffard, Pansu, & Vezeau, 2014; Birkeland, Breivik, & Wold, 2014).

Research question and objectives

The current longitudinal study examines the links between developmental trajectories of self-esteem across adolescence and the feeling of social acceptance among students assessed at ten years old. To this end, the first aim of this study is to determine the presence of different latent growth classes by grouping students who share similar initial levels and patterns of change over the seven years study. The second aim is to investigate whether and how the feeling of social acceptance predicts the membership probabilities of the self-esteem trajectories, by estimating the between-class variation of a conditional model.

Methodology and methods

Participants

The 769 students (367 boys; mean age = 10.7, s.d. = 4 months) were involved in a broader longitudinal project on the development of perceived social and academic competence and psychological adjustment among students. Self-esteem was measured annually over a period of seven years in the school setting. The students completed the questionnaires in their respective classroom during school hours under the supervision of two research assistants. Attrition was under 4% each year, and analysis of missing data confirms that they are completely missing at random.

Instruments

Self-esteem was assessed using five items of the subscale of the validated French version (Bouffard, Seidah, McIntyre, Boivin, Vezeau, & Cantin, 2002) of the Self Perception Profile for Adolescents from Harter (1988). The instrument measured how the students feel with regard to their personal value. A sample item is: "This student is certain to be a good person." The students had to judge to what extent they felt that they were similar to the fictitious student described in each statement on a Likert-type scale ranging from 1 (not at all) to 4 (entirely). Internal consistency across the four years was satisfactory (α ranged from 0.67 to 0.75).

Social acceptance was assessed using four items of the subscale of the validated French version (Bouffard, Seidah, McIntyre, Boivin, Vezeau, & Cantin, 2002) of the Self Perception Profile for Adolescents from Harter (1988). It measured to what extent the students feel accepted by their peers in their age group as in the following example: "This student has a lot of friends". Again, they had to judge how similar they felt that they were to the fictitious student described in each statement using the same Likert-type scale. The internal consistency was 0.72.

Analytic strategy and results

First, scale score reliabilities, descriptive statistics and correlations were computed. Statistical analyses were then performed using Mplus 8.0 (Muthén & Muthén, 2010). The goals of the study were accomplished within a latent class growth analysis modeling ap-

proach (LCGM; Jung & Wickrama, 2008). This type of analysis handles missing data using maximum likelihood estimation.

The analysis identified the best unconditional quadratic model using different model fits information (CFI = 0.94, TLI = 0.93, RMSEA = 0.06, SRMR = 0.04). As expected, the unexplained amount of variance was still significant, indicating the possible presence of classes. The LCGA revealed three homogeneous latent classes (AIC = 7223,07, BIC = 7307.93, SSAo= 7250.77, Entropy = 0.68, LMR = 176.19**, VLR = 182.75**): a high trajectory representing 43.3% of the students with a posterior probability of membership of 0.81, a moderate trajectory representing 44.4% of the sample with a posterior probability of 0.90, and a lower-stable trajectory comprising the 12.3% remaining students with a posterior probability of 0.87.

As for the second aim of the study, a conditional model with a multinomial regression was tested to examine how the social acceptance felt by the student at 10 years old affects the membership probabilities of the developmental self-esteem trajectories identified in the preceding analysis. Results show that perception of social acceptance was a significant predictor of the global self-esteem latent classes (AIC = 6702.38, BIC = 6753.48, SSA= 6718.55, Entropy = 0.69, LMR = 958.63***, VLR = 1030.76***). A higher feeling of social acceptance increases the odds of following the higher global self-esteem trajectory. More specifically, students with higher perception of their social acceptance are 2.10 times more likely to belong to the moderate latent class, and 5.55 times more likely to belong to the high class than to the lower-stable trajectory. Also, having a higher feeling of social acceptance increases the likelihood of belonging to the higher latent self-esteem class by 2.64 times compared to the moderate one.

Discussion

Three latent growth classes of student global self-esteem were found in this study. The high developmental trajectory that represents 43.3% of the sample was characterised by an elevated initial level of self-esteem and a significant quadratic slope, indicating that self-esteem tends to increase slightly over time, and slightly decrease later on. The moderate group was characterized by an initial level that is lower than the first trajectory, but following a similar quadratic pattern over time. These two trajectories represent a majority of the adolescents, showing that most of them evaluate themselves as generally valuable and worthy, supporting what earlier studies have illustrated before (Hirsh et Dubois, 1991; Zimmerman, Copeland, Shope, & Delman, 1997; Diehl, Vicary, & Deike, 1997; Birkeland, Melkevik, Holsen, & Wold, 2012; Morin, Maïano, Marsh, Nagengast, & Janosz, 2013). Those findings lead to a positive outlook on the well-being of teenagers and their future psychosocial adaptation. Finally, the third trajectory is characterised by a significantly lower initial level but a non-significant slope, indicating that the self-esteem trajectory remains low and does not change over the seven years of the study for 12.3% of the students as revealed by the literature review. The chronic nature of the poor evaluation of one's value over time can create detrimental effects and needs to be addressed subsequently.

These findings also show that the feeling of social acceptance at ten years old affects the probabilities of following a given developmental self-esteem trajectory across adoles-

cence. The more students feel accepted by the peer group at the end of primary school, the more likely they are to belong to an elevated global self-esteem latent class, chances increasing up to more than five times. Feeling like a member of the peer group just before entering puberty and facing the numerous changes and challenges of adolescence seems to act like a positive influence on the attitudes and general evaluation of the self by the students all along their development.

These results highlight the importance of studying the link between the longitudinal development of global self-esteem and predictors as indicators of risk for the prevention of maladjustment and negative outcomes later in life, as well as potential sources of positive influence for the promotion of well-being.

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SUPPORTING PUPILS' MENTAL HEALTH THROUGH EVERYDAY PRACTICES: A QUALITATIVE STUDY OF TEACHERS AND HEAD TEACHERS

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Introduction and aim of the study

The current study aimed to explore teachers' and head teachers' understandings of how they work to support pupils' mental health through their everyday practices. A qualitative study, including individual interviews with head teachers and focus group interviews with teachers, was conducted in lower secondary schools in Norway.

Promoting healthy functioning among pupils can be seen as part of the teacher's role in supporting learning processes (Atkins, Hoagwood, Kutash, & Seidman, 2010; Samdal, 2017; Spratt, 2016; Spratt, Shucksmith, Philip, & Watson, 2006). Nevertheless, teachers tend to perceive support of pupils in managing their mental health as an additional burden to an already heavy workload, giving rise to role-related pressures (Ekornes, 2016; Mazzer & Rickwood, 2015). According to a Norwegian study, teachers tend to understand their primary role in supporting pupils' mental health in terms of the identification of mental health problems, and, if necessary, referring on to mental health services (Ekornes, 2016). Although teachers' early identification of pupils' mental health problems is important, teachers must additionally support pupils with mental health problems in the classroom especially in terms of keeping them engaged with learning. Mazzer and Rickwood (2015) found that teachers perceived identifying pupils' mental health concerns as part of their role, as well as providing an inclusive school context and teaching in mental health education. However, the teachers participating in their study perceived other professionals as better equipped to support pupils' mental health, and any form of treatment or counselling as outside the scope of their role (Mazzer & Rickwood, 2015). Ekornes (2016) found that a majority of the teachers in primary and secondary school felt both a professional obligation and a personal responsibility to help pupils with mental health problems. At the same time, more than half of the teachers felt helplessness in doing so, and were afraid of making things worse when talking to pupils with mental health problems. Besides, secondary school teachers seem to be more subject-oriented and less receptive towards the needs of each

pupil, than their colleagues in primary school (Holen & Waagene, 2014; Lendrum, Humphrey, & Wigelsworth, 2013).

Given that head teachers make decisions with regard to school resources, facilitate collaboration both internally and externally, and are also central in developing a set of shared values among staff, they have the potential to influence teachers' work supporting pupils' mental health (Weare & Nind, 2011). Hence, how teachers negotiate their role in supporting pupils in managing their mental health and their learning in their everyday practice, and how head teachers contribute to their work were the focus of the current study.

Methodological approach

The preferred approach was qualitative, using focus group interviews with teachers and individual semi-structured interviews with head teachers as the specific data collection method in order to generate rich descriptions of how teachers' and head teachers' work to support pupils' mental health through their everyday practices. Head teachers from ten Norwegian lower secondary schools were invited to an individual interview in the period of January – June 2016. The head teachers' experience as a head teacher ranged from six to eighteen years. Six focus group interviews with teachers were conducted in the same period, and the focus group interviews were composed of 3-8 teachers from the same school teaching at different grades and in different subjects.

The interviews were audiotaped, which in turn were anonymized and transcribed verbatim. The software NVivo-11 was used to encode the data and create a basis for descriptions and thematic processing (Leech & Onwuegbuzie, 2011) using the whole data set. The transcripts were read and reread, and descriptive codes were identified. Patterns between codes were explored and organized in major and sub themes, inspired by the process of first and second cycle coding by Saldaña (2013). During the process of conducting, transcribing and analyzing the interviews, new codes were added to, expanded, modified and reorganized going from descriptive codes to more analytic themes.

Findings

At an overarching level, teachers' support for pupils' mental health was understood as a fundamental prerequisite for learning. Hence, teachers and head teachers accepted that an integral part of their responsibilities was to support pupils in managing their mental health because it related to the core purpose of school, namely pupil learning. In so doing, teachers' responsibility to support pupils' mental health was viewed as providing a way of trying to ensure positive pupil-centered development for all pupils, and moreover, in a way that went beyond a focus on academic achievement. Against this overarching perspective, two main themes were developed that related to the teaching and learning process: 1) Working with individual pupils through everyday practice, 2) Working with the school context.

The first theme refers to the everyday practices of teachers at the individual pupil level. It was evident that teachers and head teachers tended to view these everyday prac-

tices as important in trying to keep pupils present at school and engaged in learning in order to prevent circumstances relating to a specific pupil's difficulties deteriorating. There were two dimensions to this theme that were uncovered, one relating to the nature of the relationship between teachers and individual pupils, and the second relating to specific strategies that were used to adjust teaching and learning processes to reduce pressure and anxiety among pupils.

Alongside their work with individual pupils, teachers also talked about the ways in which they were working with the school context to support pupils' mental health. Two dimensions were related to this second theme. The first dimension was developing a safe and inclusive school climate, and the second dimension was providing experiences of mastery and different learning opportunities. Taken together, these themes illustrate the different ways teachers and head teachers (proactively and reactively) support young people's mental health development as a core aspect of their educational role, as well as some of the challenges therein.

Discussion

The specific contribution of this study was to explore how teachers and head teachers understand their work to support pupils' mental health in their everyday practices. Even though teachers in lower secondary school are identified as being less receptive to the needs of each pupil than teachers in primary and middle school (Holen & Waagene, 2014; Lendrum et al., 2013), the teachers and head teachers participating in this study accepted a professional responsibility to support pupils' mental health, as it was viewed as part of their obligation towards supporting pupils in learning. The teachers and head teachers did not describe remarkable or unusual practices, but rather initiatives as part of their practice of teaching and learning to promote healthy functioning of pupils.

The teachers and head teachers in this study underlined the importance of working with the individual pupil through their everyday practices of teaching and learning. This is consistent with literature recognizing the importance of teachers making themselves accessible to pupils and connecting with them on an emotional level (Atkins et al., 2010; De Wit, Karioja, Rye, & Shain, 2011; Drugli, 2013; Krane, Karlsson, Ness, & Kim, 2016; Suldo et al., 2009). However, the teachers felt pressured by limited time and resources in supporting individual pupil's learning and mental health, in line with findings of previous studies (Ekornes, 2016; Mazzer & Rickwood, 2015). Ekornes (2016), however also suggests that teachers' competence and skills in mental health promotion is limited, leading to a role-related pressure on teachers. The findings in the current study do not seem to mirror the aforementioned research findings, instead the teachers called for better collaboration with mental health providers to help pupils attend the everyday practices of school and learning activities.

Working with the school context to develop a safe and inclusive school climate was described by the teachers and head teachers as part of the teachers' role in supporting pupils' mental health, alongside with efforts to provide experiences of mastery and different learning opportunities for pupils with mental health problems. By these descriptions, the teachers and head teachers recognized the importance of the school context

for pupils' healthy development. They also recognized how teachers and head teachers can promote positive spirals of development, where increased educational outcomes can lead to improvement in positive aspects of mental health, promoting further improvement in educational outcomes (Gustafsson et al., 2010). Consistent with previous studies, the teachers' considered this effort to be part of their role and their professional competences (Mazzer & Rickwood, 2015).

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MOTIVATION AND ACADEMIC WELL-BEING AT TIMES OF AN EDUCATIONAL TRANSITION

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Introduction

Educational transitions are critical phases in young people's lives and especially for their academic development (Pietarinen, Soini & Pyhältö, 2014). Educational transitions have been often associated with a decline in academic motivation (e.g., Symonds & Hargreaves, 2016) and play a destabilizing role in academic wellbeing (e.g., Salmela-Aro & Tynkkynen, 2012). Some students seem to encounter adjustment problems, while others go through this phase without any difficulties (Ratelle, Guay, Larose, & Senécal, 2004).

A theory that studies adjustment to new environments is the stage-environment fit (Eccles et al., 1993). This theory builds on ideas related to person-environment fit theory and motivation theory (Self-determination theory, SDT; Deci & Ryan, 2002) and posits that students' motivation is largely determined by the extent to which schools provide educational and social environments that meet adolescents' needs for competence, relatedness, and autonomy. SDT suggests that satisfying these three needs is essential for autonomous motivation and well-being.

Therefore, we chose to operationalize academic wellbeing according to these three needs. Our first indicator of academic wellbeing, satisfaction with the chosen major ('major satisfaction'), represents academic wellbeing according to the need for autonomy. Our second indicator of academic wellbeing, social adjustment, represents the need for relatedness. The last two indicators, academic adjustment and self-efficacy, comply with the need for competence.

Furthermore, our indicators of motivation were also derived from SDT. Based on SDT, different types of motivation are classified according to goal internalization: intrinsic, identified, introjected, and external regulation. Both intrinsically motivated and well-internalized activities are said to be autonomously regulated, whereas activities that have been partially internalized or not internalized at all are said to be regulated by controlled motives (i.e., introjected and extrinsic motivation). Finally, amotivation concerns a lack of motivation and refers to "a state of motivational apa-

thy in which students harbor little or no reason (motive) to invest energy and effort" (Cheon & Reeve, 2015, p. 99).

Research questions and objectives

The purpose of this study was to examine whether students' motivational profiles, and possible changes in those profiles, moderated the influence of educational transition on academic wellbeing. Specifically, we addressed the following research questions: (1) What kind of motivational profiles can be identified before and after the transition to higher education? (2) What motivational change profiles can be identified and how do group memberships change? (3) How do students with different motivational change profiles differ with respect to their academic wellbeing (i.e., major satisfaction, social adjustment, academic adjustment and self-efficacy)? (4) How are different motivational change profiles related to changes in academic well-being (self-efficacy)?

Methodology and methods

The sample consisted of 1,403 applicants (62.2% female, Mage = 19.21, SD = 2.05) for bachelor's programs at one of the largest universities of applied sciences in the Netherlands. These applicants filled out an online questionnaire as part of the obligatory intake procedure before they commenced their studies (Time 1) as well as a survey ten weeks after their commencement (Time 2).

Academic wellbeing was operationalized by four indicators, which are major satisfaction, social adjustment, academic adjustment, and self-efficacy. Major satisfaction was measured ten weeks after commencement with the six-item Academic Major Satisfaction Scale (AMSS), constructed by Nauta (2007). In our study, an academic major equals the chosen bachelor's program. To measure social and academic adjustment in higher education, the Dutch brief 20-item shortened version (Beyers, 2001; Beyers & Goossens, 2002) of the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1984) was used ten weeks after commencement. Self-efficacy was operationalized with the self-efficacy for learning and performance scale of Pintrich et al. (1991) and assessed before as well as ten weeks after commencement. Students' motives for choosing a specific bachelor's program were assessed with a Dutch version of the Academic Self-Regulation Scale (Ryan & Connell, 1989) before as well as ten weeks after commencement.

Analyses and results

To examine Research Question 1, a person-centered approach was used and Latent Profile Analyses (LPAs) were conducted. In the first step, individuals were clustered based on their pattern of scores on the motivational dimensions before their commencement. In the second step, we computed the probability of belonging to each of the profiles using the individual's scores on the motivational dimensions. The classification probabilities were used to assign each individual to the profiles for which the classification

probability was the largest. We repeated this whole procedure in order to identify the motivational profiles after commencement. After that, every student had a motivational profile, before as well as after commencement. In order to examine Research Question 2, every possible shift from one profile to another profile, or remaining in the same profile, was coded for every student, resulting in motivational change profiles and changes in group membership. To answer Research Question 3 and Research Question 4 one-way ANOVAs were conducted in order to examine how students with different motivational change profiles differed with respect to academic wellbeing or a change in academic wellbeing.

Correlational results demonstrated in general that the autonomous types of motivation (intrinsic and identified motivation) were positively correlated with academic wellbeing, whereas the controlled types of motivation (introjected and extrinsic) and amotivation were negatively related to academic wellbeing. Furthermore, results show that in comparison with the means at Time 1, the means of the autonomous types of motivation are significantly lower at Time 2 and the controlled types of motivation, amotivation and self-efficacy were significantly higher at Time 2.

A three-profile solution was chosen regarding motivational profiles before commencement. The profiles we identified were a 'high quality' profile (41.2%) in which prospective students display autonomous motivation above average and controlled motivation and amotivation below average. Furthermore, we identified a 'high quantity' profile (34.4%), in which prospective students display all types of motivation above average, except for amotivation. Finally, we identified a 'poor quality' profile (24.4%) in which prospective students displayed autonomous types below average, and controlled motivation and amotivation above average. Regarding motivational profiles after commencement, the same three profiles were identified, but in a different order: a poor quality profile (44.3%), a high quantity profile (30.8%), and a high quality profile (24.9%).

The second goal of this study was to examine which motivational change profiles could be identified and how group memberships change. The three motivational profiles at Time 1 as well as Time 2 provided nine possible change configurations. Students could remain in the same profile, or move to two other profiles. Results showed that fewer students moved to a more favorable profile (i.e. high quantity to high quality) and most of them moved to a less favorable profile (i.e. high quantity to low quality). Overall, 45.5% of the students did not change regarding their motivational profiles.

The third purpose of this study was to examine how students with different motivational change profiles differed with respect to academic wellbeing. The results of the one-way ANOVAs showed that all academic wellbeing variables were significantly associated with the motivational change profiles. Students who started and stayed in a low quality profile reported the lowest academic wellbeing in general. On the other hand, students who started and stayed in the high quality profile or started in a high quantity profile and moved to a high quality profile displayed the highest means on academic wellbeing. Remarkable was the finding that students who came from a less favorable profile (low quality and high quantity) before the transition and moved to the most favorable profile (high quality) after the transition were the students with the highest self-efficacy at Time 2.

The last purpose of this study was to examine whether different motivational change profiles are associated with parallel changes in academic wellbeing (i.e., self-efficacy). Results showed that self-efficacy at Time 1 and Time 2 was significantly associated with the motivational change profiles. Students who started in the most favorable motivational profile (high quality) reported the highest self-efficacy at Time 1 and students who started in the least favorable motivational profile (low quality) reported the lowest self-efficacy at Time 1. After the transition, students that ended up in a high quality profile reported the highest self-efficacy. When we look at the differences in self-efficacy between Time 1 and Time 2 results suggests that all motivational change profiles increased in self-efficacy, but that the students who ended up in a low quality profile had grown the least. Conversely, students who started in a low quality profile and ended up in a high quantity or high quality profile had grown the most in self-efficacy, even more than students who started in more favorable profiles.

Discussion

The present study was designed to identify whether students' motivational profiles and possible changes in those profiles moderated the influence of educational transition on academic wellbeing. Generally, students displayed different types of motivation simultaneously and these patterns may change after an educational transition to higher education. These changes were differentially associated with (changes in) academic wellbeing after the transition. Students who predominantly displayed autonomous types of motivation expressed most adaptive academic wellbeing, while students who primarily displayed controlled types of motivation or amotivation were susceptible to maladaptive adjustment to the new environment. Furthermore, students who showed a favorable pattern of motivational change increased the most in self-efficacy. These results suggest that different types of students show different (growth) patterns in academic wellbeing. Some students encounter declining motivation and different types of adjustment, while others navigate through the transition without notable problems and some even seem to flourish and become increasingly motivated and confident.

The person-centered approach enabled us to reveal groups of students with different patterns of motivation across the transition to higher education that contributed to our understanding of individual development of motivation and academic wellbeing. With this notion, we may speculate how schools could best support students' motivation and wellbeing during this demanding transitional period. For instance, high schools should invest in personal student counseling services preceding the transition to higher education in order to best support each student in making suitable educational choices. Furthermore, schools should put effort into identifying potential at-risk groups, which consists of students who manifest stable unfavorable motivational profiles or who display maladaptive changes in their profiles. As we discovered that these manifestations are associated with less favorable changes in self-efficacy it would be useful to come up with interventions that either stimulate autonomous types of motivation or feelings of competence so that these students would not alienate themselves from school.

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STUDENT WELL-BEING AND SCHOOL ALIENATION

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Introduction

Prior research has shown that student well-being plays an important role in students' learning processes at school (Hascher, 2003; Hascher, 2007; Pyhältö, Soini, & Pietarinen, 2010). It is a crucial indicator of school quality and represents one of the main educational objectives for teachers and schools (Hascher, 2008; Hascher, 2010). The rising interest in well-being of children and adolescents has led to a better understanding of its determinants and effects (Hascher, 2003). With regard to determinants, it was found that poor relationships with classmates and/or teachers or a lack of response to learning needs harm student well-being (Hascher, 2011; Hascher, 2012). Regarding the effects of well-being, it was found that positive emotions in school and social relationships prevent or reduce students' risk behavior (Hascher, 2011, 2012) and their alienation from school (Ifeagwazi, Chukwuorji, & Zacchaeus, 2015; Vahedi & Nazari, 2011).

School alienation represents the feeling of estrangement from social actors and academic aspects of schooling (Hascher & Hadjar, submitted). Alienated students may leave school with different negative experiences, such as limited educational opportunities, low interest in education, deviant behaviors, depression, or poor relationships with others (Brown, Higgins, & Paulsen, 2003; Hascher & Hagenauer, 2010; Tarquin & Cook-Cottone, 2008). Previous research has also shown that boys are usually more alienated from school than girls (Hadjar & Lupatsch, 2010; Hascher & Hagenauer, 2010) and that school alienation tends to undermine student well-being (Pyhältö et al., 2010).

Grounded in the stage-environment effects of social, physical, cognitive, emotional, and behavioral changes during adolescence on students' academic motivation and interest in learning, it was shown that student well-being in school declines and school alienation increases over time due to a mismatch between adolescents' needs and their environments (Eccles & Gootman, 2002; Eccles & Midgley, 1990; Gottfried, Fleming, & Gottfried, 2001; OECD, 2004). Although students' well-being and alienation in school seem to be interrelated, little is known about their relationship. The present

work extends the existing body of research by investigating jointly well-being and school alienation in different educational settings, namely, primary and secondary schools in Switzerland.

Research question and objectives

A major purpose of the present study was to reveal the associations between the dimensions of well-being and the domains of school alienation among primary and secondary students. In the framework of the binational research project, School Alienation in Switzerland and Luxembourg (SASAL), supported by the Swiss National Science Foundation and the Luxembourg National Research Fund, we addressed the following hypotheses:

1) Positive attitudes to school, enjoyment in school, and positive academic self-concept are negatively related to alienation from classmates, teachers, and learning (Hypothesis 1).
2) Worries about school, physical complaints in school, and social problems in school are positively related to the domains of school alienation (Hypothesis 2).
3) Gender has no effect on student well-being (Hypothesis 3), but it plays a significant role in regard to school alienation in both primary and secondary schools (Hypothesis 4).
4) Student well-being in primary school is higher than that in secondary school (Hypothesis 5).
5) Primary school students are less alienated from school than secondary school students (Hypothesis 6).

Methodology and methods

Participants and procedures

The sample in this study consisted of 486 students from primary school (47.3% male; Mage= 10.3 years [SD = .98]) and 550 students from secondary school (45.2% male; Mage= 13.0 years [SD = .55]) from the Swiss canton of Bern. In total, 61 classes (i.e., 31 classes in grade 4 and 30 classes in grade 7) participated in the study. Fifty-five percent of secondary school students attended the middle track, 36% the lower track, about 8% the upper track. The data were collected during regular school-time. It took around 90 minutes to complete the survey.

Measures

Student Well-Being Questionnaire (SWBQ). Nineteen items of the SWBQ addressed three positive and three negative dimensions of well-being in school (Hascher, 2007): Positive attitudes toward school (e.g., "I like to go to school"), Enjoyment in school (e.g., "Have you experienced joy because of teachers' friendliness in the past few weeks?"), Positive academic self-concept (e.g., "I don't have problems mastering school tasks"), Worries about school (e.g., "Have you been worried about your school grades in the

past few weeks?"), Physical complaints in school (e.g., "Have you had severe headache in school in the past few weeks?"), and Social problems in school (e.g., "Have you had problems with your classmates in the past few weeks?"). A 6-point Likert scale (1=never, 6=very often) was used for each item. All subscales showed satisfactory to good reliability scores (.65 < α < .84).

School Alienation Scale (SALS). Participants' school alienation was assessed with twenty-four items, representing three domains of school alienation, alienation from classmates, teachers, and learning (Hascher & Hadjar, submitted; Morinaj et al., submitted). Students rated their agreement on a 4-point Likert scale (1=disagree, 4=agree). The items of the SALS address student feelings and thoughts toward classmates (e.g., "In my class I feel like someone who doesn't fit in"), teachers (e.g., "I do not feel taken seriously by my teachers"), and learning (e.g., "I don't find pleasure in learning at school"). The internal consistency was good (.77 < α < .88).

Results

Overall, the results confirmed that school alienation domains were significantly negatively correlated to the positive dimensions and significantly positively related to the negative dimensions of the SWBQ (Hypotheses 1 and 2).

In terms of student well-being, no systematic gender differences were found. Only in regard to physical aspects in primary school, girls appeared to have significantly more physical complaints than boys: t (453) = 3.30, p < .01 (Hypothesis 3). Concerning school alienation, the results revealed that gender had a significant effect in both primary and secondary schools (Wilks' λ = .98, F (3, 465) = 3.59, p = .014, eta squared = .02; and Wilks' λ = .97, F (3, 528) = 6.32, p = .000, eta squared = .04, respectively; Hypothesis 4).

Students from primary school compared to students from secondary school were higher in all positive dimensions of well-being (all ps < .001) and secondary school students reported more worries and physical complaints than primary school students (both ps < .001; Hypothesis 5). However, primary school students experienced more social problems (p = .03). In regard to school alienation, an independent sample t-test showed that the mean difference in alienation from classmates between primary and secondary school students was not statistically significant. However, there was a significant mean difference in alienation from teachers and learning in favor of secondary school students (both ps < .001; Hypothesis 6).

Discussion

The aim of this study was to gain deeper insight into the relationship between student well-being and school alienation reported by primary and secondary school students. The analysis of this relationship was based on a well-established Student Well-Being Questionnaire (SWBQ) and a newly developed School Alienation Scale (SALS).

In line with Hypotheses 1 and 2, the domains of the SALS were significantly negatively related to the positive dimensions and significantly positively related to the negative dimensions of the SWBQ. It can be concluded, that the more positive students'

experience, the greater their well-being in school, and the lower the level of their school alienation (Vahedi & Nazari, 2011). On the other hand, the more students worry about school or experience social problems, the more they feel alienated from school.

No significant gender effect was found in regard to student well-being (Hypothesis 3 confirmed), except for girls having more physical complaints than boys in primary school. Supporting Hypothesis 4, boys expressed higher school alienation in both primary and secondary schools.

In general, most students reported high levels of student well-being, indicating that learning environment facilitates the fulfillment of students' cognitive and emotional needs. However, students at secondary level show less positive attitudes to and enjoyment in school compared to primary school students, pointing to the idea that students' interest and intrinsic academic motivation decreases over time (Hypothesis 5 confirmed). Adolescence experience considerable developmental changes and at the same time have to cope with numerous stressful situations in school resulting in a misfit between their needs and given environments (Eccles & Gootman, 2002; Safipour et al., 2011). Moreover, especially during adolescence students are in need of peer interaction for personal growth and feelings of relatedness (Furman & Buhrmester, 1992). Therefore, the lack of quality peer interaction may result in reduced well-being and motivation toward learning. As some students worry about school performance and further educational opportunities, sometimes combined with educational pressure imposed by parents, students at secondary level feel more alienated from school (Hypothesis 6 confirmed).

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THE RELATION BETWEEN DISRUPTIVE CLASSROOM BEHAVIOR AND PERCEIVED QUALITY OF LIFE IN ADOLESCENCE

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Introduction

Adolescent's antisocial behavior violates social norms and is often directed against other people. It causes mental or physical harm and complicates the living together. But antisocial behavior is not only harming the social environment; the target adolescent can also be suffering: Antisocial behavior often results in difficulties at school, in the family, and with peers (Schmeck & Poustka, 2006) – three domains contributing toward perceived quality of life (Oberle, Schonert-Reichl, & Zumbo, 2011). Recognized as being essential to positive development in adolescence, quality of life – defined as the subjective perception and judgement of the most important aspects of one's life (Mattejat & Remschmidt, 2006) – has gained attention in recent years. Various efforts have been made to understand the relation between perceived quality of life and psychopathology in youth. From different studies it is known that adolescents with low quality of life have behavior or emotional problems more often than their peers with average or high quality of life (i.e., Ravens-Sieberer, Ottova, Hillebrandt, & Klasen, 2012). Nevertheless, psychopathology in children and youth does not always go hand in hand with low perceived quality of life: Suldo and Shaffer (2008) showed for example that perceived quality of life in youth with behavioral and emotional disorders depends on various other variables, such as their sociability, self-esteem or social relationships.

While an increasing number of studies investigated the relation between perceived quality of life and psychopathology in general, research on antisocial behavior in particular remains scarce. The few existing studies indicated a negative relation (Valois, Paxton, Zullig, & Huebner, 2006) but mostly used cross-sectional designs. Factors, which could explain the association between life quality and antisocial behavior, are rarely studied by now. Further no study has been found that focus on disruptive classroom behavior, such as talking out of turn, idleness or hindering others, as one specific aspect of antisocial behavior. The fact that after transition to secondary school disruptive classroom behavior increases (Arbuckle & Little, 2004) and perceived quality of life

decreases (Michel, Bisegger, Fuhr, & Abel, 2009) raises the question, whether these developments depend on each other. In addition disruptive classroom behavior provokes reactions by the teacher, which in turn affects the relation to the target student in a negative way (Henricsson & Rydell, 2004; Little, 2005). But a positive relationship to the teacher has been shown to be important for the perceived quality of life in adolescence (Newland et al., 2014).

Research questions and objectives

This longitudinal study aims to investigate the relation between adolescents` disruptive classroom behavior and their perceived quality of life in the first school year after the transition to lower secondary school. There were three questions:
  – Research question 1: Is there a relation between the increase of students` disruptive classroom behavior and the decrease of their perceived quality of life?
  – Hypothesis 1: The more disruptive classroom behavior increases, the more perceived quality of life decreases.
  – Research question 2: Does students' disruptive classroom behavior negatively influence their perceived quality of life?
  – Hypothesis 2: Disruptive classroom behavior has a negative influence on perceived quality of life.
  – Research question 3: Does students' disruptive classroom behavior have an indirect influence on their perceived quality of life?
  – Hypothesis 3: Disruptive classroom behavior has an indirect negative influence on perceived quality of life through the student-perceived relationship to the teacher.

Methodology and methods

This research was part of the "Fribourg Study on Peer Influence in Schools", a longitudinal study in the German-speaking part of Switzerland (e.g., Müller, Fleischli, & Hofmann, 2013). A total of 823 participants, aged approximately 13.12 years (SD = 0.48) at the first point of survey, answered anonymous questionnaires at four time points across the Grade 7 school year 2011/2012 (students` first year in lower secondary school). Perceived quality of life was measured with the Inventory for the Assessment of Life Quality in Children and Adolescents (Mattejat & Remschmidt, 2006), and disruptive classroom behavior with the Fribourg Self- and Peer-Report Scales-school problem behavior (Müller, Begert, Gmünder, & Huber, 2012). The student-perceived relationship to the teacher was also measured by self-report (Holtappels, 2003) but only once at time three. Analyses of data involved structural equation modeling including latent growth curve modeling (Hypothesis 1), cross-lagged panel design (Hypothesis 2), and mediation analysis (Hypothesis 3). Yuan-Bentler robust maximum likelihood estimation (MLR) was performed (Yuan & Bentler, 1998). Because of differences between boys and girls in disruptive classroom behavior (Arbuckle & Little, 2004) and perceived quality of life (Michel et al., 2009) all analyses were conducted controlling for gender.

Results

– Hypothesis 1: The latent growth curve model showed a good model fit [MLR-χ2 = 1051.178 (df = 750); CFI = .971; RMSEA = .022; pClose = 1.000; SRMR = .052]. The significant negative slope of perceived quality of life indicated that it decreased significantly across Grade 7. In contrast, disruptive classroom behavior increased significantly. The slopes of perceived quality of life and disruptive classroom behavior were negatively correlated (r = -.223, p < .05), suggesting that a decrease in perceived quality of life occurred along with an increase in disruptive classroom behavior. A significant negative relation was also found between the intercept factors (r = -.225, p < .001), signifying that adolescents with low initial perceived quality of life reported higher levels of initial disruptive classroom behavior. The analysis confirmed Hypothesis 1: There is a significant relation between the increase of disruptive school behavior and the decrease of perceived quality of life.

– Hypothesis 2: The cross-lagged panel design model for testing Hypothesis 2 showed a good model fit [MLR-χ2 = 108.680 (df = 718); CFI = .965; RMSEA = .025; pClose = 1.000; SRMR = .056]. While the regression coefficients between the same variables across the four time points were high and significant [disruptive classroom behavior time point 1◊time point 2 (β = .640, p < .001); time point 2time point 3 (β = .772, p < .001); time point 3◊time point 4 (β = .776, p < .001) / quality of life time point 1 ◊time point 2 (β = .771, p < .001); time point 2◊time point 3 (β = .763, p < .001); time point 3time point 4 (β = .754, p < .001)], there were no significant regression coefficients between perceived quality of life and disruptive classroom behavior. Hypothesis 2 had to be rejected.

– Hypothesis 3: For testing Hypothesis 3 the measures of perceived quality of life and disruptive classroom behavior at time points 1 and 4 were included in the analysis. The student-perceived relationship to the teacher was measured at time point 3. Again there were no significant relations between disruptive classroom behavior and perceived quality of life. However there was a significant negative effect from disruptive classroom behavior on the perceived relationship to the teacher (β = -.230, p < .001) which in turn predicted perceived quality of life (β = .204, p < .001). The analysis further showed a small indirect effect from disruptive classroom behavior through the perceived relationship to the teacher on perceived quality of life (βind = -.047, p < .01). The model showed a good model fit [MLR-χ2 = 500.878 (df = 260); CFI = .949; RMSEA = .034; pClose = 1.000; SRMR = .059] and confirmed Hypothesis 3.

Discussion

Consistent with previous cross-sectional investigations on antisocial behavior (Valois et al., 2006) the present study demonstrated a significant relation between the individual decrease in perceived quality of life and the individual increase in disruptive classroom behavior (Hypothesis 1). A possible explanation for the rather small correlation is that disruptive classroom behavior consists of non-severe antisocial behaviors and concerns

mainly one domain of an adolescent's life. More profound antisocial behaviors usually affect more than one life domain and could result in a stronger relation with perceived quality of life.

Given that hypothesis 1 cannot be interpreted as causal and the direction of the relationship remains unclear, a cross-lagged panel design model was analyzed (Hypothesis 2). Although model fit was good, the hypothesis had to be rejected. One explanation may be that disruptive classroom behavior increases the student-perceived popularity among classmates (Bru, 2006), which possibly buffers negative consequences for quality of life. In addition, the present study focused on perceived quality of life in general. Possibly domain specific quality of life – such as wellbeing in school – would show stronger relations. While no significant direct effect of disruptive behavior on perceived quality of life was found, disruptive classroom behavior had an indirect effect through the student-perceived relationship with the teacher (Hypothesis 3). Thus it seems that teachers play an important role in a student's life.

Concluding, this study's results contribute to our knowledge on the relations between disruptive classroom behavior, student-perceived quality of life, and the role of student-teacher relationship herein. In order to even better understand the relation between disruptive classroom behavior and adolescents' perceived quality of life, more longitudinal research including both individual and contextual factors as predictors may be required.

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WELL-BEING AND TRANSITIONS THROUGH EDUCATION SYSTEMS AND BEYOND. REFLECTIONS FROM KENYA

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Of the 17 UN SDGs set to transform the world and the agenda for vision 2030, Goal 4 highlights Education: *Ensure inclusive and quality education for all and promote lifelong learning*. Education is an essential dynamic tool which is very important to the development of the world. In the 21st century, education has constantly experienced transition to embrace technology and new methodologies hence promoting well-being at schools. The emphasis placed on its importance has been redefined time and again in different contexts and platform in order to improve the content materials fed to the learners and this content must remain relevant.

The process witnessed in the exercise of developing curriculums can evidently be reflected in the transformation of publication series of learning materials from text books to dictionaries in order to provide relevant information in a dynamic world of education and technology.

Kenya got her independence in 1963, hence free education was introduced. The east African community embraced the same education system of 7-4-2-3 (7 years of primary, 4 years of secondary, 2 years of high school and 3 years of university) until 1985 where Kenya transited to a new education curriculum of 8-4-4 (8 years of primary, 4 years of high school and 4 years of university) whilst Uganda and Tanzania maintained the same system to date. This move was informed by the ideology of nurturing the students holistically to improve their socio-economic dynamics, skill set and welfare. However, 32 years of practice and experience on the new system, it has since been realized that the failure has outweighed the success hence the current crisis of flooded unutilized manpower.

Under the directive of Kenya Institute of Curriculum Development (2014), formal schooling begins between the ages of 5-6 years with compulsory basic education running through to the age of 14. The cycle is thus divided into lower (standard 1-4) and upper primary (standards 5-8). At the end of the primary circle, students are awarded the national Kenya Certificate of Primary Education while their high school counterparts are awarded the national Kenya Certificate of Secondary Education upon undertaking examinations supervised by the Kenya National Examination Council. These

examinations are primarily used to rank and stream students into secondary schools and universities respectively. The public primary school education curriculum is uniform across the country and includes the subjects; English, Kiswahili, Mathematics, Sciences, Social studies, religious education, creative arts and physical education and only 5 subjects are examinable; English, Kiswahili, mathematics, social students & science. In the secondary school section, students are examined only in eight subjects Mathematics, English and Mathematics being compulsory while the rest would include sciences, applied sciences, technical sciences and humanities.

Whilst government remains the majority provider of basic education, a number of private schools (complimentary & elite) and international schools exists, delivering education as institutions of choice to the elite. According to a study by Uwezo (2013) it is stated that within countries there are large disparities; e.g. the best and worst performing districts in East Africa are all in Kenya.

Experiences and practices

The 8-4-4 curriculum system has faced a lot of criticism and has remained a burden to the students, parents and teachers respectively. In recent years, the society has strongly emphasized on grades and neglected the core basis of education which is to impart knowledge that can be translated into application. The students and teachers have been overly stressed by the heavy assignments administered in order to improve grades. This has taken a rather dangerous turn because of the emphasis that has been put on memorizing as opposed to understanding the lessons administered. Generally the school environment is lacking eudemonic pleasure of operation.

The major requirement of joining the teacher-training institutes is good high school grades minimum a C+ an equivalent of B in the USA secondary scaling where teachers undergo extensive training for either a 3 year diploma or 4 year degree. After the training they are then accredited by the Teachers Service Commission a national body which is a regulatory body of teachers and education in Kenya. The TSC is mandated by the government under the Article 237 of the constitution to (Republic of Kenya Constitution):

1. Advise the national government on matters relating to the teaching profession.
2. Review standards of education and training of persons entering the teaching services.
3. Review demand for & supply of teachers amongst others.

Bearing in mind that these teachers are professionals, it means that they extensively understand the importance of administering an actual curriculum as stipulated by the directives of the Ministry of education (Ministry of Education Science and Technology, 2012). They have a responsibility to deliver quality education especially because education is one of SDGs goals in achieving the agenda of vision 2030, a key component in development. It is important that they rise above the pressure of good performance to deliver quality education that shall provide a platform of equal standards. Despite the pressure surpassing the need to focus on the well-being of education, there is need to re-track in order to promote self-esteem actualization, infrastructure development (to create an enabling environment for students to air their ideologies and grievances),

identifying child abuse symptoms and creating a system of questioning authority of a teacher for the purposes of learning. Another area that needs focus would be equipping the schools and teachers to deal with matters arising from education transition such as development of new interests, symptoms of sexual abuse, sexual orientation etc.

Extensive unrest was experienced in 2016 in high schools following violent protests by students by burning down schools. This was a result of the pressure mounted on the students to perform exceptionally. Consequently, teachers were in a long while engaged in aiding the students to cheat in exams defeating the whole purpose of learning. Schools which did not afford this alternative were shamed for their poor performance and students suffered ridicule and low self-esteem.

This is a general reflection of a struggle in the education system in Kenya which has finally led to yet another transition to a more practical system that focuses on early development of specialization and holistic well-being of students.

Methodology and methods

The mundane of the well-being in education transition should be reflected in the operative systems that govern the schools. This could be classified in various categories as such:

- Self-esteem development
- Social development
- Personal development
- Cultural character enforcement
- Infrastructure development

1. These key components ensure that education is encompassed to shape individuals in social and cultural angles resulting into high esteemed individuals' whose positive impact of education trickle down into the social and economic realms of the society.
2. The new system aims to subject specialization at a younger age to enable them identify their strength and exert interest for pursuance to a higher or professional level.
3. Special abilities should be identified and nurtured at a nascent stage noting that students possess different abilities that can culminate into productivity if tapped and used well. This shall be the only remedy to ensuring that education remains relevant in our development sphere.
4. The government should localize the monitoring & evaluation system to capture the success and teething problems of each region. This shall see an adoption of consistent methodological reporting that offer practical solutions and support to the school and the stakeholders.

Strategies to achieve UBE in Kenya

The government of Kenya has laid some strategic measures to support the initiative of Universal Basic Education. MOEST developed Sessional Paper No. 14 (2012), constantly under review indicating 14 strategies for achieving UBE in Kenya. Some of the few key areas highlighted include:

1. Ensure a holistic approach by integrating health, sanitation, nutrition and safety, thus making schools 'child-friendly,'
2. Review and implement the policy on inclusive education for pupils with special needs including the gifted and talented
3. Expand the school meals (feeding) program, and encourage communities to provide the midday meal in marginalized, hard-to-reach and vulnerable groups;

   School feeding program plays a key role in education well-being through keeping the children in school and at the same time minding their health. The government has partnered with World Food Program and UNICEF to deliver on the school meals and support humanitarian child education services but the intensity of the need surpasses them. According to the KFSSG report (Famine Early Warning Systems Network, 2017) short rains assessment that was conducted in 23 counties in January 2017 estimated that a total of 2.6 million people are acutely food insecure and require urgent humanitarian assistance, mainly in Kenya's pastoral and marginal agricultural areas. This represents an increase in needs by about 100 percent from the last long rains assessment in July 2016 reflecting the substantial decline in food security. Earlier on in May, in Kilifi County, girls had become targets by perverted old men who offered them food in exchange of sex. This was attributed to poverty and harsh famine conditions that adversely affects the counties especially in semi-arid areas. Such scenario indicates the importance of school meals as a means of protecting vulnerable children as well as promoting basic human rights. As an intervention measure, the gap is increasingly being met by the private sector.

   A case example is Mafanikio Organization that has been contributing to financing and supporting education from early childhood development to school feeding programme. Over the years, the organization has supported school feeding programs as a key to keep the children in school especially during the drought and famine seasons. Recent indications show improved education transition from classroom reference to informal education engagement. This form of intervention is fundamental to promote quality education to the vulnerable groups who are otherwise, not factored in ordinarily.
4. Mobilize adequate resources for construction and rehabilitation of schools and provide equipment to needy areas, especially in ASAL's and urban slums towards attaining equity.

   Lack of access and quality education to marginalized communities remains a barrier to achieving MDG and vision 2030 goals. This is because these areas have limited access to education, lower quality of teaching staff considering most teachers are untrained and did not get a minimum pass mark grade of C+. The facilities are equally appalling hence poor learning environment without basic learning materials (text books). The schools do not have extensive support from the government and most of the times, are run by the community. This makes the situation dire especially in APBET schools (Alternative Provision of Basic Education & Training) since they do not have standard point of reference and mostly are unsupervised by the Ministry of Education. This exposes the students to misinformation, education inequalities and wanting in knowledge.

As an intervention measure, Mafanikio Organization provides graduate substitute teachers through the voluntary program that brings in international students to teach and live with the local communities in marginalized areas.

5. Ensure the re-entry of girls who drop out of school due to pregnancy and early or forced marriage in line with the Gender Policy in Education (Republic of Kenya, 2007).
6. Establish mechanisms for providing social support to orphans and most vulnerable children.
7. Strengthen partnerships with development partners and the private sector for provision of basic education.

Way forward

Given that, the government has identified and documented areas that need redress, collective responsibility of all stakeholders is prudent to work towards implementation to secure a well-being transition in education and beyond. The outcome shall reflect on the result oriented social behavior of students on individual basis and general society. This holds a great potential to creating a wealthy nation which is self-reliant through opening engagement opportunities of work labor force and trade.

The above experiences, interventions and strategies inform the need to forge more local and international partnerships to tackle the delivery of quality education to all children in Kenya irrespective of their socio-economic status.

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A CHILD'S WELL-BEING AS A PHILOSOPHICAL MATTER

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The child's well-being is also a philosophical matter. This for at least three reasons.

Firstly, because the notion of well-being is ambiguous and problematic, since it can refer to some characteristics of the subjective experience as well as to reaching an objective positive condition. In this sense, the question is a topic of normative ethics in which the philosophy of well-being is an important though controversial chapter (Crisp, 2016).

Secondly, the problematic aspect in the notion of well-being is particularly undeniable when the subject is the child, especially the youngest (pupils in kindergarten and in the first two-years of primary school). To rely exclusively on the child's subjective judgment in order to determine his well-being could reveal itself as misleading and misguided. It is in fact commonly believed that children cannot really know what they want since their character has not yet been formed. They could express a mistaken or at least an inadequate evaluation of their own well-being, contrary to adults whose well-established character makes them subjects with a determined or at least more stable perspective of the world.

Moreover, the judgment expressed by adults on the child's well-being can also reveal itself as misleading and misguided. Assuming that the positive subjective experience was a necessary condition in a state of well-being, it could be problematic for adults to put themselves in the shoes of a child and judge the condition of the well-being of a small child in the way that this child would judge it. Thus, the question is similar to the problem of the philosophy of mind proposed by Thomas Nagel (Nagel, 1974). Even though it can't be denied that knowing what it is like for a small child to be a child it is not the same thing as knowing what it is like to be a bat for a bat – at least because people who ask themselves the question have already been children, but never bats – the similarity between the two situations is greater than it is usually thought to be (Tomlin, 2016, 5-6).

There is, finally, a third reason for justifying the belief that the child's well-being is also a philosophical matter. According to a particular theory, what constitutes the child's well-being as a component of his good life is not completely independent from a

particular philosophical conception of childhood. Every notion of a child's well-being has, at least implicitly, an image of the childhood condition and of its relationship with the adult's own childhood. The problem of a child's well-being is in this view an object of the philosophy of childhood and more broadly, of philosophical anthropology.

Communication focuses attention on all those philosophical aspects of the problem. Particularly it examines those aspects from the point of view of the philosophy of childhood. Some dominant theses that have emerged in recent philosophical publications are discussed, which explicitly define possible practical implications and the educational meaning of different positions.

But first, I will identify three conceptions of childhood.

Educational thinking of the last century, which was prophetically defined by Ellen Key as "the century of the child", has a certain familiarity with a conception of childhood that could be defined as primitivistic in the light of some acute observations by Paolo Rossi (Rossi, 2001, 11-69) or more broadly romantic (Gheaus, 2015). It considers childhood as an eminently positive period in life, during which the child would give proof of skills of which there would not remain any traces in the subsequent years of his life – a lesson that we can find for example in Andersen's fairy-tale, "The Emperor's New Clothes". According to this rather extravagant conception, adults would therefore be defective children. The transition from childhood to adulthood would constitute a loss justifying the rejection of growing up, just like Peter Pan wished.

The idea that childhood is a positive state of human life has recently been argued by some thinkers. They evoke a conception of childhood of remote Aristotelian origins (Matthews and Mullin, 2015) which is much more influential in Western culture than the romantic conception. Nowadays, in the philosophy of childhood the Aristotelian conception has come to life again and its arguments have gained new credit. Having been one of the favourite targets of numerous educational theories of the 19th century, its basic assumption is known even beyond the philosophical community. The Aristotelian conception considers the child an imperfect being, since it is incomplete in relation to an adult (Gheaus, 2015). Childhood is a negative and difficult condition of life (Schapiro, 1999); which is true independently from the fact that somebody had positive experiences during childhood or had now pleasant memories of it. The standard condition of childhood is indeed characterised by some important deficiencies in practical behaviour, clearly distinguishable from the one of a normal adult: a lack of comprehension of the link between means and ends of an action; a practical fluid identity preventing the affirmation of a defined project of life; a constitutive vulnerability towards the natural and social environment; an accentuated dependence on other people's care (Hannah, 2017).

The Aristotelian conception is less extravagant than the romantic one, but it has numerous limits as well. Both are partial conceptions of childhood. None of the two is able to adequately explain the process that leads the child becoming an adult. More precisely, they have the flaw of not being able to give a comprehensive account of the child's well-being in common. Moreover, both assume a substantial continuity from childhood to adulthood, like the one that may be seen in a growing plant, and therefore a comparison between one condition and the other is possible. As a consequence, the criteria of judgment of a small child's well-being could be identical to those of an adult.

A different conception of a child's well-being should be adopted instead, a conception integrating some elements of the Aristotelian conception and others of the romantic one.

On the one hand, it recognises the specificity of the goods of the different ages of life of a person; it thus considers that the criteria determining the child's well-being do not necessarily coincide with those applying to adulthood (Skelton, 2016, 368). From this point of view the relationship between the child and the adult is similar to the one between a caterpillar and a butterfly (Tomlin, 2016). This means recognising the relevance of Thomas Nagel's argument, even in the case of a child's well-being. The practical implication of Nagel's argument is two-fold. It is reasonable to have some doubt on the adult's ability to imagine what a child would need for its own well-being and what would be able to guarantee it to the child. At the same time, the ability to find unusual ways in order to give voice to the child's point of view on its own well-being is required (Mashford-Scott et al., 2012). As can be seen, the practical implication is neither skeptical nor futile.

On the other hand, the child's transformation into an adult is not a discontinuous process as the metamorphosis of a caterpillar into a butterfly is. The difference between the child's and the adult's condition is not irrelevant; however, it is not as profound as it were for two distinct natural kinds. The child isn't identical to the adult; but the child is a human being before becoming an adult. We can deduce some important educational implications about treating the child, implications which will be discussed in the final part of this paper. It is the paradox of education: because of their constitutive vulnerability, the child must be protected and defended; this justifies the liberal paternalism towards the child and explains why in the modern world childhood appears as "a sort of quarantine" (Ariès, 1960). The dependence is however temporary: childhood is a period of experimentation; children must be granted a progressive exercise of free and responsible choices with which they progressively become active subjects of their own well-being. By their common humanity (Williams, 1962) children and adults are equals, both worthy of respect. It is however essential to recognize the difference, even when the object is the well-being of the person. Treating the child as an equal does not mean, in fact, treating it in the same way as an adult is treated.

The result of the analysis of this paper is therefore also interesting from a theoretical point of view; with regard to normative ethics. The consideration results in a "hybrid" conception of the child's well-being (Skelton, 2016, 373).

Childhood is not merely a period in life to prepare for adulthood. Goods offered by childhood should be safeguarded, knowing they have value for the child as the person who is now, not only for the adult it will probably be in some years. To neglect them would be an error, as shown in the pages of Rousseau's "Émile" on which the educational theories of the last century have been based. Nevertheless, experiences of childhood should not prevent goods of adulthood. It is hence essential, beginning from early childhood, to protect the autonomy in their own life choices as future adults, "the child's right to an open future" (Feinberg, 1980). The exercise of this right depends in a determinant manner on the education received by the child in the family, school and society (Ostinelli, 2004). To guarantee the balance between those elements of a child's well-being is only one of the challenge of today's education.

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EVALUATION OF WELL-BEING OF STUDENTS WITH RUNNING TRY OUT

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Introduction

The theme of the research is focused on how an incorrect system of training for athletes and students can have dangerous consequences on their health. Athletes and students that are hardly training can come up with the following problems: 1) An increase in number and gravity of muscle, tendons and ligaments damages; 2) psychological problems that lead to drop out, due to too much burden stress for the athletes. The above situations contribute to change the everyday life routine which leads students and athletes to an inactive lifestyle that can lead to diseases such as: diabetes, hypertension, etc. (Chopra & Tanzi, 2016). Regarding students not making a sport, we can observe lower energy levels and organic general efficiency compared to students making a sport (Chopra & Tanzi, 2016).

Both athlet students and students who do not practice any sport, can be monitored with a simple test implicating running at a constant rhythm and speed (a six minute at 6 km/h running test). This test gives an evaluation in terms of a score called economic coefficient (*coefficiente di economicità*). This coefficient derives from the number of the heart beats measured before and after the physical activity (six minutes running at 6 km/h).

Goals and research questions

On the vast scale, a monitoring made with a specific test would be useful for students? Are the youths nowadays aware of their physical and psychological decline? Are they really interested in improving their wellbeing? The aim of this research was to make them aware that their health level can decrease in a short frame of time. Another important aim of this research was to give them an individualized method of for self-monitoring and wellbeing enhancement. In fact, a six minute running at 6 km/h improves not only the muscles efficiency, but also, the cardio vascular, endocrine, and cognitive system (Chopra & Tanzi, 2016).

Methodology and sample

The research has been taking place for three-four years in three Italian cities including Livorno, and wanted to underline how physical activity (also agonistic sports) together with correct eating habits can help prevent serious diseases. The school where data were collected has almost two thousand students, and a significant number of them have diabetes and other progressing illnesses. This study shows that other than having genetic factors, these people smoke, eat junk food, and don't perform daily physical activity.

Before the study begun, the responsible of this project and his staff presented it to students. Students' parents gave consensus to take saliva and urine samples that were then analysed at Livorno's hospital. At school, blood pressure was measured, and a questionnaire regarding food and life habits was filled out by students. In parallel, physical education teachers, during curricular lessons, make students perform an unofficial test to test speed and rhythm. After some weeks, their heart beats were counted with a pulse oximetry before and after the six minute running test. That permitted to compute the index of organic general efficiency. Results were gathered on excel sheets and shown to the students. The index of organic general efficiency curve was similar to the Gaussian curve. School grades were also assigned using a scale from 1 to 10.

In sum, three data were obtained: 1) heart beats from sitting down position to a minimum of five minutes; 2) heart beats after six minutes running at 6 km/h (140 footsteps per minute); 3) the difference between the second and the first heart beat measure. The organic general efficiency is higher when the resistance that the blood encounters in its flow is higher. The blood flow depends on its density and on the efficiency of internal organs (liver, lungs, kidneys, muscles, etc.). The more resistance the heart has, the more it has to pump. The University professor of physical education Antonio La Torre, who cooperates with the Italian Olympic committee, stated that "each internal organ must pay duty to the heart". In order to complete the study we combined the results obtained with those emerging from the Borg scale. A sample of about three hundred students of 14 to 18 years were examined, 75% were females and 25% males.

Analysis and results

Analysis' results are the following:
1) students show more often tachycardia than bradycardia;
2) a significant number of student reaches a very high level of heart beats and according to the Frank Starling Law are in a "risk zone";
3) smokers have worse results than non-smokers;
4) sometimes, athletes – students (above all in team sports) don't have an "athletic heart" (e.g. bradycardia).

During the running test at 6 km/h, we also noticed a high number of students that were unable to complete the test. These students have asthma and various forms of allergies giving breathing difficulties. Heart diseased students were exempted from the test. In order to the make this test more complete forty trainers participated to the same test as the students. The majority were students' trainers. Their results were better than

those obtained by the young people. The worse results were obtained by the two trainers who smoke.

Research data

In 2014/15 school year 74 students made the test. The organic general efficiency index mean was of 68 bpm. Five students were over 100 bpm and only three were under 40 bpm. In 2015/16 school year 125 students completed the test. The organic general efficiency index mean had worsen to 76 bpm, nine students were over 100 bpm and five were under 40 bpm. Hence, there was a worsening of 11%, even if data confirmed the flow of Eurofit Tests. This last test showed a decrease of 5% in all physical capacities in ten years (from 2004 to 2014) in several European countries.

In 2016/17 school year 100 students made the test. The organic general efficiency index mean was of 76 bpm. The mean of heart beat at rest of young people was of 77 bpm. The data obtained this last school year were gathered using the software furnished by the National Motorial Ability Observatory (Osservatorio Nazionale Capacità Motorie).

We hope that simple tests like the six minute at 6 km/hour will be utilized by an increasing number of physical education teachers and physical trainers as well. The goal is to ensure that in this school year, a thousand students can make the test.

Discussion

After having examined their results, many students among those not having obtained good results were not interested in improving their performance. Even showing results of many scientific studies, their interest did not grow. Usually, the elders are said "fragile"; the same word can be utilized for a large number of students. The above mentioned characteristics can be found in the working world now. The young workers (employees, clerks, etc.) show scarce resistance and health diseases. This state of thing creates inconveniences to the community. Scarce mental and physical efficiency has a repercussion in the working world because the employees are unable to remain focused on their job for a long period of time (Lipton, 2006; Pert, 1999; Trabucchi, 2007).

Regarding life styles, unfortunately continuous breaks are used to smoke, to have a snack, to drink, etc. both in the working world and at school.

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DEFINITIONS OF WELL-BEING AND SUFFERING: SECONDARY SCHOOL AND UNIVERSITY STUDENTS' CONCEPTUALIZATION IN TERMS OF PHYSICAL AND PSYCHOLOGICAL DOMAIN

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Introduction

In everyday life it is very common to deal with situations that can influence one's state of well-being or suffering, and individuals gradually develop an understanding of these two states (Bruner, 1986). In the literature there are many definitions of well-being and suffering focusing on different aspects. On the one hand, definitions of well-being vary extensively (Pollard & Lee, 2001). Although in 1948 the World Health Organization defined health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' emphasizing both physical and psychological aspects of health, only recently have psychologists offered an inclusive definition of well-being as a state integrating physical, psychological, and socio-emotional functioning (Bornstein, Davidson, Keyes, & Moore, 2003). On the other hand, studies on children and adolescents' understanding of suffering have typically considered either mostly physical phenomena, such as illness (Burbach & Peterson, 1988; Siegal & Peterson, 1999) or injuries (Burgwyn-Bailes, Baker-Ward, Gordon, & Ornstein, 2001; Peterson & Whalen, 2001), or mostly psychological phenomena, as for traumatic and stressful events such as abuse and involvement in natural disasters (Bahrick, Fraser Parker, Fivush, & Levitt, 1998; Bidrose & Goodman, 2000). The existence of many different definitions is probably related to the complexity of the two concepts and underlines the urgency of taking into account different levels of analysis. This issue is particularly relevant, in light of the key role of understanding individuals' inner functioning, and specifically emotional aspects, for adapting successfully to the external world, and in particular to learning contexts (e.g., Denham, Bassett, & Zinsser, 2012a; Saarni, 1999).

Addressing suffering and well-being states may involve referring to aspects relating to the body and to the mind, i.e. pertaining to two distinct conceptual domains, a psychological and a physical domain. From an early age, children develop instruments to know the world also taking into account these two domains, showing both strengths and limitations (Carey, 1999; Notaro, Gelman, & Zimmerman, 2001, 2002; Schulz & Gopnik, 2004;

Wellman & Gelman, 1992). Surprisingly few studies examined how children and adolescents represent well-being and suffering with reference to psychological and/or to physical aspects, also focusing on the possible conceptualization of them as opposite states. Some research studies indicated that preschool and school students' representation of well-being and suffering states pertaining to two different domains can be conceptualized both in terms of symmetric and asymmetric aspects (e.g., Gobbo & Raccanello, 2011; Raccanello & Gobbo, 2011, 2015). For example, analysis of five to nine-year-olds' narratives revealed differences between the two states, with higher focus on events relating to a psychological domain for well-being and to a physical domain for suffering; however, older children were more prone to report psychological than physical events for both valences (Gobbo & Raccanello, 2011). In addition, salience of the coexistence of states pertaining to the two domains was higher for well-being rather than suffering, and it increased with age for the latter state considering five to nine-year-olds' and adults' definitions (Raccanello & Gobbo, 2011, 2015). However, scarce attention has been paid to studying these issues with older students.

Aims and hypotheses

Considering the pervasiveness of states of well-being and suffering in everyday life, our main aim was to investigate how secondary school and university students conceptualize states of positive and negative valences pertaining to their body and to their mind. In line with previous findings on younger students (Gobbo & Raccanello, 2011; Raccanello & Gobbo, 2011, 2015), we hypothesized that at increasing ages (1) the reference to the physical domain would have increased while the reference to the psychological domain would have been stable, and that (2) the presence of the coexistence of the two domains would have been more frequent. In all the cases, we also checked for differences between well-being and suffering states, in order to explore whether their conceptualization can be considered symmetric for its characterization in terms of physical and psychological domains for students of this age.

Method

Participants

The participants were 352 students from Northern Italy: There were 134 twelfth-graders (M = 17.5 years, 82% females) and 218 university students (M = 20.2, 84% females). They participated voluntarily, after they or their parents signed an informed consent form.

Procedure and materials

The students were administered a written task. Due to organizational constraints, there was a pencil-and-paper administration for secondary school students and an on-line administration for university students, using the Apsym-Survey Software (ApSS, Pasini, Brondino, Burro, Raccanello, & Gallo, 2016). All the students were asked to give a written definition of two terms referred to well-being and suffering, i.e. feeling good and feeling bad (in Italian, stare bene and stare male, respectively), counterbalanced.

In line with previous coding systems (e.g., Gobbo & Raccanello, 2011; Raccanello & Gobbo, 2011, 2015), the definitions were coded for absence/presence (0/1) of (1) reference to the physical domain (e.g., well-being: physical well-being; suffering: lack of good physical health) and to the psychological domain (e.g., well-being: feeling in harmony with yourself and being serene; suffering: feeling anxiety and a weight in your stomach, not being able to concentrate), and (2) coexistence of the two domains (e.g., well-being: being happy and in good health; suffering: being disturbed mentally, physically, or sentimentally in a negative way according to situations).

A second judge coded 30% of the definitions for reliability (mean agreement between judges: 96%).

Data analyses

We used Generalized Linear Mixed Models (GLMM). We utilized the lmer/glmer functions in the lme4 package (Bates, Maechler, Bolker, & Walker, 2015) of the R-software (R Core Team, 2017). We performed Mixed Model ANOVA Tables (Type 3 tests) via parametric bootstrap (afex package). For dichotomous dependent variables we utilized binomial family and logit link-function, while for count dependent variables we utilized Poisson family and log link-function. We used Bonferroni correction for post-hoc tests (lsmeans package, Lenth, 2016). Participants was the random effect. The level of significance was $p < .05$.

Results

Reference to physical and psychological domain

We carried out a GLMM with school level (twelfth-graders, university students) and type of state (well-being, suffering) as fixed effects and reference to the physical domain as the dichotomous dependent variable. We found a significant effect of school level, $X^2(1, 354) = 12.35$, $p < .001$, and type of state, $X^2(1, 354) = 8.02$, $p = .004$. Reference to the physical domain was lower for twelfth-graders (45%) compared to university students (62%), and for well-being (52%) compared to suffering (60%).

The same analysis was repeated for reference to the psychological domain (93%), but no significant effects emerged.

Presence of coexistence

We ran a GLMM with school level (twelfth-graders, university students) and type of state (well-being, suffering) as fixed effects and presence of coexistence as the dichotomous dependent variable. Significant effects of school level, $X^2(1, 354) = 10.56$, $p = .001$, and type of state, $X^2(1, 354) = 7.84$, $p = .005$, emerged: Presence of coexistence was lower for twelfth-graders (46%) compared to university students (61%) and for well-being (51%) compared to suffering (59%).

Discussion

At the theoretical level, our findings indicated that, in everyday life, secondary school and university students' representation of well-being and suffering states can be conceptualized in terms of some asymmetric aspects like the higher relevance of physical domain and coexistence between domains for suffering versus well-being, and some symmetric aspects like the same relevance of the psychological domain for the two states. In addition, our data revealed that at increasing ages the conceptualization of the two states becomes more complex, with higher salience of physical domain and coexistence, extending previous literature (Gobbo & Raccanello, 2011; Raccanello & Gobbo, 2011, 2015).

At the applied level, knowledge on students' representation of negative and positive states, frequently characterized in terms of physical and psychological aspects, can be useful in prevention and educational field. It could be a key resource to base programs aiming at developing individuals' psychological instruments to better deal with people's functioning, both within and outside learning contexts.

This research suffers from limitations such as the use of only one method to investigate our research questions, the absence of measures on cognitive abilities, or having involved a sample of students not balanced for gender. Nevertheless, our findings extended the generalizability of previous data on younger students' conceptualization of well-being and suffering and solicit further investigations over different stages of the life span.

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PROMOTING MENTAL HEALTH IN SCHOOLS: RESULTS OF A NATIONAL STUDY IN SWITZERLAND

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Introduction

The Swiss government has mapped out a strategy to counter the consequences of increasing prevalence rates of non-communicable chronic diseases (NCD) (Health 2020, BAG 2013). In line with this strategy, a project group composed of members of the Federal Office of Public Health (FOPH), the Conference of Cantonal Health Directors (GDK), Health Promotion Switzerland and other external partners wrote a report on the situation and the need for action regarding the promotion of mental health within the Swiss population (Bürli, Amstad, Duetz Schmucki & Schibli, 2015). Where children are concerned, the school setting can play a major role in the promotion of health and well-being (Trussell, 2008). According to Konu & Rimpelä (2002), the well-being of children is connected with teaching and education as well as with learning and achievements. Indicators of well-being are to be found in school conditions, social relationships at school, the means for self-fulfillment and the health status of students. Moreover, a poor state of health may have a negative impact on the quality of learning (Dadaczynski & Paulus 2011, 164). Despite this knowledge, little is known about practices in promoting mental health and psychological well-being in Swiss schools. To bridge this knowledge gap, a research project was carried out by members of the Swiss Network "bildung+gesundheit". The main aim was to bring in the perspective of the mental health of school children and school staff to the above mentioned national strategy. The project was supported financially by the Federal Office of Public Health.

Research question and objectives

The project was guided by the following research question: Is there any need for action within Swiss schools regarding the promotion of mental health? Three separate studies were conducted for this purpose:

1) In the first study, existing scientific literature was reviewed in order to address questions regarding the prevalence of mental health and mental health problems in school children and teachers, protective and risk factors related to developing mental health problems as well as the evidence for successful school approaches;
2) The second study gathered insights on existing offers (programs, activities) for schools in Switzerland to promote mental health as well as to learn about the needs of cantonal services which support schools in their mental health promoting activities;
3) The third study looked at the situation in Swiss schools. The research questions concerned the challenges and needs of schools in order to promote the mental health of children and staff as well as the activities and programs they implement in their schools.

Methodology and methods

An extensive literature review was conducted by the project team to answer the research questions in the first study. Information on existing offers for schools was collected in explorative research on the internet and complemented by telephone interviews with selected program managers (n=18) and cantonal experts (n=31) (study 2). The third study consisted of an online survey. A representative sample of Swiss schools (n=448) was contacted, of which 189 head-masters or teachers in charge of health concerns answered the questionnaire (42%).

Analyses and results

The literature review (study 1) revealed heterogeneous prevalence rates for the mental health problems of children and adolescents, ranging from 0.5% to 10% depending on the problem, with anxiety/phobia and dysfunctional social behavior as the most frequent. Between 8% and 50% of students with mental health problems were reported not to be receiving adequate support or counseling. The implementation and effectiveness of three distinct forms of mental health promotion in schools, that is action to prevent psychological distress, distinct features of the general teaching content, early detection of psychological strain and mental health problems, are discussed in the report as well as measures to promote the mental health of teachers, such as strain reduction and mobilization of personal and social resources (Zinniker & Kunz Heim, 2017).

In the second study, programs and activities were included into the inventory if they stated the promotion of mental health in schools as a specific goal. By applying these inclusion criteria in the internet search, 39 programs or activities were found which were being carried out throughout Switzerland or in one of the Swiss language regions. Their target group was students in the great majority of cases, and the programs aimed mostly at strengthening conflict management skills, social competencies and a positive sense of self. Another 206 programs or activities were found on the cantonal level, two thirds of them targeting students and one third teachers. According to the respondents in the telephone interviews, there is little need for new offers but rather a need to integrate the promotion of mental health into existing offers or adapt specific offers to the needs of

new target groups (for example adaptation of programs for primary school to the secondary school context). Besides this, through intensified cooperation and coordination between the different stakeholders, the promotion of mental health could be approached in a more purposeful and needs-oriented way than is now the case (Holdener, Conrad Zschaber & Jordan, 2017).

Finally, results of the online survey (study 3) showed that the majority of Swiss schools specifically promoted the mental health of their students, although in different ways and to different extents. Problem-based activities and programs, such as the prevention of violence and the management of conflicts, were mentioned more often than general approaches to mental health promotion, such as life skills approaches. Around 30 % of the respondents expressed a desire for improved cooperation with specialized services. According to respondents, there is a need for action regarding counseling and support services for concerned students, their teach-ers and parents, regarding life-skill programs for students and specialized training-programs for teachers. About half of the respondents mentioned financial and organizational problems as constraints when implementing mental health promoting activities at their schools. In the analysis, regional differences showed up in the prevalence rates of mental health related student behaviors, in the perceived responsibilities of schools for the early detection of mental health problems as well as in the need for adequate specialized programs and offers for schools (Zumbrunn, Zinniker & Kunz Heim, 2017).

Discussion

The results of the project presented provide new insights on mental health promotion activities in schools in Switzerland, from a schools' point of view as well as a providers' point of view. However, due to the small response rate to the online survey, results on regional differences should be considered with caution.

Based on the results of the three studies mentioned above, the project team highlighted the need for action regarding the promotion of mental health in Swiss schools in terms of 13 recommendations. They can be classified into four fields:

- Knowledge and training: develop a shared understanding of mental health promotion in the school setting by concerned actors, conceptualize specialized training for teachers
- Students as target group: promote good practice offers and life-skills programs, make teachers aware of internalizing problem behaviors such as anxieties, use established methods of early detection also for mental health problems, optimize counseling services and collaboration with specialized services outside of schools, spread information on existing programs and offers
- Teachers as target group: foster cooperation between cantons concerning offers pro-moting the mental health of teachers, implement workplace health promotion in schools
- Success factors for program implementation: consider success factors in good practice examples, minimize barriers to successful implementation of activities promoting mental health.

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STUDENT WELL-BEING WITHIN SCHOOLS IN MONTREAL, MELBOURNE AND BORDEAUX: FINDINGS FROM THE INTERNATIONAL STUDY OF CITY YOUTH

STUDENT WELL-BEING WITHIN MELBOURNE, AUSTRALIA: FINDINGS FROM THE INTERNATIONAL STUDY OF CITY YOUTH

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Introduction

The Melbourne Declaration of Goals for Young Australians outlines the aspiration that all Australian state and territory education systems work together and ensure that "every young Australian becomes a confident and creative individual with a sense of 'self-worth, self-awareness, and personal identity that enables them to manage their emotional, mental, spiritual and physical wellbeing" (MCEETYA, 2008, p.8). Student wellbeing is considered a vital precondition to economic prosperity and social cohesion within Australia, with a strong sense of wellbeing enabling "children to engage positively and confidently with their environment and therefore to take full advantage of learning opportunities" (Marbina, Mashford-Scott, Church, & Tayler, 2015, p.5; MCEETYA, 2008). Various Australian jurisdictions are starting to approach the topic seriously and engage in systemic reform to improve overall levels of student wellbeing. This paper looks specifically at student wellbeing in Melbourne, the capital city of the state of Victoria in Australia.

The current Victorian Government's "Education State" reform agenda seeks to improve resilience in young people and the amount of physical activity undertaken weekly, alongside more typical targets around lifting student achievement in literacy and numeracy (Department of Education and Training, 2015). The topic of wellbeing is also emphasized in the new Victorian curriculum framework, which includes four cross-curricular capabilities (critical and creative thinking, ethical capability, intercultural capability and personal and social capability) with defined standards to use for teaching and assessment, until the end of the 10th Grade. The "personal and social" capability strand in particular has vital components underpinning wellbeing such as self-awareness and management including the development of resilience (Victorian Curriculum and Assessment Authority, 2015).

The Victorian system's explicit intention to improve student wellbeing necessitates good measures by which to track progress that can also help target areas where improve-

ment is needed. There are a number of data collections within Melbourne that take direct measures of student wellbeing, complemented by others which take participation in education, training and work as a proxy measure of wellbeing (Lamb, Jackson, Rumberger, 2015). This paper uses data collected through the International Study of City Youth (ISCY) involving a representative sample of 10th Grade students in Melbourne. This data and the newly developed ISCY socio-emotional scales associated with dispositions reflect student preparedness to learn and give insight into student wellbeing, through the measurement of belonging, hope, purpose and self-efficacy.

Research questions and objectives

- How does the education system in Victoria approach the topic of wellbeing?
- What policy frameworks or provision does Victoria offer or have in place?
- How does Victoria currently measure student wellbeing?
- What can ISCY data tell us about differences in student wellbeing using ISCY indicators?

Methodology and methods

The data used for this paper is taken from the International Study of City Youth conducted in 2014. The International Study of City Youth is a study undertaken with 10th Grade students from 16 cities around the world. Schools participating in Melbourne were a representative sample of schools drawn from all sectors (i.e. Government, Catholic and Private). These three distinct sectors differ from one another in terms of governance and policies but all receive federal and state Government funding. Government schools have a more heterogeneous student body and are charged with taking all comers. Catholic and Private schools can enroll at their own discretion, with some high-fee, benefiting from a highly advantaged and homogenous student body. School sector arrangements are not the only factor differentiating schools in Melbourne, there are also finer-grained neighborhood distinctions signifying the city's social stratification which further impact educational outcomes (Van Zanten, 2005).

Grade 10 students were asked to initially answer an online survey of approximately 40 minutes. This questionnaire was designed to be comparable to other large-scale assessments such as PISA, and included items such as student family background, student perception and dispositions, views on school, engagement, future plans, civic participation and political/social values (Lamb et al., 2015). Students also took part in an English and math achievement test adapted from the OECD's PISA instruments. 5619 students participated and from this, 59.2% were from Government schools, 16.9% from Catholic schools and 23.9% were from Private schools. 46 schools in total participated across the greater metropolitan Melbourne.

ISCY gathered important information about student cognitive and non-cognitive outcomes. Items in the ISCY survey were drawn together into scales that constitute the elements of the ISCY Framework for 21st Century skills, dispositions and engagement (Lamb et al. 2015). This paper will look specifically at the constructs identified as stu-

dent dispositions, which are belonging, self-efficacy, hope and purpose. These constructs are vital to a student's preparedness to learn, engage with schooling and meet the demands it affords – all are sentiments, which align to a strong sense of wellbeing. We do not wish to locate the acquisition of these dispositions within the schools' context only, they are also shaped by family/home life and personal characteristics.

Self-report data is commonly used to measure student wellbeing, and its strength is that it can pose personal questions in a non-confrontational manner. One such example is the Victorian Student Health and Wellbeing survey which involves 6000 students in Years 5, 8 and 11 that collects information in an online format on physical health and health risk behaviours, psychological/emotional wellbeing, and school and family relationships (Department of Education and Training, 2015b). As this data is based on self-assessment it can be impacted by social desirability bias, cultural bias and reference group bias (OECD, 2015). However, self-reported measures are commonly used to capture socio-emotional constructs within other large-scale transnational assessments such as PISA and researchers find that "people are quite good at assessing their own character" (Reeves, Venator, & Howard, 2014).

Analyses and results

Using ISCY data, we will analyze levels of student wellbeing using developed scales corresponding to constructs of belonging, hope, purpose and self-efficacy. These scales were standardized across all participating cities, with a mean of zero and a standard deviation of one. The data was also weighted to reflect survey respondents and school sector proportional enrolments. Taking the overall mean by each construct, Melbourne students rate themselves fairly strongly by international comparison particularly on belonging (.183) and self-efficacy (.172).

Male students were more likely to rate themselves highly across all dispositions on average than female students, with the exception of belonging. This gender difference is found particularly on the construct of hope (.090 compared to .016), signifying that male students are more confident in achieving their goals and have a stronger sense of optimism about the future. Students who spoke a language other than English at home assessed their sense of belonging and self-efficacy more highly than students from English speaking homes, with most difference found on the purpose scale (.237 compared to -.026). This aligns with research that suggests students from non-English speaking backgrounds demonstrate a strong ethos of working hard at school with view to the future, due to the reinforcement of social and cultural capital in the home (Naidoo, 2015).

There is significant contrast between students and their sense of belonging, purpose and hope when taking into account socio-economic background. Students from the highest socio-economic backgrounds rated themselves more strongly across all constructs in comparison to students from more disadvantaged homes. Crucially student sense of their self-efficacy was strongly associated with socio-economic status, with students in the highest socio-economic quartile feeling more confident about their abilities to overcome problems and challenges (.376) compared to students from the lowest socio-economic quartile (.004). When disaggregated by student math achievement

quartile, students in the top quartile of math achievement rated themselves strongly on belonging (.422) and self-efficacy (.420) compared to students in the lowest achievement quartile (.057 and .020). Taking sector in account, students in Government schools were less likely to report strong agreement on any construct when compared to students attending Catholic or Private schools. Student sense of purpose was particularly weak in Government schools, with a negative mean (-.010). However, these distinctions could be largely attributed to the differing SES composition of each school sector.

Discussion

The current Victorian Government's Education State agenda states: "to ensure the overall wellbeing of children and young people is as high a priority as literacy and numeracy" (Department of Education and Training, 2015a, p.7). The focus on student wellbeing and the step back from narrow measures of academic achievement is a positive step. Student wellbeing is growing concern, particular in the upper-years of schooling, evidenced by recent data finding a positive correlation between age and mental illness (Mission Australia, 2016). School and study problems are identified as a significant stress for young people, and it is unfortunate, by-product of the high-stakes academic curriculum, that in the final years schools have less time to focus on improving student wellbeing (Mission Australia, 2016). During the final years, students face the mechanistic assessment infrastructure of the Victorian Certificate of Education (VCE), as well as the social expectations around the achievement of an Australian Tertiary Application Ranking score used by universities for purposes of selection.

Preliminary findings using ISCY data and associated ISCY scales measuring student dispositions such as belonging, hope, purpose and self-efficacy suggest that wellbeing is not uniform across the 10th Grade population. There are differences between students according to socio-economic background, language background and gender. Many students who are susceptible to scoring themselves low on these dispositions are found within Government schools. ISCY indicators also show that there is a relationship between student assessment of their own dispositions and academic achievement, thereby affirming the interconnected model set out in the ISCY Framework of 21st Century skills, dispositions and engagement (Lamb et al., 2015).

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INEQUALITIES IN STUDENTS' WELL-BEING EXPERIENCES AND SKILLS IN FRENCH SECONDARY EDUCATION: A PERSPECTIVE FROM THE INTERNATIONAL STUDY OF CITY YOUTH (ISCY) IN BORDEAUX

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Introduction

The most widely used indicators of the effectiveness of education systems are measures of achievement, with a particular emphasis on literacy and numeracy outcomes (with the possible inclusion of science as well). This is true for national and international evaluations of education systems. In recent years, however, these indicators and assessments have been criticised for the narrow conception of the 'good education system' they convey. As a response, dominant evaluation programs have expanded the types of outcomes they measure and report. For instance, the Programme for International Student Assessment (PISA) has recently included questions on '21st century skills' in its data collection (OECD, 2014, 2017a). In the same movement, these programs have also focused on non-achievement related criteria for evaluating the quality of education systems (Sellar & Lingard, 2014). One of these indicators is students' wellbeing.

As a provisional definition, one can see wellbeing as component of human flourishing (Anand, 2016). One of the interesting implications of thinking about wellbeing in terms of human flourishing is that we have the ability to nurture human flourishing, according to the way we distribute opportunities for flourishing to individuals (Fishkin, 2014). And this is valid for educational opportunities: "the development of skills and the acquisition of a range of emotional and cognitive experiences are key outcomes" for student wellbeing (Anand, 2016, p. 43).

Although such a dichotomy is necessarily simplistic, one can identify two dimensions of wellbeing: (1) the personal dimension (psychological state of contentment) and (2) the social dimension of wellbeing (development of virtues and talents) (Noble & McGrath, 2016). From the point of view of education systems, the former refers to the maintenance of a healthy and positive state of mind over the educational career of a student, while the latter refers to longer-term developmental outcomes in which formal education can play a role. Education systems are thus important for both aspects of students' wellbeing. Although student wellbeing is not exclusively determined by

their educational experiences, students' life at school can shape both dimensions of their wellbeing. And the organization of education systems can be structured in ways that are more or less conducive to the promotion of psychological wellbeing and the development of the social dimension of wellbeing.

Even though student wellbeing is determined by out-of-school factors, the development of social and emotional skills in schools contributes to students' wellbeing, and the importance of developing these 'non-cognitive' skills is increasingly recognized. Students' definition of a good life often mentions schools (The Children's Society, 2015), suggesting that it is important to pay attention to students' experiences at school to understand their wellbeing. In short, schools are institutional settings where students can both experience and develop wellbeing. In this paper, we examine both aspects with respect to France.

Research question and objectives

Our contribution aims at studying how the structuration of the French education system shapes students' experiences and development of wellbeing in French secondary education. We explore which students the French education works for in terms of wellbeing, and which students are provided with less opportunities to experience and develop their wellbeing.

In this paper, we combine a policy analysis of wellbeing in the French education system with a quantitative analysis of student differences in wellbeing experiences and skills, to answer the question of the distribution of wellbeing opportunities between students. In the first part of the paper, we explore how the French education system has paid attention to, studied, measured, and promoted student wellbeing in French schools. In the second part of the paper, we evaluate students' wellbeing experiences and skills in tenth grade in the city of Bordeaux. We draw on data from the International Study of City Youth (ISCY) project to make sense of the multiple factors that determine students' sense of wellbeing and wellbeing-related skills. These factors include students' background characteristics (social and familial), but also variables about the structuration of the education system (e.g. types of schools, educational pathways or social segregation).

This paper addresses four key questions. How does the French education system approach the question of wellbeing? What are the policies and initiatives that French schools implement to promote student wellbeing? How does the French education system evaluate its students' wellbeing, and how are the data used? What can the International Study of City Youth (ISCY) survey in Bordeaux teach us about differences in self-reported student wellbeing in French secondary education?

Methodology and methods

We combined two different types of method to address our research questions. The first one could be broadly characterised as a form of policy analysis, while the second proposes a quantitative study of students' wellbeing.

The methods for exploring how the French education system has addressed and shaped the question of student wellbeing will be based on a secondary exploration of public documents, official policies and associated working papers. It aims at identifying the main framing lines of the discursive and policy space of student wellbeing in French education.

For the analysis of students' wellbeing experiences and skills in French education, we use statistical methods to interpret data collected as part of the ISCY project. We compare and contrast students' wellbeing in a descriptive way and use inferential statistics to identify determining factors that shape students' wellbeing.

The concept of wellbeing is certainly complex and multidimensional. A comprehensive analysis of students' wellbeing would require a wealth of indicators to account for the various aspects of wellbeing. In ISCY, we are particularly interested in the relationship between the organization of education systems and students' wellbeing. The distribution of students across schools, the economic, cultural and ethnic homogeneity of schools and classrooms, the relationships students have with their peers and their teachers, the social importance of academic success or failure, the organization of educational progression (i.e. prevalence of grade repetition or not, student's agency in deciding for his or her educational destiny), and the prestige or perceived value of different academic or vocational pathways are all important features of school systems that can affect students' wellbeing.

For measuring students' experience of wellbeing, in this paper we use student response on items associated with their sense of belonging. For measuring students' development of wellbeing skills, we analyze student response on constructs of hope, purpose and self-efficacy. Each of these scales have been standardized internationally, with a mean of zero and standard deviation of one.

Analyses and results

Interest in the promotion of student wellbeing in educational policies in France is a recent phenomenon. The French Ministry of Education's concern with student wellbeing emerged in the early 1990s, when an ambitious programmatic text on the need for French education to become student-centred was released. The topic has gained traction in French educational debates and research since then. It is now important enough that it has been the subject of a special issue of Éducation et Formations—the official evidence-based periodical publication of the French Ministry of Education—on 'School climate and wellbeing at school' in 2015 (Ministère de l'Éducation Nationale, 2015).

In the 2010s, the Ministry of Education has approached student wellbeing in two ways: (1) by using research to enhance our understanding of the various aspects of student wellbeing, and (2) by developing policies and initiatives to promote student wellbeing. In research conducted by the Ministry of Education, student wellbeing has come to be defined as students' sense of personal satisfaction in various aspects of their life at school (Murat & Simonis-Sueur, 2015, p. 3). With the second form of engagement, however, student wellbeing has generally been presented as one objective among others. The recent work on school climate is one example of this (MENESR, 2016, 2017). The exploration of student wellbeing has sometimes been done in combination with an

analysis of teachers' wellbeing, and the notion of school climate seems fundamental in the French initiatives to promote wellbeing.

The statistical analysis of ISCY data reveals some interesting patterns. In terms of belonging, considered here to be an experience of wellbeing, in general students in Bordeaux rate themselves fairly poorly (-.113), especially male students (-.217) and those who speak a language other than French at home (-.313). Students who were in the top quartile of math achievement rate themselves highly (.208) when compared to those in the lowest quartile (-.360). Students in the vocational sector were more likely to feel greater sense of belonging than those in an academic stream (-.382 compared to -.100).

Hope, purpose and self-efficacy are regarded as constructs central to the development of wellbeing skills within students. Student math achievement continues to be the strongest predictor variable across all three. Students in the highest math achievement quartile were more likely to consider themselves as having high levels of self-efficacy (.051) than students in the lowest math achievement quartile (-.398). Students in the vocational stream were more likely to feel a sense of purpose (.161) compared to students in academic schools (-.281), while students in schools offering both academic/vocational pathways scored the highest across all constructs compared to the other school types. Students in private schools rate themselves highly on hope (-.471) and self-efficacy (-.245) in comparison to other school types in Bordeaux, while students in public schools were more likely to report that they felt purposeful (.113) than private school students (.020).

Discussion

The analysis presented here highlights the specific ways in which the structures of the French education system, including its policy approach, shape students' wellbeing in schools. The ways education systems are shaped has an influence on both aspects of students' wellbeing. These results draw on commonly studied aspects of wellbeing, such as students' sense of belonging, sense of purpose and sense of hope. Since these types of measures are receiving more attention in the literature, it could be interesting to focus on less commonly addressed factors that could shape students' wellbeing. We propose three possible avenues for approaching students' wellbeing from another angle. First, researchers could focus on the role of credentials and, more specifically, the hierarchy of value and prestige of credentials, to examine how students' engagement in unequally prestigious courses shapes their wellbeing (e.g. via their sense of worth). Second, researchers could examine whether a relationship exists between students' conceptions of justice in education (e.g. between- and within-school inequalities) and their wellbeing. Finally, researchers would gain from integrating social cohesion as an important social dimension of students' (collective) wellbeing (Dubet, Duru-Bellat, & Vérétout, 2010).

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STUDENT WELL-BEING IN MONTRÉAL (CANADA): COMPARED COMPETENCIES AND INEQUALITIES

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Introduction

According to transcultural studies, Canada and Québec perform well on cognitive outcomes: Canada is above-average in PISA 2012 for mathematics, reading and science performance, while Québec is third in the OCDE for mathematics and fifth for reading (Brochu et al., 2013). At the provincial level, students in Québec perform above the Canadian average for mathematics. Moreover, Canada ranks internationally high on equity, measured by the (low) strength of the relationship between SES and performance in academic tests (OCDE, 2013).

However, the Québec education system, with his tridimensional mandate (instruction, socialization and qualification), goes beyond academic learning. It is based on a conceptual framework that defines well-being on the basis of the need for all students to develop various types of competencies: intellectual competencies, such as problem solving and creativity, methodological competencies, such as adopting effective work methods or using information technologies, personal and social competencies, such as achieving potential and cooperating with others, and communication-related competency, such using various modes in a variety of contexts (Ministère de l'Éducation, 2007). These competencies are thought to be achieved through helping students construct a world-view, construct an identity and become empowered. According to Québec education system, schools do more than give to students' academic tools; they also enable them to set goals for their lives and prepare them to contribute to society.

Historically, transcultural studies on education have mainly focused on cognitive outcomes to rate systems in relation to one another (Chiu, 2007; Causa & Chapuis, 2011). More recently, studies have given growing importance to non-cognitive skills (OCDE, 2017b), as empirical research suggest that these skills contribute in predicting educational attainment, labour market success, health, and criminality beyond cognitive skills (Kautz et al., 2014). The International Study of City Youth (ISCY), an international study of 10th grade students, offers a unique opportunity to examine how

Montréal students perform on a variety of competencies targeted by Québec education system, and to compare their performance with students from major cities from Europe, Asia, North America and Australia.

Montréal: specificities and challenges

Montréal, with its 2 million inhabitants, is the biggest French-speaking city in North America and the second largest Canadian city. It is characterized by high levels of poverty (36% of households) and immigrants (28%; Statistique Canada, 2010), as well as a wide geographical disparity in terms of repartition of Francophone and Anglophones, immigrants and non-immigrants, wealthy and disadvantaged families. These geographical disparities impact on school composition, as students are assigned to schools on a geographical basis.

Public and private schooling operate side by side in Montréal, with private schools catering for 30% of secondary students. High-achieving students and students from wealthy families are overrepresented in private schools, while low-achieving students and students from disadvantaged families are overrepresented in public schools. Another distinctive element of Montreal school system lies in its bilingual schooling arrangement, where three French-speaking schools boards (72% of students) cohabit with two English-speaking school boards. French-speaking schools cater for a high proportion of students from immigrant backgrounds, due to a provincial law requiring immigrants to be schooled in French.

Research question and objectives

In light of Montréal distinctive specificities and challenges, this paper addresses three main research questions: 1) How do Montréal students perform on dispositions, engagement, non-cognitive and cognitive skills related to the various competencies targeted by Québec education program, compared to students from cities all around the world? 2) Do Montréal schools foster the development of these competencies with equity? How large is the gap between Montréal students according to gender, SES, migration status and grade retention? 3) Are these competencies affected by school characteristics such as school SES, proportion of students with a migration background, language of instruction, and private versus public schooling?

Methodology and methods

Participants

Students of our sample participated in the International Study of City Youth (ISCY) in 2013-2014. The sample consists in 4072 students (47.0% boys, 13.3% repeaters, 25.7% born out of country, mean age: 15.8 years old) from 36 schools. In order to maximize representativeness, school sampling was based on school board, school size, language of instruction (N=10 English schools) and school SES. However, private schools participated on a voluntary basis. Overall, only 5.9% of the students of the sample attend a private school, and 23.4% attend an English school.

Measures

Students (gender, grade retention, migration status) and family characteristics (SES) as well as student self-reported dispositions, engagement and non-cognitive skills (according to Lamb et al., 2015) were measured through a web survey completed by students in classroom. Family SES consists of an internationally normed measure based on parental education and occupation. Three forms of student dispositions were surveyed: belonging (e.g. "I will leave school with good memories"), hope (e.g. "There is little that can prevent me from reaching my goals") and purpose (e.g. "Working hard in school matters for success in the workforce"). School engagement was measured in its three dimensions: cognitive, behavioral and emotional. Furthermore, five non-cognitive skills were evaluated: collaboration (e.g. "I work well in groups"), creativity (e.g. "I am good with at coming up with new ideas"), self-control (e.g. "I tend to leave things to the last minute"), communication (e.g. "I express ideas clearly in written text"), and conscientiousness (e.g. "I always try to do my best"). In addition, students answered achievement tests in maths and reading adapted from the OECD's PISA instruments. All student scales were internationally normed, with a mean of zero and a standard deviation of one.

Analyses and results

1) How do Montréal students perform on dispositions, engagement, non-cognitive and cognitive skills related to the various competencies targeted by Québec education program, compared to students from cities all around the world?

Montréal students score close to the international mean for belonging, purpose, behavioral and emotional engagement, creativity, self-control and reading score (scores between -.01 and .04). However, compared to the international sample, Montréal students obtain notably higher scores on hope (.41) and conscientiousness (.29) and, to a lesser extent, in cognitive engagement (.15), collaboration (.16), and communication (.19). Montréal students did not perform as expected according to previous studies (OCDE, 2013) in the maths test: their mean score is .21 standard deviations under the international mean.

2) Do Montréal schools foster the development of these competencies with equity? How large is the gap between Montréal students according to gender, SES, migration status and grade retention?

Montréal 10th grade girls show significantly higher scores than boys for belonging, purpose, cognitive, behavioral and emotional engagement, collaboration, self-control, conscientiousness, and reading score. Boys, in counterpart, show higher scores than girls on creativity, communication and maths score.

Students with grade retention appear particularly at risk in Montréal: they show lower scores on belonging, hope, cognitive, behavioral and emotional engagement, self-control, communication, conscientiousness and achievement scores (maths and reading). The observed gaps are of particularly high amplitude (above .4 standard deviations) for achievement scores and conscientiousness. As grade retention has become increasingly

uncommon since Québec ministry of education restricted this measure, repeaters show particularly high risk profiles.

Students born out of country show higher scores than students born in country for belonging, hope, purpose, emotional engagement, creativity, self-control and conscientiousness, but they obtain significantly lower scores on achievement tests. The observed gaps are of particularly high amplitude (above .4 standard deviations) for purpose and emotional engagement. The results for engagement and achievement are coherent with previous studies (Schleicher, 2006; Chiu et al., 2012), but very few studies have addressed this question for student dispositions and non-cognitive skills.

The SES gap, defined as the difference in competencies between students from low and high SES families (one standard deviation under mean versus one standard deviation above mean), is significant for belonging, cognitive and behavioral engagement, collaboration, creativity, communication and conscientiousness, and of particular strength for achievement scores (above .4 standard deviations for reading and maths), which is coherent with previous studies (OCDE, 2017a).

3) Are these competencies affected by school characteristics such as school SES, proportion of students with a migration background, language of instruction, and private versus public?

Student competencies do not depend solely on individual and family characteristics: a significant part of the variance in student competencies lies between school and thus can be explained by school factors. The proportion of between-school variance is substantial for reading and maths achievement scores (21.7% and 20.6%), between 5 and 8% for purpose, emotional engagement, and belonging, between 1 and 5% for hope, cognitive and behavioral engagement, conscientiousness and self-control, and less than 1% for collaboration and creativity. Thus, academic skills appear to be the competencies that vary the most depending on school factors.

Controlling for student and family characteristics (including family SES), school SES is the greatest predictor for student competencies. Attending a high SES school is associated with higher reading and maths scores, as well as higher belonging, behavioral engagement and conscientiousness. However, attending a low SES school is associated with higher sense of hope. Controlling for student and family characteristics as well as other school characteristics, attending a school with high proportions of students with migration background is associated with higher emotional engagement, self-control and conscientiousness. Finally, belonging and hope appear higher in French schools, while creativity is higher in English schools. No effect of public versus private schools was observed, which must be tempered because of under-representation of private schools in our sample.

Discussion

The Québec 21th century education system aims to go beyond academic learning in fostering methodological, personal and social, and communication-related competencies besides intellectual competencies. Our results indicate that Montréal 10th grade

students show a moderate advantage over students from other cities across the world for some manifestations of these competencies such as sense of hope and conscientiousness, and, to a lesser extent, cognitive engagement, collaboration and communication. To our knowledge, these comparisons had never been done before.

The results concerning maths scores are although more surprising, as they contradict previous results from PISA (Brochu et al., 2013). May this finding result from our education reform in which maths curriculum has been modified? A closer look at the achievement test will be conducted to better understand Montreal student lack of performance in 2013-2014.

On another note, while important efforts are being made to empower all students to achieve their full potential, our results show that important gaps remain. The gender gap favors girls with moderate strength for cognitive engagement and conscientiousness, while the grade retention gap reaches higher strengths for conscientiousness and achievement scores, which is also the case for SES gap. Students born out of country show a moderate lag for achievement scores, while they show considerable privilege for sense of purpose, emotional engagement, self-control and conscientiousness. These gaps do not only refer to individual characteristics, but also expand to characteristics of the school students attend, particularly school SES. Our paper will discuss these results paying a particular attention to school climate and practices that contribute to maintain or lessen inequalities relative to individual and school characteristics.

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POSITIVE PSYCHOLOGY AND SCHOOL INCLUSION:
RESEARCHES AND INTERVENTIONS
IN ITALIAN SCHOOLS

BURNOUT LEVELS IN ITALIAN SUPPORT TEACHERS: WHEN HARD TEACHING EXPERIENCE MAKES LESS BURNED OUT TEACHERS

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Theoretical framework

Teachers' burnout is a triadic structure including two negative dimensions called emotional exhaustion and depersonalization, and a positive dimension labeled personal accomplishment (Maslach & Jackson, 1981). Emotional exhaustion is the inability to accept and manage new emotional situations; depersonalization involves distancing oneself from others within relationships; and, finally professional fulfillment leads to feelings of efficacy regarding one's work (Hakanen, Bakker, & Schaufeli, 2006). Teacher burnout may negatively affect the atmosphere in the classroom, contributing to problematic behavior and poor academic performance on the part of students (Skaalvik & Skaalvik, 2007; 2010). According to Schaufeli, Leiter and Maslach (2009) teacher's burnout is caused by an imbalance between the resources available to workers and the demands placed on them, perceived as unsustainable. The emotional demands associated with the teaching profession may lead to emotional exhaustion, cynical attitudes about teaching, a reduced feeling of personal accomplishment (Skaalvik & Skaalvik, 2011). When demands increase over personal job resources, people fail to cope with demands (Aiken et al., 2002). On the other hand, personal accomplishment, as a positive dimension of burnout syndrome, is negatively associated with the negative ones. Consistently with this, several studies have shown that personal resources protect teachers from burnout syndrome experience (Brouwers, Will, & Welko, 2001; Fiorilli et al., 2017; Gavish & Friedman, 2010). Nowadays teachers' job is particularly at-risk of burnout due to continuous emotional demands (Schaufeli et al., 2008). The main demands towards teachers include: learning difficulties and/or aggressive behavior of the students, ambiguity and conflict amongst colleagues, problematic relationships with parents, time pressures and large classes (Albanese et al., 2014; Burke & Greenglass, 1994; Carlson & Thompson, 1995; Fiorilli, 2009).

According to the abovementioned empirical literature, it is expected that teachers with harder job demands (e.g. teachers with students with special needs) will show higher burnout risk compared with their colleagues teaching in regular classes

(Küçüksüleymanoğlu, 2011). As regards the organization of the Italian educational system, class average size is twenty-five students with the inclusion of no more than two students with disabilities (law 104/1992). Teachers with a specific training on disabilities support curricular class teachers during activities. The inclusion process among children with typical and atypical development is achieved via projects involving teachers of regular class, support teachers, experts, and practitioners. Some researchers highlighted that there are few adequate and well-established trainings for teachers working with children with special needs to cope with these requirements (De Stasio et al., 2015).

Aims and hypothesis

The purpose of this study is to analyze whether the multidimensional construct of teacher's burnout is affected by their teaching experience. Firstly, we expected that emotional exhaustion as well as their depersonalization and detachment from their work and students were higher in support teachers than in their regular colleagues. Secondly, we expected that personal accomplishment in support teachers show less scores than in regular teachers.

Participant and methods

We studied 187 Primary teachers from Italian schools. We compared 87 support teachers and 100 regular teachers. Both groups were composed mostly by females (92%), aged from 20 to 60 years (M=45.5; S.D.=3.22), their professional experience ranged from 6 to 15 years. Both groups represent the Italian typical teacher population. The two groups were homogeneously distributed for age and years of experience. The MBI-ES (Italian version by Sirigatti & Stefanile, 1992) was submitted in order to assess the teachers' levels of professional burnout. The MBI comprises 22 items covering three different dimensions of professional burnout: emotional exhaustion (9 items, α=.81), depersonalization (5 items, α=.71) and sense of effectiveness (8 items, α=.76). Responses are given on a 7-point scale ranging from 0 (never) to 6 (every day). Two researchers personally distributed the questionnaires to the teachers, specifying that they were to be completed individually and agreeing the date by which the completed questionnaires were to be returned. Retention rate was approximately 85%.

The research was conducted following ethical guidelines and code of conduct.

Results

MBI responses show higher burnout level in the regular teachers sample than in support teachers. Three ANOVA series showed that support teachers have significantly lower scores on depersonalization ($F_{(1,187)}$=35,74; p<.000) as well as higher scores on personal accomplishment ($F_{(1,187)}$=7,22; p=.008) compared with their regular colleagues. Whereas, no significant difference has been found on emotional exhaustion scale. Differences in both groups are confirmed when teachers' age, years of experience and school level were controlled for.

Discussion and conclusion

The present study showed that support teachers involved in special needs students are more equipped to face with stressful event. Our data suggest some different perspectives. Firstly, it is plausible that Italian support teachers' involvement in a special training, makes them more resilient than regular teachers in facing the negative experience of academic failure. These teachers could be more prepared to interpret failure in a more complex view where their own self-efficacy is less involved in. Secondly, according to Csikszentmihalyi (1990) and Nakamura and Csikszentmihalyi (2014), individuals experience satisfaction when they are involved in activities which require a functioning at a peak of their abilities. This perspective might shed a light on the meaning of hard job demand when one's work focuses on the care of students with special needs.

Finally, all of above interpretative points require to be more deeply analyzed in future studies taking into account socio-demographic as well as career development characteristics of teachers.

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THE EFFECT OF WORK WELL-BEING AS PROTECTIVE FACTORS OF BURNOUT IN SPECIAL EDUCATION TEACHERS

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The literature indicates that emotional exhaustion and later on burnout are extensively experienced among professionals providing social and human services, including teachers at all levels of education (Skaalvik & Skaalvik, 2010). The principal risk factors for teachers derive from being required to cope with learning difficulties and aggressive behavior on the part of their students, conflict amongst colleagues, problematic relationships with parents, time pressures, and large classes.

In relation to special needs teachers in particular, Küçüksüleymanoğlu (2011) analyzed whether self-reported burnout in Turkish special education teachers working with students affected by mental disability was influenced by gender, family status, years' teaching experience, educational background, or school type. The author found that these teachers experienced higher levels of burnout, reported additional stress and felt more exhausted and depersonalized than their counterparts working in mainstream classrooms.

More broadly, a review of research conducted between 1979 and 2013 found that the most salient factors in the burnout reported by special education teachers included teaching experience, student disability, role conflict, role ambiguity and lack of administrative support (Brunsting, Sreckovic, & Lane, 2014). Recently, two new perspectives have been introduced into the debate on the multiple sources of teacher burnout syndrome, both of which concern the role of positive and protective factors in reducing teachers' risk of emotional exhaustion (e.g., Betoret, 2006). The first of these posits a role for teachers' personal resources, while the second examines the effects of work well-being (e.g., Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2010; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Nevertheless, to the best of our knowledge, no studies have analysed what is the role of personal resources and teacher well-being in relation to burnout, in a sample of teachers assigned to children with special needs.

Objectives

The aims of the current study were to explore the relationships among demographic variables, personal resources and teachers' work well-being and to integrate a new combination of the teachers' dimensions mentioned afore into a predictive model of burnout.

On the basis of the literature, we expected that teachers' personal resources, happiness at school and job satisfaction were inversely correlated to all dimensions of burnout.

We hypothesised that teachers' happiness at school and job satisfaction would incrementally predict a significant proportion of variance in all dimensions of burnout, even after controlling for the effect of demographic factors and personal resources. We also expected that teachers coming from different school contexts (kindergarten, primary school and middle school) might express different levels of burnout.

Participants and procedure

Our sample was composed of 230 full-time in-service special education teachers (89 % female) from Rome, Italy. Ages ranged from 26 to 52 (M=40.4 years, *SD*=5.29). In terms of marital status, 59.5% were married, 33.0% were single, 7.0% were separated/divorced, and 0.5% were widowed. Sixty-nine percent of participants had children. Length of teaching experience ranged from one to 30 years (M=10.58, *SD*=5.06). With regard to the school level, 20% of participants taught in middle school, 38.2% in primary schools and 41.8% in kindergartens.

Participants received written information on Italian privacy regulations, signed informed consent, and subsequently took part in the study. The research was conducted following the APA's ethical principles and code of conduct (American Psychological Association, 2002).

Measures

Copenhagen Burnout Inventory (CBI). The CBI comprises 19 items evaluating three sub dimensions of burnout (Kristensen, Borritz, Villadsen, & Christensen, 2005) (alpha coefficient: 0.85). We used the Italian adaptation of the CBI by Fiorilli and colleagues (2015). The first subscale assesses personal burnout and comprises six items concerning the physical and psychological fatigue, and overall exhaustion experienced by an individual. The second subscale, entitled work-related burnout, consists of seven items concerning the physical and psychological fatigue experienced by respondents due to their teaching work. Finally, the third subscale termed client-related burnout is composed of six items evaluating the physical and psychological fatigue experienced by people in relation to their work with clients, in our case specifically with students.

Teacher Self-Efficacy (TSE). We devised a brief *ad hoc* scale for evaluating teachers' self-efficacy (alpha coefficient: 0.75). The instrument comprised five items constructed following the recommendations of Bandura (Bandura, 1989). Each statement referred to one of the five core components of teacher's self-efficacy: management of difficult students; use of new technology; coping with educational challenges; collaboration with colleagues; meeting teaching objectives and targets.

Rosenberg Self-Esteem Scale (RSES). The Rosenberg Self-Esteem Scale (Rosenberg, 1965) (alpha coefficient: 0.785) comprises 10 statements and is commonly adopted as an empirical measure of global self-esteem.

Job Satisfaction Survey (JSS). The Job Satisfaction Survey (Spector, 1985) (alpha coefficient: 0.852) measures respondents' perceived satisfaction with their job situation. It comprises 36 items divided into nine subscales, namely: pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, co-workers, nature of work and communication.

Teacher's Happiness at School. Teacher's Happiness at School (alpha coefficient: 0.75) is a scale designed *ad hoc* to assess teachers' happiness at school. It was adapted from the School Children's Happiness Inventory (Ivens, 2007) given that – to the best of our knowledge – there were no existing Italian-language scales for measuring teachers' happiness at school.

Data analyses

Bivariate correlations between the study variables were assessed by calculating the Pearson correlation coefficient, with a number of significant correlations identified. To gain further understanding of the relationships between the independent and dependent variables, multiple regressions were used. Three separate multiple regression analyses were conducted by regressing each of the dimensions of burnout in turn onto the correlated independent variables. These multiple regressions were hierarchical, with socio-demographic variables (namely age, seniority, marital status and children) entered first, followed by personal resources (namely self-efficacy and self-esteem), and finally by work well-being (namely teacher happiness, job satisfaction and school).

Results

Hierarchical multiple regression revealed that the socio-demographic variables entered at Step 1 explained 3%, $F_{(4,166)} = 1.4$; $p > .05$ of the variance in personal burnout. When personal resources variables were included at Step 2, the total variance in personal burnout explained by the model was 28%, $F_{(7, 159)} = 11.23$, $p < .001$. Finally, when the work-related well-being variables were added at Step 3, the model as a whole accounted for 47% of the variance in personal burnout, $F_{(10, 156)} = 15.28$, $p < .001$. In the final model, the best predictors were: teacher well-being at school ($\beta = -.40$, $p < .001$) and self-esteem ($\beta = -.24$, $p < .001$). As far as work-related burnout is concerned, the socio-demographic variables entered at Step 1, explained 3% of the variance and the model was not statistically significant. The personal resources variables included at Step 2 explained an additional 16% of the variance ($F_{(7,159)} = 6.76$; $p < 0.001$). Finally, at Step 3 work well-being variables were included, with the final model explaining 45% of the variance in work-related burnout ($F_{(10, 156)} = 13.66$, $p < .001$). In the final model, teacher happiness at school, job satisfaction and self-esteem all negatively predicted work-related burnout ($\beta = -.41$, $p < .001$), ($\beta = -.25$, $p < .001$) ($\beta = -.16$, $p < .001$). Finally, age was a significant positive predictor ($\beta = .14$, $p < .001$) of work-related burnout.

A final hierarchical multiple regression was used to assess the independent variables' contribution to variance in student-related burnout. The socio-demographic variables entered at Step 1 accounted for 7% of variance ($F_{(4,166)}$ = 3.19; p < .05). When the personal resource variables were entered at Step 2, the model explained 30% of the variance ($F_{(7,159)}$ = 11.53; p < 0.001). The final model including both personal resources and work well-being variables (Step 3) explained 44% of the variance in student-related burnout, ($F_{(10,\,156)}$ = 12.5, p < .001). More specifically, four variables were found to be significant predictors of student-related burnout. These were teacher's job satisfaction (β = - .26, p < .001), teacher happiness at school (β= - .22, p < .001), self-esteem (β= - .24, p < .001), and self-efficacy (β = - .17, p < .001), all of which negatively predicted student-related burnout. Finally, age (β = .20, p < .001) was a significant and positive predictor of student-associated burnout.

Discussion

The main aim of the current study was to explore the contributions of three sets of teacher characteristics, which we may label as socio-demographic, personal resources, and work well-being variables, respectively, in predicting each of the three dimensions of burnout measured by the Copenhagen Burnout Inventory. As we expected, the results confirmed what previous research evidenced: teachers' personal resources, happiness at school and job satisfaction were inversely correlated to all dimensions of burnout in the different school contexts. Furthermore, the results of our study showed that both teachers' happiness at school and their job satisfaction incrementally predicted variance in the dimensions of burnout, even when controlling for the effect of socio-demographic factors and personal resources. Contrary to our hypothesis teachers coming from different school contexts didn't express different levels of burnout. Interestingly, this unexpected result which is in contrast with previous studies (e.g., Tsai, Fung, & Chow, 2006), leads to future research with special education teachers. Furthermore, in line with previous research (Toker, 2011; Zhao & Bi, 2003), teachers' socio-demographic variables were found to slightly predict each of the CBI burnout sub-scales. Consequently to several findings (e.g., Innstrand, Langballe, Falkum, & Aasland, 2011; Toker, 2011; Zabel & Zabel, 2001) our study confirms the contradictory role played by teachers' background dimensions (e.g., age, marital status) on their burnout levels.

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OBSERVATION OF CHILDREN STRENGTHS (OCS): A NEW ANALYSIS, GUIDANCE AND COMPARISON TOOL FOR STUDENTS' RESOURCES

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Background

In the educational and training contexts, Positive Psychology (PP) provides stimuli in order to promote well-being, personal and social development introducing innovative tools which can identify individual and environmental resources.

In this regard the reference to the International Classification of Functioning and Health (ICF, 2002), the Disability Classification System developed by the World Health Organization, allows to detect the dynamic interaction between individual health condition and environmental and personal factors in a dimensional evaluation of the *functioning*, instead of having a categorical vision, to permit its collocation in a continuum between health and illness.

The application of ICF (even in ICF-CY Children version, 2007) in school and educational assessments to create personalized and inclusive programs, has been introduced in the Italian legislation from the DM "Intervention tools for students with Special Educational Needs-SEN" (27/12/2012). In fact ICF and the observation grids obtained from this classification have allowed evaluations focused on global functioning, resources and soft skills, in particular from a socio-relational and ethical point of view.

In this direction, the areas and dimensions contained in ICF could be integrated with the classification of the 6 Virtues and the 24 Temperamental Forces (Peterson and Seligman, 2004), developed in the field of PP and in the Intercultural Studies.

The authors have proposed a classification of the temperamental forces and virtues that allows people to feel satisfied in different religious, economic, and cultural contexts.

Based on these analyzes, Peterson and Seligman (2009) developed the personality questionnaire *Values in Action of Character Strengths*.

The six main virtues are associated with temperamental forces, which facilitate the achievement of the virtues, according to the following classification:

1. *Wisdom and Knowledge:* it includes cognitive strengths that entail the acquisition and use of knowledge, such as Creativity, Curiosity, Judgement, Love of Learning and Perspective;
2. *Courage*: it includes emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, internal or external, such as Bravery, Perseverance, Honesty and Zest;
3. *Love:* it includes interpersonal strengths that involve befriending and tending to others, such as Love, Kindness and Social Intelligence;
4. *Justice*: it includes civic strengths that underline healthy community life, such as Teamwork, Fairness and Leadership;
5. *Temperance*: it includes strengths that protect against excess, such as Forgiveness, Humility; Prudence and Self-Regulation;
6. *Transcendence*: it includes strengths that forge connections to the larger universe and provide meaning, such as Appreciation of Beauty and Excellence, Gratitude, Hope and Spirituality.

Research question

The research intends to demonstrate the possibility and usefulness of evaluating students' resources, starting from the creation of a new observation tool, the Observation of Children Strengths (OCS), based on the six theorized dimensions of Peterson and Seligman (2009).

The use of this type of grids within the school education system promotes positive evaluations that, together with the promotion of the use of ICF, allow to consider the students in an educational and learning context (Ianes, 2013). Moreover, this new grid favours the promotion of those environmental factors that facilitate the development of this strengths. In this perspective, the OCS may also be included as an extension of the ICF in Personal Activities, Social Participation and Personal Contextual Factors sections.

Aims

The research has the following aims:
- creating and testing an observation grid based on the Values In Action of Character Strengths (2009), adapting it to the Italian school context;
- making the grid as easy and understandable as possible, allowing accessibility also on computer devices;
- promoting a positive vision of the students' skills and qualities;
- driving the planning of teaching and laboratory interventions, in order to promote not only inclusive but also positive didactics.

Therefore, the work presented can be considered as part of the research-action field, as it integrates both the research aspects because of the creation of new observation grid, and the experimental aspects, since the grid has been tested within a primary school to evaluate its effectiveness.

Methods and procedure

a) The construction of the OCS instrument

Based on the original definitions, the 24 temperamental forces (Peterson and Seligman, 2009) have been adapted to describe attitudes and behaviors of students in the school environment, including social, personal and relational dimensions. After an appropriate adaptation to the school context, five dimensions have emerged (Wisdom and Knowledge, Temperance, Courage, Love and Justice and Transcendence), declined in 21 factors.

b) Testing the grid in a primary school

Twenty teachers of a primary school, located in Monza e Brianza, have completed the OCS in a checklist mode in order to verify its effectiveness and accessibility in the school context. The teachers, using computers, have completed the grid to observe 200 students, aged from 6 to 11 years. Each teacher filled the grid by observing about ten children, pointing to the items that most represented the behaviors of the students in the school context.

c) Comparison with ICF-CY grid

Thereafter, teachers had to indicate the strengths of students among the following factors, chosen because of their relevance with the OCS factors, extrapolated from ICF-CY, in the Personal Activities (8, 9, 10), Social Participation (1, 2, 3, 4) and Personal Contextual Factors (5, 6, 7) sections:

1. He/she has the capacity to engage in recreational and leisure activities
2. He/she applies the ability to engage in recreational and leisure activities (takes initiative during recreation at school, practice sports)
3. He/she has the ability to seize religious and spiritual aspects
4. He/she has the capacity to seize aspects of ethics and human rights
5. Self-esteem
6. Motivation
7. Self-efficacy, curiosity
8. He/she has a significant relationship with a classmate
9. He/she has a significant relationship with a friend in an extra-school context

d) Relationship with teachers and Teachers' Self-report

Finally, the teachers have answered a specifically created questionnaire, ranked on a 5-point Likert scale, in order to investigate the usefulness and the comprehensibility of the grid in the school context.

Analysis and results

A Repeated Measures ANOVA with Age and Gender as within subjects factors, were carried out on the five OCS' dimensions, which underlined a significant difference between the means of the dimensions ($p < 0.001$), reporting a higher mean score in the

answers given for Temperance. The interaction effect of Age was significant (p<0.001); in particular, the 10-years-old students had a higher mean score for Transcendence. The interaction effect of Gender was also significant (p<0.001): females had a higher mean score for Love and Justice.

Thereafter, Pearson's correlation analysis were carried out between OCS dimensions and ICF-CY items, in particular:

Temperance had a correlation with:
– He/she has the capacity to seize aspects of ethics and human rights (R=0,329 p<0.001)
– Motivation (R=0,477 p<0.001)
– Relationships with teachers (R=0,332 p<0.001)

Love and Justice had a correlation with:
– He/she has the capacity to seize aspects of ethics and human rights (R=0,424 p<0.001)
– Motivation (R=0,508 p<0.001)
– He/she has a significant relationship with a classmate (R=0,438 p<0.001)

Wisdom and Knowledge had a correlation with:
– Self-Esteem (R=0,444 p<0.001)
– Motivation (R=0,581 p<0.001)
– Self-Efficacy, Curiosity (R=0,519 p<0.001)

Courage had a correlation with:
– He/she applies the ability to engage in recreational and leisure activities (takes initiative during recreation at school, practice sports) (R=0,349 p<0.001)
– Self-Esteem (R=0,358 p<0.001)
– Motivation (R=0,442 p<0.001)
– He/she has a significant relationship with a classmate (R=0,413 p<0.001)

Transcendence had a correlation with
– He/she has the ability to seize religious and spiritual aspects (R=0,226 p<0.001)
– Motivation (R=0,331 p<0.001)
– Self-efficacy/Curiosity (R=0,398 p<0.001)
– Relationship with teacher(R=0,366 p<0.001)

The questionnaire given to the teachers had a substantial approval rating, as it could be deduced from the answers (Mean score) to the items:
– Is the grid easy to complete? M = 4,5
– Is the grid capable to underline the students' resources? M = 4,9
– Does the grid use adequate sentences to describe the behavior of the students? M = 4,6
– Would you use the grid in the team group for students with disability? M = 3,6
– Would you use the grid to plan the aims of the European Key Competences? M = 4,1

Discussion

The OCS demonstrated to be an effective tool to reveal the resources and the potential of the students. Moreover, the correlations of the OCS dimensions with the ICF-CY items showed a good relevancy of the grid to promote the identification of the factors

that could predispose a positive socio-relational, emotional and ethical development in the school field.

The analysis of the questionnaire also underlined the appreciation of the teachers who had collaborated to the identification of the resources of their students, seizing the novelty and the potential of the proposal.

Future directions contemplate the extension of the sample, by dispensing the grid to other schools of the same level or higher, in order to stimulate targeted interventions, workshops and didactics, allowing the development of a context which could promote these important points of strengths.

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WELL-BEING IN SCHOOL CONTEXTS: THE CHILDREN PERSPECTIVE

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Topic introduction

The bio-psycho-social model describes human functioning as a dynamic, complex system, consisting of biological, psychological and social dimensions. The World Health Organization (WHO) defines health not as a mere absence of disease, but as a complete physical, psychological and social wellbeing, thus integrating a positive vision and switching from a problem centered approach - where only what does not work is taken into account, representing a deficit, a lack, a difficulty - to a person centered approach - where the available personal and social resources are also considered.

This perspective, applied to disability, contributed to the drafting and formalization of International Classification of Functioning, Disability and Health (ICF). This classification, based on the bio-psycho-social model, invites doctors, psychologists, teachers, educators and more generally social and health professionals to observe the personal resources, considering the dysfunctional and disabling components in relation to the other individual and social dimensions that can favor or hinder human functioning.

Our research team has conducted various studies on well-being and disability, developing action plans addressed to the school context. In this presentation we aim to provide an overview of the main activities and their results. In particular way, reference will be made to the PhD research project, "School, development and psycho-physical health", which aims to investigate the pupils, teachers and parents psycho-physical well-being by integrating different perspectives.

Research question and aims

In the school context, the investigation of subjective experience is crucial to highlight discrepancies and convergences among pupils', teachers' and parents' perceptions of skills, interests, well-being and performance, and objective performance indicators.

Based on the previous research work of our group, study aims primarily , concern:

– the contribution of positive psychology and its constructs in identifying individual and collective resources in the school context

– hedonic and eudaimonic well-being dimensions perceived by teachers and parents of children with disabilities;

– pupils' quality of experience perception and well-being perception, compared with teachers' and parents' proxy evaluation;

– the potential of ICF model in evaluating the interaction patterns between individuals and their daily context, with specific attention to children with disabilities and their families.

Methodology, instruments and samples

The positive psychology models and the ICF bio-psycho-social approach were used to investigate subjective experience, personal features and environmental contextual factors in their relation to individual functioning.

Qualitative and quantitative instruments were used, and data were processed with the statistical softwares SAS and SPSS.

Qualitative instruments

All study participants - pupils, parents and teachers - were administered a semi-structured interview. The main purpose was to identify the personal and environmental contextual factors related to the daily experience of children with disabilities and with typical development. Pupils' interview included 15 open-ended questions, teachers' parents' ones 25 questions. The interview allowed us to explore from three different perspectives children's resources and challenges in the various life domains and relationships, with special attention to coping strategies. A content analysis of individual responses was conducted; each answer was assigned a numeric code, and up to three answers were retained for each question. Coded answers were then grouped into broader functional categories. The coding was performed by a researcher and was then discussed and validated by three raters, a procedure that ensures greater objectivity in the coding process. The functional categories used to analyze the answers were constructed by the research team taking into account the ICF structure, positive psychology constructs, and the bio-psycho-social approach.

Quantitative instruments

– *Pupils*
  - Pediatric Quality of Life Inventory (PedsQL, Varni, J.W., 1998, Italian version Trapanotto, M., et al., 2010)
  - Psychological Well-being Scales 18 item (PWB-18, Ryff C.D., 1995 – Italian version Ruini et al., 2003)
  - Big Five Questionnaire for Children (BFQ-C, John, O.P. et al., 1991, Italian version Barbaranelli, Caprara and Rabasca, 1998)
  - Multidimensional Students' Life Satisfaction Scale (MSLSS, Huebner, 1994; Huebner et al., 1998; Italian version Zappulla et al., 2014)

- - Positive and Negative Affect Schedule (PANAS-C, Watson, Clark e Tellegen, 1988; Laurent et al., 1999, Italian version Terracciano, McCrae, & Costa, 2003)
  - Academic self-efficacy scale (ASCP, Italian version Bandura, Caprara, 2001)
  - Social self-efficacy scale (ASP, Italian version Bandura, Caprara et al., 2001)
  - Multidimensional Questionnaire of the Italian Institute of Statistics (ISTAT) – selected items referring to health, nutrition and physical activity.
- – *Parents*
  - Eudaimonic and Hedonic Happiness Investigation (EHHI, Delle Fave et al., 2011)
  - Satisfaction With Life Scale (SWLS, Diener et al., 1985, Italian version Lucas Carrasco et al., 2014)
  - Psychological Well-being Scales (PWB-18, Ryff C.D., 1995 – Italian version Ruini et al., 2003)
  - 36 Item Short Form Health Survey (SF-36 – MOS-36, Ware et al., 1992, Italian version Apolone et al., 1997)
  - Big Five Questionnaire for Children - proxy evaluation (BFQ-C, John, 1991, Italian version Barbaranelli, Caprara e Rabasca, 1998)
  - Multidimensional Questionnaire of the Italian Institute of Statistics (ISTAT) – selected items referring to health, nutrition and physical activity.
- – *Teachers*
  - Eudaimonic and Hedonic Happiness Investigation (Delle Fave et al., 2011)
  - Satisfaction With Life Scale (SWLS, Diener et al., 1985, Italian version Lucas Carrasco et al., 2014)
  - Psychological Well-being Scales (PWB-18, Ryff C.D., 1995 – Italian version Ruini et al., 2003)
  - 36 Item Short Form Health Survey (SF-36 – MOS-36, Ware et al., 1992, Italian version Apolone et al., 1997)
  - Big Five Questionnaire for Children – proxy evaluation (BFQ-C, John, 1991, Italian version Barbaranelli, Caprara and Rabasca, 1998)
  - Multidimensional Questionnaire of the Italian Institute of Statistics (ISTAT) – selected items referring to health, nutrition and physical activity.

Sample

The project "School, development and psycho-physical health" was conducted in two schools. The sample comprised 403 pupils (mean age 9,05 – sd 1,03; 39 with disabilities), 33 parents and 55 teachers. This presentation will focus on some of the major results.

The group of 39 pupils with disability was compared with a group of 39 children with typical development, comparable for gender and grade, for the purpose to highlighting group differences in perceived well-being, self-efficacy and personality.

In a second study, involving 401 pupils, a linear regression model was used to identify personality and demographic predictors of psychological well-being and self-efficacy.

In a third study, conducted on the group of pupils attending the same school in urban area of Milano (265 pupils, mean age 8,83, sd 0,94), the relationship of well-being

and self-efficacy dimensions with objective school performance (final grades in scientific and humanistic disciplines) was examined. A linear regression model was used to identify predictor variables of student success.

Analyses and results

Overall, analyses of the qualitative and quantitative data did not highlight significant differences between pupils with and without disability as concerns life satisfaction and psychological well-being; the same pattern was detected for personality traits description. In the interview, participants in both groups emphasized the importance of relationships (in family, school and social context, associating them with the same emotions/experiences.

Some relevant findings emerged:
a) Group differences were detected for self-efficacy, with children with disability reporting significantly lower levels than children with typical development.
b) Psychological well-being was significantly correlated with self-efficacy, but not with school performance. Linear regression identified only two dimensions of PWB - personal growth and environmental mastery - as predictors of school performance.
c) Among personality traits, openness was significantly correlated with PWB dimensions, self-efficacy and grades in scientific disciplines and humanities, thus representing a predictor of school performance.
d) Finally, self-efficacy was positively correlated with all PWB dimensions, personality traits (negatively with neuroticism), and school performance; linear regressions highlighted its role as predictor of school performance.

Discussion

The investigation of children perspective allowed to overcome the stereotypical vision of what the pupils/sons like or dislike. This shift is essential to outline more effective intervention planes, based on the real needs and designed to promote well-being and to improve quality of life for people with disabilities.

Findings suggest evaluation of interactions (among people and contexts) can provide useful information to improve educational actions.

Furthermore, surveys have given voice to every actor involved, opening new perspectives for the educational programs, oriented to increase the levels of well-being and self-efficacy, improving also school performance.

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LIFE SKILLS AND STUDENT WELL-BEING AT SCHOOL

PISA 2015: EXPECTATIONS ABOUT FUTURE EDUCATION AND LIFE SATISFACTION OF SWISS STUDENTS

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Introduction

The Program for International Student Assessment (PISA) is a triennial survey promoted by the Organization for Economic Co-operation and Development (OECD) that aims to evaluate skills of 15-year-old students worldwide in three fields: science, mathematics and reading. In addition, the survey is provided with a questionnaire for students that investigates different topics of their personal and school life. As such, the data collected through this questionnaire allow researchers to explore a multitude of topics helping them to contextualize students' performance. The aim of this contribution is to focus on some aspects linked to students' well-being that have been covered by the 2015 PISA questionnaire, in particular their life satisfaction related to their vision of future education.

Theoretical framework

Subjective well-being is constructed as consisting of two components: an emotional or affective component and a judgmental or cognitive component (Diener, 1984; Veenhoven, 1984). The affective component has received considerable attention from researchers whereas judgmental component has been neglected for the constructed well-being. Diener, Emmons, Larsen and Griffin, (1985) explored this second component by developing the Satisfaction With Life Scale as a measure of judgmental component of subjective well-being. According to what settled by these authors, in our analyses life satisfaction will be considered as an indicator of well-being. Regarding the literature about further expectation on education, there is a focus both on the influence of the environment (Beal & Crockett, 2010) and on psychological mechanisms which build those expectations (Correa, Errico, & Poggi, 2011). The understanding of these aspects allows for example to considerate the process of decision-making that students use for their choices about their education and professional career. It has been demonstrated

that expectations on further education contribute to determine the choice of post-secondary schools is determined (Nurmi, 2004; Beal & Crockett, 2010).

Research question

Our contribution aims to explore the relationship between future expectation in education and life satisfaction: does a certain vision of the future have an impact on teenagers' satisfaction?

In the PISA questionnaire, satisfaction has been measured through the question: "Overall, how satisfied are you with your life as a whole these days?".

For the expectations about future education, students were asked to choose which among lower secondary, vocationally-oriented upper-secondary (VOUS), academically-oriented upper-secondary, post-secondary non tertiary, vocationally/technically-oriented tertiary and university level they expected to complete. The main hypothesis is that life satisfaction is correlated with expectation about further education. Interestingly, the distribution of Swiss expectations about future education vary from the OECD's average: the percentage of students expecting to complete a university degree in Switzerland (27%) is much lower than the OECD average (44%) while for vocationally-oriented upper-secondary (VOUS) level it is higher (29,8% against the 12% of the OECD's average) (OECD, 2017, p. 105). As a consequence, for the analyses these two groups will be considered: students who aims to reach university and students who want to stop after VOUS level. Because of these differences, we assume that there may not be a difference in life satisfaction since the higher number of people in Switzerland that selected the VOUS level compared to the OECD's average may indicate that in Switzerland the VOUS level is an alternative appealing choice to university.

Anxiety, motivation and sense of belonging to school have been included in the analyses assuming that these factors could have an effect on life satisfaction.

In PISA, these three variables are constructed in relation to the school context: anxiety is assumed as the degree of concern and nervousness about school tests and grades; sense of belonging to measure school student's perception of social integration. As for motivation, it is measured through items that lead to student's ambition, for example trying to obtain high grades.

Finally, students' performance in the PISA test have also been considered according to the hypothesis that it is likely that a student with high performance will expect to have a greater satisfaction in life. Furthermore, accounting for performance is important as a control, since it may be that a student with higher performance expects to attain university more than a student with poor grades.

Performance is measured through three variables, one for every subject that has been tested (science, mathematics and reading) and bases on the results of the PISA test.

Methodology

Data from PISA 2015 in Switzerland have been used, where 5860 students took part to this survey. The overall Swiss sample is characterized by 48% of females and 52% of

males, with an average age of 15.8 years. In the questionnaire, the dependent variable used is life satisfaction, ranged from 0 (not at all satisfied) and 10 (completely satisfied). For the analyses, the variable has been dichotomized, choosing to separate very satisfied students who rated 9 or 10 from the others.

The explicative variable of the expectations about further education was also dichotomized isolating the students of our interest. Two different variables have been created: one that separates those expecting going to university from all the others and another that isolate students who expect to finish their education after the VOUS level. Accordingly, two models have been created, one focusing on those expecting to go to university and the other for those expecting to finish the VOUS level. Finally, a third model has been constructed, which include all possible categories of further education.

Correlations were first used to verify the existence of relationships between life satisfaction and the expectation of further education, performance and the three relevant psychological constructs of anxiety, motivation and sense of belonging to school.

Then, means comparison of life satisfaction between students expecting to go to the university and those that are vocationally oriented has been run to see whether a significant difference exists.

Finally, a logit regression was performed to determine the influence of expectations about further education on satisfaction. Anxiety, motivation, sense of belonging to school and of performance have been added as control variables. Socio-demographics variables such as gender, socio-economic status index and the immigrant status have also been integrated.

Results

On average Swiss students declare a life satisfaction of 7.72 points. We find a difference between students depending on their expectation on further education: pupils who expect to attain university have a mean satisfaction of 7.94 while pupils who believe to end their education after the VOUS level declare a life satisfaction of 7.59 (the difference is statistical significant).

Differences between the two groups are noticeable in the correlation between life satisfaction and the expected level of further education: the Spearman's coefficient is .041 for students who expect to attain university, in opposite to the -.031 for students who expect to reach the VOUS level. Indeed, expecting to end the education before the tertiary level has a negative effect on life satisfaction. This is confirmed by the general positive correlation (r=.074) between life satisfaction and the expectation of further education. As regards to the control variables, we discovered that motivation (r=.101) and sense of belonging (r=.306) are positively correlated with life satisfaction, whereas anxiety is negatively correlated (-.270). Finally, performance on the tree fields and life satisfaction are not statistically correlated.

Regarding the first logit model, we found that students who expect to reach university are more likely to be very satisfied compared to the other students. The odds to be very satisfied for a student expecting to attain university are 1.28 times higher than those for a student who expect to finish his/her education before. The effect of further

expectation is thus statistical significant, as the effect of anxiety, the sense of belonging, motivation and gender. Indeed, boys have a higher probability to be very satisfied compared to girls, *ceteris paribus* (odds=1.284). A negative relationship between anxiety and the chance to be very satisfied (odds=0.634) was found. Sense of belonging (odds=1.460) and motivation (odds=1.315) have a positive influence on student's life satisfaction. Age, the index of socio-economic status, the migration status and the performances on PISA test are not statistically significant. Finally, the model as a whole is significant and explains the 15 % of the variation of the outcome.

Similar results were found in the second model, except for the effect of expectations on further education: finishing at the VOUS level has a negative effect on the chance to be very satisfied. Students who expect to end their education after the VOUS level are less likely to be very satisfied compared to the rest of the students (odds=.81).

Finally, with the third model, that compares students who expect to finish after university with those from the other categories of expectations about future education, we found that the only statistical difference is between the two groups of our interest. Students who aim to reach the VOUS level are .69 times less likely to be satisfied compared to students who expect to attain university.

Discussion

Overall, we found out that further expectation is positively correlated with life satisfaction and has an effect on it, which confirms our main hypothesis. We are aware that the main limitation of our research lays in the general weakness of the correlation between all the variables. However, we discovered a positive impact of the expectation of attending university on life satisfaction, and a negative one when students expect to end education after the VOUS level. Moreover, thanks to the third model, we found that the only difference on life satisfaction between the groups constructed on the expectation about the future is among students who expect university and the one who expect the VOUS level. This result rejects our hypothesis according to which in Switzerland ending at the VOUS level is as much in terms of life satisfaction appealing as ending with university.

Regarding the effect of the performance on the expectation on further education, we cannot confirm our hypothesis which assumed a correlation between those two variables. However, the results are aligned with the one of OECD (2017): there is no significant effect of performance on life satisfaction.

The results about anxiety, motivation and sense of belonging in school are also aligned with those of OECD and confirm our hypotheses: a negative relationship was found between anxiety and life satisfaction (OECD, 2017, p.84), whereas a higher motivation (OECD, 2017, p.94) and a positive sense of belonging increase the chance to be very satisfied (OECD, 2017, p.122). One limitation of the model used is that it does not sufficiently account for the mediation's effect that the variable about the expectations about the future plays on the indirect effect of the psychological constructs on satisfaction. We controlled for a perfect collinearity bias and none of the constructs is highly correlated to expectation about education. However, the possibility of a mediation effect could still exist and it would be interesting to study it in further

researches that may include more personality characteristics, such as self-esteem or coping mechanisms.

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RESEARCH ACTION AT SCHOOL: MONITORING ITALIAN STUDENTS' SKILLS-ABILITIES – CSSMB PRELIMINARY OUTCOMES

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Introduction

The following preliminary study is the first of the Center for Studies on Wellness and Exercise (CSSMB), a network of 17 schools in Campania promoting health care through sporting activities, with the aim of offering a new experience in the practice of research action.

In fact, the national health-care plan states that health is given a boost through individual and collective actions, using measures designed to change individual behavior, like promoting a correct lifestyle, and improving the living condition of the community. Such aims can be achieved through school education.

The CSSMB means to follow this vision, with Liceo "A. Genovesi" leading a Network of Schools and Institutions working together to achieve the main purpose of promoting a correct lifestyle and spreading the culture of sport for the students' well-being.

Thus, testing skills and abilities is the first step taken by the CSSMB in order to identify the students' fitness and well-being. Numerous studies prove that physical activity enhances both physiological and psychological health (Scully et al., 1998; Hassmén, Koivula, & Uutela, 2000), and a more demanding level of exercise seems to be related to lower levels of stress, anxiety and depression (Norris, Carrol, & Cochrane, 1992).

Research questions and aims

We mean to register the students' physical condition through observation at school, to better identify their needs, and to take some common action to improve their physical performance.

The aim of the study will be to give a complete database of the abilities selected, to monitor the evolution over the years, to observe the effectiveness of the intervention, and to find the best way to improve the performance.

We decided to get a full picture at the beginning of high school by testing the students' physical fitness on three types of skills: back flexibility, sprint, and endurance. The complete study will last 3 years (2016 - 2019), while the preliminary results are discussed below.

Methodology and methods

So far, we have studied a sample of 144 schoolchildren (88 males and 56 females) of an average age of 14.40 ± 0.77 years.

Each teacher tested his or her own students. The tests selected to evaluate the abilities above were the most widely used in scientific literature:
  – The Sit and Reach Flexibility Test (Lopes et al., 2016; Vanhelst et al., 2017; Ayala et al., 2012; Chillon et al., 2010; Ortega et al., 2011)
  – The 4x10 m Shuttle Speed Run Test (Ramos-Sepúlveda et al., 2016; Ortega et al., 2008; Brunet, Chaput, & Tremblay, 2007)
  – The Ruffier Test (Salinero et al., 2016; Cisse et al., 2006)

All the teachers involved in the project shared the study protocol and were instructed on the procedures of data collection. Besides, the teachers endorsed the warming-up performed before each test.

The Sit and Reach Flexibility Test was carried out assembling a support with a scale which marks 0 at the level of the student's feet, negative digits extending towards the student, and positive digits in the opposite direction. To run the test the subjects sit barefoot on the ground, with the soles of their feet touching the support and their legs stretched: in this position, the arms push forward to reach the best position on the scale and maintain it for almost 2 seconds. The exercise was performed three times, reporting the values reached the third time.

In the 4x10 m Shuttle Speed Run Test the students had to move two small blocks of wood along a path, placing them in precisely defined places. The start was given by a whistle and the time employed was registered from the moment the sound was heard till the last block wood was positioned into the right place. We took account of the time and of the precision in placing the blocks. In the last test, the students were asked to perform 30 squats in 45 seconds, while a metronome gave the right rhythm. The teachers reported the heartbeat at rest (measured while the students were sitting in the classroom), and 1 minute after the exercise. A score was given to each performance using a reference scale resulting from: (FC1-70+FC1-FC0)/10. Score 1 to 2 is excellent; 2 to 4 is good; 4 to 6 is sufficient; 6 to 8 is poor; over 8 is very poor.

Analyses and results

In this preliminary study, we chose to analyze the impact of moderate exercise and BMI on skills and abilities in a group of 144 students with an average age of 14.42 ± 0.77. We

compared the groups with a Student's t Test: significantly the results with p<0.05. In our study sample, 65% of the students were sedentary people, whereas the other 35% practiced different sports with an average of 3.02 ± 0.98 times/week. The analysis of the data showed no difference between skills and abilities of sportive students and of sedentary ones. In the first test, the Sit and Reach Flexibility Test, sedentary students reached a measure of 3.39 ± 8.09 cm vs. 4.93 ± 7.58 cm in sportive students (p>0.05). The second test, the 4x10 m Shuttle Speed Run, had similar results in both groups, with an average timing of 12".00 ± 2".03 in sedentary students vs. 11".79 ± 1".50 in sportive students (p>0.05). Finally, the Ruffier Test showed an index of 6.70 ± 3.80 in sedentary students vs. 6.54 ± 4.32 in sportive students (p>0.05), with some poor scores in both groups.

Analyzing BMI data, we did not find any differences in the physical performance of overweight students, with a BMI > 25, and of normal-weight students, with a BMI < 25.

However, when we arbitrarily set the cutoff of BMI further below 25, we found some interesting differences between the students with higher BMI (group H – BMI > 21) and the ones with lower BMI (group L – BMI < 21). Actually, the students with BMI < 21 (group L) gave better performances than group H in the Shuttle Speed Run Test with a time of 11".46 ± 2".03 vs. 12".44 ± 1".50 (p<0.05). Moreover, the two groups showed significant differences between their heart rate at rest, which was 77.95 ± 12.80 bpm in group H vs. 73.26 ± 11.72 bpm in group L (p<0.05). Anyway, we did not find any differences between the groups as regards heartbeat after exertion.

Discussion

The first observation is that in our group only a low percentage of students declared to do some sport: 65% of the sample were sedentary people, like most members of the young generation (Whitaker et al., 2017). Moreover, this trend relates to body types, showing an increase of weight in younger children (Mascherini et al., 2016), as we noticed in 27% of our sample, who have a BMI > 25. In our study, though higher levels of physical activity are usually related to better performance (Cabral-Santos et al., 2016), we did not find any differences between the group of sportive students and the one of sedentary students. In particular, sport activity induces an effect on the heartbeat (Kwon et al., 2016), which is slower than in sedentary people. Instead, in our study we found the same poor cardiac response to exercise in both groups. This behavior could be explained by the limited workload of the sportive students, who train an average of 3.02 ± 0.98 hours per week. Probably, this limited amount of training in the young is not sufficient to induce physical adaptation to exercise.

However, we found more differences when comparing the students according to their BMI: 66 students with a BMI of 18.74 ± 1.51 performed significantly better in almost all the tests than the other 78 students with BMI of 25.38 ± 3.91. Though BMI cannot give a complete view of body type, it remains the most common method of population screening, and the relation between physical performance and BMI is well-documented (Martínet-López et al., 2017). In our study, the best performance was related to a very low body weight, when we arbitrarily put the cut-off of the BMI at 21. Of course, the data need further examination to evaluate the differences between males and females

and the values of BMI in young people, but at present our findings support the results of field literature, which show that the best performances are related to low body weight (Chwałczyńska et al., 2017).

In conclusion, our preliminary findings show that our students present inadequate physical fitness, and that the sedentary ones give almost the same performances as the physically active. Therefore, in agreement with field literature (Parfitt & Eston, 2005) we think that doing exercise just a few hours a week is not sufficient to improve the physical wellbeing of young students, and that probably such low levels of exercise have no positive effects on their psychological wellbeing either.

On the contrary, low BMI seems to have a greater impact on performance, and therefore it could be related more favorably to subjective wellbeing.

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ASSESSING LIFE SATISFACTION ACROSS CULTURES: ITALIAN VALIDATION OF THE BRIEF MULTIDIMENSIONAL STUDENTS' LIFE SATISFACTION SCALE (BMSLSS)

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Introduction

The construct of life satisfaction has gained a place in the assessment of mental health and in the psychological literature (e.g., Lyons & Huebner, 2016; Saha, Huebner, Hills, Malone, & Valois, 2014). Studying life satisfaction during the developmental years can be useful, as its measures are sensitive to the entire spectrum of functioning (Gilman & Huebner, 2003), providing indicators of both wellbeing and psychopathology (Proctor, Linley, & Maltby, 2009).

Several instruments have been developed to assess life satisfaction in developmental samples. Among the most used, the Students' Life Satisfaction Scale (SLSS - Huebner, 1991) must be mentioned. It is a seven-item self-report measure aimed at evaluating life as a whole, rather than focusing on particular domains. The Multidimensional Student Life Satisfaction Scale (MLSS - Huebner, 1994) is another interesting instrument. It was developed in order to evaluate life satisfaction across different contexts of children and adolescents' life (i.e., family, friends, school, self, and living environment). Although the MSLSS seems promising, its use in large scale surveys might be prevented by its length, since it is composed by 40 items. To address this problem, the Brief Multidimensional Student Life Satisfaction Scale (BMSLSS - Seligson, Huebner, & Valois, 2003) was developed. In the BMSLSS, the MSLSS five domains are investigated through one question each.

Research question and objectives

The general purpose of the present study is to examine the psychometric characteristics of the BMSLSS in the Italian context, with a sample composed of children and early adolescents. Reliability, criterion validity and convergent validity of the BMSLSS will be investigated. Moreover, associations between the BMSLSS and children's coping strategies and behaviour will be explored.

Methodology and methods

A sample of 354 students (172 boys and 182 girls) attending four primary and four middle schools and their teachers participated in this research project. The schools were located in three cities of the North of Italy, in areas with mixed socioeconomic backgrounds. Participants ranged in age from 8 to 15 years (M = 11.34, SD = 1.77).

Life satisfaction was measured through the BMSLSS (Seligson, Huebner, & Valois, 2003) and the SLSS (Huebner, 1991). The Italian version of the BMSLSS and the SLSS were developed by using the back-translation method.

Depressive symptoms were assessed through the Child Depression Inventory (CDI - Kovacs, 1985). Feelings of loneliness were assessed through the Loneliness and Social Dissatisfaction Questionnaire (LSDQ - Asher & Wheeler, 1985). Anxiety symptoms were assessed through the Screen for Child Anxiety Related Emotional Disorders (SCARED - Birmaher et al., 1997).

Coping strategies were evaluated through the Self-Report Coping Scale-revised (SRCS-R - Wright, Banerjee, Hock, Rieffe, & Novin, 2010).

Finally, teachers completed the Strengths and Difficulties Questionnaire (SDQ - Goodman, 1997), which examines emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial behavior.

Analyses and results

The descriptive statistics denote a rather high degree of satisfaction among the participants (M ≥ 4.87, SD ≤ 1.64). The BMSLSS total score did not correlate with the demographic variables. Internal consistency of the BMSLSS total score was acceptable ($\alpha = 0.64$).

Intercorrelations among the five BMSLSS items ranged from .17 to .40 with a mean of .26.

A principal axis factor analysis was used to evaluate the factor structure of the BMSLSS. A scree test and an eigenvalue of one criterion were utilized to determine which factors to retain. The analysis revealed a one-factor solution which accounted for 41% of the variance. Factor loadings ranged from 0.40 to 0.67, and the eigenvalue was equal to 2.05.

Correlation analyses revealed a strong relationship between the BMSLSS total score and the SLSS total score, r = .44, p < .001.

The BMSLSS total score was negatively correlated with both the CDI and the LSDQ, r ≥ -.25, p < .001. It was negatively correlated also with all anxiety scales, r ≥ -.12, p < .05, with the exception of separation anxiety.

The BMSLSS was positively correlated with problem solving and seeking for social support, r ≥ .18, p < .001; it was negatively correlated with internalizing, externalizing and trivializing coping strategies, r ≥ -.11, p < .05; and it was not correlated with distraction.

Finally, the BMSLSS total score was negatively correlated with teacher ratings of peer problems and hyperactivity, r ≥ -.14, p < .01; it was positively correlated with teacher ratings of prosocial behavior, r = .11, p < .05; and it was not correlated with teacher ratings of emotional symptoms and conduct problems.

Discussion

The BMSLSS proved to be a valid and reliable instrument for the assessment of life satisfaction in five crucial domains, in a sample of Italian children and early adolescents.

The modest correlations found here among the BMLSS items, in line with the findings of Seligson and colleagues (2003), support the multidimensionality of the instrument and provide evidence that children are able to distinguish between the five domains of the BMSLSS. Congruent with the BMSLSS literature (Seligson et al., 2003, 2005; Siyez & Kaya, 2008), the results of a principal axis factor analysis yielded a single factor for the BMSLSS, accounting for 41% of the variance. Children and early adolescents who participated in the present study reported positive levels of overall life satisfaction on the BMSLSS, confirming findings from other studies (Seligson et al., 2003, 2005).

In our study, the BMSLSS total score demonstrated high concurrent criterion validity with the SLSS total score and revealed good convergent validity in its relationship with internalizing symptoms. Specifically, we found a negative correlation between the BMSLSS and depressive symptoms, mirroring the findings obtained by previous studies (see Gilman & Huebner, 2003). In line with the literature (Neto, 1993), we found a negative correlation between the BMSLSS and measures of loneliness. A negative correlation was also observed in the present study between the BMSLSS and general anxiety, panic disorder, social and school phobia, in line with previous studies (Huebner, 1991; Neto, 1993). The association between life satisfaction and separation anxiety had never been investigated before. In the present study, the two constructs were not associated. However, the decrease of separation anxiety with age (Essau, Sakano, Ishikawa, & Sasagawa, 2004) might reduce the amount of variation in separation anxiety. Therefore, this association should be explored in younger children in order to confirm that life satisfaction and separation anxiety are not related.

In relation to behaviour, children and early adolescents scoring high on the BMSLSS total score were the same rated by teachers as displaying a high rate of prosocial behaviours, extending Gilman's (2001) findings. Moreover, students scoring high in the BMSLSS were rated by teachers as not having problems with peers, in line with previous studies (Nickerson & Nagle, 2004; Verkuyten & Thijs, 2002). In addition, the negative correlation found between life satisfaction and hyperactivity confirms previous results obtained with children and adolescents with ADHD symptoms (Klassen, Miller, & Fine, 2004).

As far as coping strategies are concerned, the BMSLSS total score was positively correlated with problem solving and seeking for social support, and negatively correlated with externalizing, internalizing and trivializing. These findings convey an idea of wellbeing linked to an active and constructive behavior and inversely related to short-tempered, ruminative and avoidant attitudes. Finally, life satisfaction was not correlated with distraction, which is in line with the only study that investigated this specific relationship (Thiruchelvi & Supriya, 2012), albeit among adults.

A bigger sample would have allowed more sound analyses and more robust conclusions. Moreover, the collection of the data in a single time point prevented to test the

stability of results and precluded determination of causality among variables. Nonetheless, these findings addressed an important gap highlighted by Seligson and colleagues (2005) regarding the examination of the BMSLSS in relation to unexplored variables such as coping strategies.

Overall, the present results support the usefulness of the BMSLSS in the Italian context and encourage further studies aimed at investigating and promoting strength and protective factors in children's lives across nations and cultures.

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"S-CARTIAMO IL FUTURO": A CAREER EDUCATION INTERVENTION FOR PRE-ADOLESCENTS

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Globalization, internationalization, job instability, rapid progression of technological developments and the economic crisis contributed to drastic changes in the world of work. Careers have become unpredictable and the world of work has become less clearly defined, creating greater challenges for adolescents when making career decisions and coping with career transitions (Savickas et al., 2009).

At the same time, however, due to the crisis and the current socio-economic conditions we are more often thinking about the future in a negative way, with concern, with ideas that opportunities and possibilities are decreasing, and all of this seems to affect particularly the most vulnerable populations as the youth. These reflections had significant repercussions in counseling and career education fields. It was argued that to act in this society, to make predictions about the evolution of work and educative systems, we can no longer rely on linear predictions, is necessary to continue to innovate, to provide an intensive use of human capital, creativity and ingenuity, overcoming old patterns and using an open mind to change. Thereafter, career professionals interested to help youth to design their future, need to embrace theoretical models that are more in tune with these changes and challenges.

Therefore, the present contribution aims to present a career development program developed with a group of secondary school students in the light of the theoretical paradigm of Life Design (Savickas et al., 2009). Life Design approach (LD) represents a new paradigm for career counseling and development in the 21st century augmenting 20th-century Person-Environment (P-E) fit and developmental models by focusing on making meaning through work. Moreover, it emphasizes the need to support people to become experts in co-construction and Life Design processes, to anticipate and deal with career transitions, and to consider the hope for a foreseeable future, optimism, future orientation, and resilience, useful to individual's future planning and behavior, and career adaptability, that is a modern world workers' essential resource to manage frequent career and life transitions. Multiple studies also reported positive relations between hope, optimism, future orientation and resilience, and variables related to job and life satisfaction (Santilli et al., 2016).

The relationship between job strain and life satisfaction was partially mediated by career adaptability (Maggiori, Johnston, Krings, Massoudi, & Rossier, 2013). Furthermore, life satisfaction is not only related to, but can also be predicted by career adaptability and positive variables toward the future (Hirschi, 2009). Furthermore, as reported by different studies (Robertson, 2013), career education may have a direct impact on well-being via mechanisms analogous to therapeutic counseling. It may impact indirectly on well-being by promoting engagement in work or learning. If these effects can scale up to a population level, then the potential exists for career education to be a social intervention with public health implications. Therefore, it is important and necessary to help young people prepare for and install positivity about their future, to consider multiple career options, to support them to develop positive life trajectories and to cope with social economic conditions related to uneasiness, discomfort and confusion (Nota, Soresi, Ferrari, & Ginevra, 2014). This indicates the great need for vocational guidance and career education to support youth in coping with career and work-related challenges and transitions; not only to find work, but to find decent work, allowing for growth and security.

In line with the LD approach a LD career education intervention group with middle school students was established that encouraged youth to reflect about the possible way that they could develop for their future. The participants were encouraged to narrate their story, using the "My Career Story" (Hartung and Savickas, 2011) workbook, and exploring their career activities interest using "card sort", a bunch of work activity cards.

During the activity, the role of career adaptability and positive attitudes, such as hope, optimism, resilience and future orientation was also stressed. Attention was also paid about education and the importance of innovation and creativity to design the future (Nota, Ginevra, Santilli, & Soresi, 2014). Students at the end of their activity were encouraged to reflect on the benefits of setting more career goals for the future, identifying and describing their professional and personal goals and the various strategies that may help to reach them (Nota, Santilli, & Soresi, 2015).

To evaluate the effectiveness of the training, a quasi-experimental design was developed. In this study 108 middle school students (54 boys and 54 girls) with a mean age of 13.09 years (SD = .467) were involved. The students were randomly assigned to the experimental group (54 students) and control group (54 students).

All the participants filled out in pre and post training the "Career Adaptability Inventory" (DiMaggio et al., 2016), and the "Vision About the future" (Geneva et al., 2015), and the "Design My Future" (Santilli et al., 2015) scales.

The Career Adapt-Abilities Scale (CAAS; Savickas & Porfeli, 2012) comprises 24 items set on a 5-point Likert-type scale ranging from 1 (*not strong*) to 5 (*strongest*). The 24 items combine to yield a total career adaptability score, and form four separate six-item subscales that measure the career adaptability resources of concern (e.g., "Realizing that today's choices shape my future"), control (e.g. "Counting on myself"), curiosity (e.g., "Investigating options before making a choice"), and confidence (e.g., "Working up to my ability"). For the present study, we used the Italian validated version of the CAAS for middle-school students (Di Maggio, Ginevra, Laura, Ferrari, & Soresi, 2015). Cronbach's alphas for the four subscales in the present study were .75 (concern), .73 (control), .75 (curiosity), and .82 (confidence).

The Visions About Future scale (VAF; Ginevra, Sgaramella, Santilli, Ferrari, Nota, & Soresi, 2016) contains 20 items yielding a total score of positive future orientation and two subscales: hope (e.g., "Certainly in the future I'll be able to realize something interesting for me") and optimism toward the future (e.g., "I think I'm an optimist"). Participants respond to each item on a scale from 1 (*not strong*) to 5 (*strongest*). In the present study, Cronbach's alphas were .88 for hope and .85 for optimism toward the future.

To measure resilience and future orientation, we used the Design My Future scale (DMF; Santilli, Ginevra, Sgaramella, Nota, Ferrari, & Soresi, 2015). The DMF scale comprises 21 items assessing two subscales: resilience (e.g., "I think I'm able to meet the difficult situations that may arise in the future for me") and future orientation (e.g., "Looking ahead and thinking about what will happen in the future makes me feel full of energy"). Participants responded to each item on a scale from 1 (*not strong*) to 5 (*strongest*). In the present study, Cronbach's alphas were .89 for resilience and .87 for future orientation.

The effectiveness of the training was examined with a series of repeated measures variance analysis. Results highlighted that the experimental group was characterized by higher levels of adaptability than control group, specifically in concern [$F_{(1, 79)} = 14,454$, $p = .001$]; control [$F_{(1, 79)} = 7.254$, $p = .009$]; curiosity [$F_{(1, 79)} = 6.288$, $p = .014$]; and confidence [$F_{(1, 79)} = 8.950$, $p = .004$]. Additionally, the experimental group presented higher level of hope [$F_{(1; 79)} = 13,622$, $p = .001$], resilience [$F_{(1; 79)} = 7.884$, $p = .006$], and future orientation [$F_{(1; 79)} = 38,102$, $p = .001$] than control group.

Furthermore, the results obtained with social validity analysis supported the importance to carry out career education group interventions in classroom, in line with the recent career guidance model and Life design approach (Nota, Ginevra, & Santilli, 2015).

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LEARNING AND EMOTIONS

STABLE IMPOSTORISM AND SCHOOL ADJUSTMENT IN HIGH SCHOOL STUDENTS

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Introduction

A key determinant of whether learners make efforts and persist in front of difficulties rests in the beliefs they hold about their capacity to do so. Students' self-efficacy beliefs for learning relate to motivation and achievement in diverse academic areas and for students at all levels of schooling (see Bandura, 1997; Pajares, 2007). However, self-evalution of one's competence is a complex task that may result in biases of different types. One of them concerns the accuracy of the students' evaluation of their own competence and another concerns the feeling of being wrongly evaluated by others. This study focuses on impostorism, defined as the bias when a student believes to be less academically able and competent than the others think.

If experiencing fleeting impostorism has no lasting consequences aside from feeling a momentary discomfort, its frequent or stable presence is known to undermine psychological well-being (Clance & Imes, 1978; Fruhan, 2002; Harvey & Katz, 1985). Although research on impostorism has mainly focused on adults, it can affect people as young as 10-12 years old and is already significantly linked to the correlates observed among adults (Bouffard, et al., 2011; Caselman, Self, & Self, 2006). Besides, other studies posit that a strategy of persons with impostorism is to avoid taking risks or to withdraw from situations that might undermine the view that others hold of them (Clance 1985; Harvey & Katz, 1985). Failing to recognize their own abilities and internalize their successes, they sometimes lower their own expectations, whick limits their academic and career goals and leads to fail to achieve their full potential (Fruhan, 2002).

The frequent evaluations and opportunities to appear incompetent at school can make it a threatening environment for students who harbor impostorism. These youths are likely to feel ill at ease at school and to experience a sense of alienation from the school environment. Setting their sights on less challenging goals and leaving school as early as possible can be seen as solutions for keeping up appearances and lessening the anxiety of being discovered (Leary, et al., 2000; Ross et al., 2001; Want & Kleitman,

2006). These short-term seemingly positive effects, however, may have long-term consequences such as restraining their aspirations to lower-level jobs with fewer advancement opportunities. However, except from a study by Bernard et al. (2002) which found a negative correlation between impostor feelings and achievement striving among undergraduate students, this issue remains empirically unexplored.

Research question and objectives

The current longitudinal study covered a period of five years starting when the students were in Grade 7. It examines the links between membership in developmental trajectories of impostorism and school adjustment assessed through school alienation and intentions of academic self-sabotage. Studies involving adolescents have found that problems related to academic aspirations and high school dropout are more prevalent among boys (Battin-Pearson et al., 2000; Brack, et al., 2004). Thus, this study also tested the moderating effect of gender. Because students intellectual capacities can impact on their academic futures, these capacities were assessed and used as a control variable in the analysis of the variables associated with them.

Methodology and methods

Participants

The 658 (312 boys) participating students (mean age = 13,1. s.d. = 4 months) were involved in a broader longitudinal project on the development of perceived competence. They were asked annually about their impostorism over a period of four years, from Grades 7 to 10, and about school adjustment variables in Grade 11. The students completed the questionnaires in their respective classroom during school hours. Trajectory analyses allow for the handling of missing data using maximum likelihood estimation when the data are missing completely at random. In order to minimize the number of missing data while ensuring that the emerging trajectories would be representative, those students had participated in at least two out of four measures of their impostorism.

Instruments

All items were rated on a Likert-type scale ranging from 1 (not at all) to 4 (entirely), measuring the extent to which the students deemed themselves to be similar to the fictitious student described in each. For each variable, a higher mean score indicates a higher degree of its presence.

Impostorism was assessed using the *Impostor Feelings Questionnaire for Children and Adolescents* (Bouffard, Chayer, et al., 2011) that includes eight items on how the students feel with regard to what others think of their intelligence. A sample item is: "When other people tell this student that he is smart or that he is good at school, he feels like he is fooling them." The internal consistency across the four years was satisfactory (α from .83 to .87).

School alienation represents the extent to which the students felt out of place at school. The five items (α = .77) as the following one were drawn from Galand (2002): "This student will feel better about himself when he can leave school."

Academic self-sabotage intentions variable was assessed with three items created by a committee of five experts. One item related to avoiding challenges: "This student avoids taking up some challenges so that others won't discover that he isn't as smart as they think he is." A second concerned the intention to drop out of school prematurely: "This student wants to leave school before others notice that he's no good at school." The third concerned students' intention to limit their own educational attainment: "This student will choose to go less far in his studies to prevent his lack of competence from being discovered." The internal consistency was satisfactory (α = .60).

Mental ability was assessed using the French version of the Otis-Lennon School Mental Ability (Otis & Lennon, 1983). The total number of correct answers was converted into a mental ability index (MAI), based on the students chronological age.

Analyses and results

Trajectory analyses of impostor feelings

In order to identify developmental trajectories of impostor feelings and their links with school adjustment among the adolescents, trajectory analyses were performed using the SAS-TRAJ procedure (Jones, Nagin, & Roeder, 2001; Nagin, 2005). This group-based semiparametric approach estimates the model parameters using maximum likelihood estimation, compensating for the missing data in a longitudinal study. Thus, it makes full use of the available data and reduces the problem of missing data caused by participant attrition. The percentage of missing data was 14.96% over four measurement times and Little's Missing Completely at Random (MCAR) test indicates that the pattern of missing data was completely at random. Gender was unrelated to students' impostor feelings at any measurement time; thus trajectory analyses were conducted on the entire sample. In order not to constrain the trajectories, quadratic models with 1, 2, 3, 4 and 5 trajectories were tested. Based on the Bayesian Information Criterion (BIC), it appeared that the three-trajectory model fit the data best and that these trajectories were linear, constant and constant. The first trajectory (mean probability = 89%) comprised 59.27% of the sample: at the start of the study students impostorism was low and decreased slightly without disappearing altogether. The second trajectory (mean probability = 78%) included 34.19% of the students: impostorism was moderate over time. The third trajectory (mean probability = 82%) included 6.53% of the students: impostorism was high over time.

The distribution of the school alienation variable deviated from the norm, thus a logarithmic transformation was used to normalize its distribution. The ceiling effect of the students' intention to sabotage their academic future did not respond satisfactorily to any transformation. Therefore this variable was dichotomized. The students who reported no intention to sabotage their academic future were assigned a code of 0 (*n* = 342, 52%, 144 boys) while those who reported contemplating this possibility were assigned a code of 1 (*n* = 316, 48%, 168 boys).

Results of univariate analysis of covariance, with trajectory group (X3) and gender (X2) as between-subjects factors and the mental ability as the covariate on school alienation revealed significant effects of trajectory group ($p < .001$) and gender ($p < .005$), but no interaction effect between these factors. Students belonging in the low trajectory of impostorism reported significantly less school alienation ($M = 1.74$) than those in the moderate ($M = 1.91$) and the high ($M = 1.93$) trajectory groups that did not differ from one another. The boys reported more school alienation ($M = 1.91$) than the girls ($M = 1.72$).

Results from the log-linear analysis on the intention to sabotage academic future revealed no second or third-order interaction effects. The most parsimonious model that best fit the data retained only three first-order interaction effects. Chi-square tests and cross-tabulated frequency tables served to examine these interaction effects. MAI was associated with students intention to sabotage their academic future ($p < .001$) and those with a MAI below or equal to the mean were twice as likely to report such an intention ($p < .001$). Second, a higher proportion of boys (53.85%) than girls (42.77%) reported this intention and boys were 1.56 times more likely to report it than the girls ($p = .005$). Lastly, a smaller proportion of students in the low trajectory (39.49%) reported such intention compared to those in the moderate (56.44%) and high (81.40%) groups. The students in the moderate and high trajectory reported this intention significantly more often than those in the low trajectory ($p < .001$) and those in the high trajectory were 3.38 times more likely to report it than those in the moderate trajectory ($p < .05$).

Discussion

We found three reliable developmental trajectories of students' impostorism. The normative developmental trajectory that represents the largest group was characterized by an initial low level that further decreased over time. This trajectory suggests that for more than half of typically developing students, such fleeting feelings might be precipitated by their arrival at high school which require adaptation and often have uncertain outcomes until there is evidence of mastery (Leary et al., 2000; McElwee & Yurak, 2010). Together, the trajectory of moderate and high stable impostorism was represented by 40% of the participants. These two trajectories support the notion that impostorism might represent a fairly stable personality trait, which primarily differs in intensity. The inability to attribute personal success may be a main factor in maintenance this characteristic (Clance, 1985).

Our findings also showed that regardless of gender, impostorism among high school students predicts their intentions to limit their academic and occupational future and thus a tendency to limit full individual potential. Choosing to restrain their aspirations could be a way to maintain control and avoid being exposed as incompetent. Our results highlight the importance of pursuing further longitudinal and prospective studies on impostorism among adolescents. Impostorism was well entrenched among 40% of the participants; this suggests that a better understanding of the factors fostering its development should involve an examination of its prevalence at a younger age.

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HYPERACTIVITY, INATTENTION, AND STUDENT ENGAGEMENT: THE PROTECTIVE ROLE OF RELATIONSHIPS WITH TEACHERS AND PEERS

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Introduction

Student engagement in school promotes positive educational and psychosocial adjustment. A great concern among professionals in education is that the incidence of classroom disengagement is not uniform across all students. Specific groups of children, as those with hyperactivity and inattention behaviors, are more likely to exhibit school-related problems and disaffection. Due to their lower behavioral inhibition, these children have difficulty remaining focused on, and investing their energy into classroom tasks (Barkley, 1997). Consequently, they are generally less engaged, less likely to appreciate assignments, and struggle to perform in school (Junod et al., 2006). Over time, hyperactivity and inattention are associated with student disengagement. Furthermore, some studies highlight that student inattention and hyperactivity have a distinct influence on academic outcomes. Inattention is thus more likely to undermine academic achievement and school completion that hyperactivity (Jaekel et al., 2013). However, there are very few studies that have considered this distinct influence of inattention and hyperactivity on student engagement.

Among students at-risk, not all children follow the same disengagement trajectory (Janosz et al., 2008). For instance, it is well recognized that factors, such as prosocial skills toward peers and positive relationships with teachers, play a direct adaptive role on student school functioning (Birch & Ladd, 1998; Wentzel et al., 2010). These factors are likely to protect boys and girls with hyperactivity and inattention against deceased school engagement. Nevertheless, this hypothesis has never been tested.

Research question and objectives

This study aims to investigate the protective role of relationships with peers and teachers to foster fourth- to sixth-grade hyperactive and inattentive students' engagement in literacy; a domain known to be central for student learning and mastery in every other academic subject matter.

A first objective is to test if students displaying higher levels of hyperactive or inattentive behaviors have a lower behavioral, emotional, and cognitive classroom engagement by the end of the school year, beyond the influence of important control variables (i.e., sex, age, parental support, and engagement at the beginning of the school year). A second objective is to investigate if student prosociality toward peers and close relationships with teachers moderate the link between student hyperactivity and inattention and engagement. A final objective is to assess if the previously stated links differ for boys and girls.

Methodology and methods

Sample

The sample comprised 513 fourth-, fifth-, and sixth-grade students (50.5% girls; average 10.35 years old, S.D.=1.02). These students were drawn from a larger sample recruited among seven elementary schools from a large school board including a mix of urban, semi-urban, and rural cities in the province of Quebec (Canada). Thirty teachers (76.7% women) participated in the study. Data collection for the present study took place in April 2010 (T1), November 2010 (T2), and April 2011 (T3). Students were asked to complete a computerized questionnaire on their academic and social experience in school. During this time, teachers were invited to complete a paper-pen questionnaire on their work experience and on their students' learning and behaviors. Missing data (maximum rates = 19.0%) was handled by multiple imputations analysis.

Measures

Students' behavioral, emotional, and cognitive engagement in literacy was self-reported at T1 and T3 using the Dimensions of School Engagement Scale (Archambault & Vandenbossche-Makombo, 2014). The behavioral dimension comprised four items (α = .81; e.g. "I listen to the teachers' explanations during French class."), the emotional dimension had three items (α=.77; e.g. "I like to read and write."), and the cognitive dimension had three items (α = .79; e.g. "When I do an assignment, I check for spelling mistakes.").

Hyperactivity and inattention behaviors (α=.81) were assessed at the beginning of the school year (T2) with a subscale of the Strengths and Difficulties Questionnaire (Goodman, 2005). This instrument is a five-item teacher-rated questionnaire (e.g. "This student is constantly fidgeting or squirming."). For this study, we separated the inattention and the hyperactivity items in two distinct scales.

Students' prosocial skills were evaluated at T2 with the Prosocial Behavior subscale of the Strengths and Difficulties Questionnaire (Goodman, 2005). This five-item scale (α=.81) was reported by teachers (e.g. This student is helpful if someone is hurt, upset, or feeling ill.").

Student-teacher closeness was measured with the Student-Teacher Relationship Scale (Pianta, 1999). The Closeness subscale comprised four items (α=.83) rated by teachers for each of their students (e.g. "It is easy for me to understand this student's feelings.").

Analyses and results

Path analysis was conducted to test the hypothesized model using Mplus7. Prior to analysis, all variables were mean-centered. We tested two distinct path models: one with inattention and one with hyperactivity. In each model, we added the independent variables (i.e., hyperactivity or inattention), the moderators (i.e., prosociality toward peers and student-teacher closeness), the double interaction and triple interaction terms. Finally, we assessed multiple-group invariance of each model for boys and girls using the Satorra-Bentler Scaled Chi Square test.

The inattention model

This model had good fit to the data (χ^2=3.31 (df=5, p=.56); CFI=1.00; TLI=1.02; RMSEA=.00; SRMR=.01). Results first indicated that beyond the influence of control variables, students with higher levels of inattention at the beginning of the school year reported lower behavioral engagement at the end of the year (β=-.12(.05), p<.01). Prosociality and student-teacher closeness were not directly associated with this outcome. The two-way inattention*prosociality interaction was significantly associated with behavioral engagement. To interpret this interaction effect, we decomposed the influence of the predictor on the outcome for different levels of the moderator (± one standard deviation). Findings indicated that, for students with low levels of prosociality, an increase in inattention behaviors was associated with lower behavioral engagement (b=-.48, p<.001). For students with high levels of prosociality, inattention was not associated with behavioral engagement (b=.00, p=.98). When looking at student emotional engagement, we found no direct effect of inattention, prosociality, and closeness. For student cognitive engagement, we found that prosociality was the only significant predictor (β=.11(.05), p<.05). This association was positive, which suggests that higher prosocial skills were associated with higher cognitive engagement at the end of the school year.

Finally, we tested for multiple group invariance across genders. To do so, we compared a first model where all parameters were allowed to vary freely, to a second model where all links were constrained to be equal between boys and girls. The Satorra-Bentler Scaled Chi-Square Test indicated that the freed model did not fit the data better than the constrained one ($\Delta\chi^2$(5)=4.63, p=.46), which suggests that the links in this model do not differ between boys and girls.

The hyperactivity model

This model also has a good fit to the data (χ^2=2.58 (df=5, p=.77); CFI=1.00; TLI=1.02; RMSEA=.00; SRMR=.01). Findings indicated that prosociality at the beginning of the school year was positively associated with behavioral engagement at the end of the school year (β=.12(.05), p<.05). Hyperactivity was marginally associated with a lower level of behavioral engagement (β=-.08(.04), p=.06). Student-teacher closeness was not directly associated with this outcome. The two-way hyperactivity*closeness and hyperactivity*prosociality interactions were significant. Decomposing the first interaction indicated that, for students with high levels of closeness with teachers, hyperac-

tive behaviors were not associated with behavioral engagement (b=.09, p=.45), whereas for students with low levels of closeness, higher levels of hyperactivity were associated with lower behavioral engagement (b=-.41, p<.01). The second interaction also indicated that, for students with high levels of prosociality, hyperactivity was not associated with behavioral engagement (b=-.04, p=.74), while for those with low levels of prosociality, higher levels of hyperactivity were associated with a lower behavioral engagement (b=-.28, p<.01). Results also indicated that none of the independent variables were significantly associated with student emotional engagement at the end of the school year. Prosociality was the only variable significantly and positively associated with cognitive engagement (β=.11(.05), p<.05).

Testing for multiple-group invariance revealed that there were significant gender differences ($\Delta\chi^2$(5)=11.06, p<.05). We therefore tested for specific gender differences by constraining one path at the time and comparing the fit of the models using a Chi-Square Difference Test. Three associations differed between boys and girls. First, the link between prosociality and behavioral engagement was significant for boys but not for girls (boys: β=.17(.07), p<.05; girls: β=-.05(.06), p=.36). Second, higher teacher-student closeness was marginally associated with higher emotional engagement for boys only (boys: β=.10(.06), p=.08; girls: β=-.06(.06), p=.32). Finally, the association between the hyperactivity*closeness interaction and cognitive engagement was significant for boys but not for girls. The decomposition showed that for boys sharing a close relationship with their teacher, hyperactivity was not associated with cognitive engagement (b=.35, p=.08). Yet, for boys who did not have this positive relationship, an increase in hyperactive behaviors was associated with a lower level of cognitive engagement (b=-.23, p<.05).

Discussion

Children with hyperactive and inattentive behaviors face several adaptive problems, especially in school. Our findings indicate that, although children displaying higher hyperactive or inattentive behaviors at the beginning of the school year tend to report lower engagement at the end of the year, this is not true for all students and for all dimensions of engagement. The direct influence of hyperactivity and inattention on behavioral engagement is similar for boys and girls, even if they may tend to have different levels of hyperactivity and inattention (Gaub & Carlson, 1997). Our results also suggest that the negative influence of inattention on student behavioral engagement is greater than that of hyperactivity.

Furthermore, in line with previous research (Ladd & Burgess, 2001), our study supports the major role played by positive relationships in school to foster student behavioral and cognitive engagement. Our results highlight that positive interactions with peers and teachers foster inattentive children's behavioral engagement in school. Students with hyperactive behaviors, and especially boys, also benefit from teachers' emotional support to promote their behavioral and cognitive engagement.

Our study is an important step in understanding the factors influencing classroom engagement of students with hyperactive or inattentive behaviors in elementary school. The opinion that positive relationships lead these students to better school adjustment is

widespread among stakeholders. However, to our knowledge, no studies had identified that positive relationships can specifically protect these children against further disengagement across elementary school years. Overall, students who struggle with diverse difficulties are at risk of scholastic pathways that lead to negative outcomes, for example low academic achievement and school dropout. We therefore hope that our study will help researchers and practitioners to expand on the portrayal of some of these students' difficulties in school, especially because it concerns the prevention of disengagement.

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ACHIEVEMENT EMOTIONS ADJECTIVE LIST: SOME DATA RELATED TO GENDER WITH SWISS SECONDARY SCHOOL STUDENTS

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Introduction

Well-being can be defined in terms of affective reactions and life satisfaction (Diener, 2000), also with reference to education systems. As regards the first between these two com-ponents, emotions characterizing learning contexts–'achievement emotions'–have recently roused particular interest for their theoretical and applied importance (Pekrun, 2006; for a review see Pekrun & Perry, 2014). According to Pekrun's control-value theory, they are de-fined as those emotions related to achievement activities or outcomes and can be differentiat-ed according to valence (positive, negative) and activation (activating, deactivating). Achievement emotions are strictly related to proximal antecedents like beliefs on control and value of a task, which would mediate the effects of more distal antecedents like gender (Pekrun & Perry, 2014). While higher levels of anxiety for females compared to males are well documented, in particular for mathematics, empirical evidence relating to other emotions is quite limited (Pekrun & Stephens, 2012). As an exception, we know that in mathematics females would be characterized by more intense maladaptive emotions such as anxiety, shame, and hopelessness, and less intense enjoyment (Pekrun & Perry, 2014).

Self-report instruments are frequently used to measure well-being and specifically emo-tions within the school, and they represent the most direct way to have insight on people's emotional world (Pekrun & Bühner, 2014). However, time and organizational constraints make them difficult to be used whether they are long, as is the case for the Achievement Emotions Questionnaire proposed by Pekrun and colleagues and includ-ing more than 200 items (AEQ, Pekrun, Goetz, Frenzel, Barchfeld, & Perry, 2011). Therefore, we developed the Achievement Emotions Adjective List (AEAL, Raccanello & Brondino, 2017) as a multi-item structured self-report questionnaire enabling to as-sess the intensity of ten achievement emotions. Compared to the AEQ, it focuses on a larger number of emotions being shorter at the same time, still considering the con-trol-value theory as its theoretical framework. Prelim-inary data on the psychometric

properties of this instrument have already been discussed, in-volving mainly university students (Brondino, Raccanello, & Pasini, 2014; Raccanello, 2015; Raccanello & Bron-dino, 2017; Raccanello, Brondino, Crane, & Pasini, 2016; Raccanello, Brondino, & Pasini, 2015a, 2015b).

Aims and hypotheses

Our main aim was to test some psychometric properties of the AEAL with students attend-ing the first year of Lyceum in the Swiss context and to investigate gender is-sues. Concerning the construct validity of the AEAL, we expected good fit indexes for a model in which the items of the questionnaire loaded on ten separate factors relating to ten achievement emo-tions. We also tested the structural invariance of the AEAL across gender, as a key step in the validation of the instrument to exclude measurement artefact (Chen, 2007). Finally, we inves-tigated gender differences in achievement emo-tions related to school in general, hypothesis-ing positive emotions to be less intense and negative emotions to be more intense for females compared to males. We also expected positive emotions to be more intense than negative emotions (Raccanello, Brondino, & De Bernardi, 2013).

Method

Participants

The participants were 1139 students from Switzerland, involved within a larger project including all the students attending the first year of Lyceum in the Canton Ticino (M = 15 years, range: 14-16, 56% females).

Procedure and materials

The students were administered an online questionnaire including the AEAL. It con-sists of 30 adjectives related to three positive activating emotions (enjoyment, hope, pride), two posi-tive deactivating emotions (relief, relaxation), three negative activating emotions (anxiety, shame, anger), and two negative deactivating emotions (boredom, hopelessness). The students were asked to indicate how they felt with reference to learn-ing at school, evaluating how much each word described their feelings on a 7-point Likert scale (1 = not at all and 7 = com-pletely). The order of the words was randomized and kept constant.

Data analyses

We used Mplus version 7 (Muthén & Muthén, 1998–2012) to run Confirmatory Factor Analyses (CFA) and Measurement Invariance analyses (MI). The nested nature of the data into classes was taken into account utilizing the Mplus "Complex" syntax. We used SPSS version 21.0 for Windows to carry out analyses of variance (ANOVA) and t-tests. The level of significance was $p < .05$.

Results

Confirmatory Factorial Analysis (CFA)

We ran a CFA to test the goodness of fit of the hypothesized model, considering the 30 items of the AEAL as loading on ten latent factors corresponding to the ten achievement emotions. To investigate goodness of fit, we used the comparative fit index (CFI) and the root-mean-square error of approximation (RMSEA), with CFI ≥ .90 and RMSEA ≤ .08 as threshold values (Kline, 2005).

The results supported the hypothesized structure. All factor loadings were positive and sta-tistically significant (larger than .61) and the fit indexes were good, $\chi^2(360)$ = 1305.52, p = .001, CFI = .923, RMSEA = .048 (.045-.051).

Measurement Invariance (MI)

MI analyses examined the hypothesis on the invariance of the factorial structure across gender. We performed multigroup CFAs by testing separate nested CFA models, including: (1) the configural invariance model, allowing all the parameters to be freely estimated; (2) the metric invariance model, requiring invariant factor loadings; and (3) the scalar invariance model, additionally requiring invariant intercepts. Comparisons among models were based on differences in CFI and RMSEA: Support for invariance requires a change in CFI less or equal than .010 and a change in RMSEA less or equal than .015 (Chen, 2007).

The findings supported strong invariance (configural, metric, and scalar invariance) of the hypothesized model across gender.

Analysis of variance (ANOVA)

We ran a 2 x 2 (valence [positive, negative] x gender [male, female]) repeated-measure ANOVA with the mean scores on positive and negative emotions as dependent variables. The analysis revealed a significant effect of valence, $F(1,1130)$ = 139.04, p < .001, η^2 = .11: Scores were higher for positive emotions (M = 3.86, SD = 0.03) compared to negative emotions (M = 3.23, SD = 0.03). Also gender resulted significant, $F(1,1130)$ = 26.52, p < .001, η^2 = .02, with higher scores for males (M = 3.63, SD = 0.03) compared to females (M = 3.45, SD = 0.2). However, this effect was moderated by a significant valence x gender interaction, $F(1,1130)$ = 61.16, p < .001, η^2 = .05: T-tests separated for valence indicated that positive emotions were higher, $t(1130)$ = 9.58, p < .001, d = 0.57, for males (M = 4.15, SD = 1.00) compared to females (M = 3.56, SD = 1.08), while negative emotions were lower $t(1130)$ = -3.57, p < .001, d = -.21, for males (M = 3.11, SD = 1.08) compared to females (M = 3.34, SD = 1.10). Further t-tests separated by emotion confirmed the presence of the described gender differences for all the emotions (all ps < .001, except for shame for which p = .027) but anger and boredom.

Discussion

Besides responding to the need to develop a version of the AEAL in the Swiss context with secondary school students, supporting its construct validity, this work aimed at

testing the AEAL's measurement invariance across gender and documenting males and females' dif-ferences on achievement emotions related to school. First, the results from the CFA supported the goodness of the hypothesized model, extending its generaliz-ability to the examined con-text. Second, MI analyses indicated the scalar invariance of the AEAL structure across gen-der; this is a key step in the process of generalizing the use of an instrument and to make new findings more interpretable, to check whether results can be ascribed to group differences or measurement issues (Chen, 2007). Third, we extended findings indicating the prevalence of maladaptive emotions versus more positive ones for secondary school females compared to males, extending previous find-ings relating mainly to anxiety (Pekrun & Perry, 2014; Pekrun & Stephens, 2012). This result should alert professionals deputed at educating students, in order to devise interventions to ameliorate such negative pattern. However, on the whole we found that, for all the students, positive emotions were more intense than negative emotions, as an indicator of their well-being within the school.

Acknowledging limitations typical of self-report instruments such as social desirability bi-as and memory distortions (Pekrun & Bühner, 2014), our study supported the generaliz-ability of the AEAL in the Swiss context with secondary school students, soliciting its use for further research aiming at measuring nuances of well-being within education systems.

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EDUCATION 3.0: THE HUMAN PARADIGM

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Introduction to the theme

A new epistemological paradigm

If our training systems - even the scientific research - are still inspired by the de-ductive-Aristotelian model, new inductive-Bacon inspired epistemological models are now emerging in research and teaching. What is emerging today is the inductive model of practical experience, of facts. Empirical evidence generates general concepts; there is not only an abstract theory, defined once and for all, to be verified empiri-cally by hypotheses of work. It consists in another way to apply the "wheel of science": in order to learn, to really understand, you must be able to handle both paths, the 'deductive' and the 'inductive'. There is no better way than the other; induction and deduction are two right ways to know the reality. If we fail to grasp the induction demand that comes from the new generations we will not be able to do innovative training. Induction is the modern art of good teaching. We have to train, train our teachers, ourselves, to this inductive logic, which is not reductive, but constructive, scientific, emancipatory.

Theoretical bases of the experimentation

To give a brief glimpse to the authors who contributed to the advancement of theoreti-cal discourse on new models of teaching / learning, we remember five fundamental authors, the real founding fathers of this: John Dewey, the forerunner of pedagogical activism, founder of school- laboratory of the University of Chicago (1896); McClel-land, theorist of the Theory of needs (1961; 1973): Need for *Belonging* ("this is my class, my university, my country, my city"); Need for *Affiliation* ("in this environment, university, group, somebody likes me"), Need for *Achievement* ("in this environment, in this work, in this course I will succeed, I'll have a high profit, I'll learn some-thing"); Kurt Lewin, perhaps the greatest author of 'Field Theory', of leadership styles

and patterns of 'experimentally created classroom climates (1935-1939): Authoritative, Democrative, Laissez-faire, not to mention *Action Research* and the *T-Group*; Elton G. Mayo's 'Search' or 'Hawthorne' effect from the "Illuminated Factory" research at Hawthorne's Western Electric (Chicago) Factory in the years 1933-45, among the first to discover how Relational Climate is crucial for the Performance; H. Gardner, D. Goleman, R. Sternberg, top scholars of *Theory of Multiple Intelligences,* all still active at their Universities of Massachussest (Usa). Giorgio Chiari (1994, 1997, 2014, 2016) and Luca Palmisano (2016) are authors of the concept and of the on-line course *Work Climate Certificate Expert (2013-15) (WCCE).* Climate is the result of various genetic and environmental components: social, affective and cognitive. A wrong environment makes people feel stupid and ineffective, inhibits self-esteem and estimate by others. Climate is a new and different concept, not incidentally born at the beginning of the twentieth century, at the heart of the industrial revolution, where the relational component of human resources begins to emerge in environments with higher industrial development, but also assumed as central concept of school education by pedagogues of the early 20th century (the "Competence Based Learning Model" of Grant et al. (1979); the "Situated Learning" of Lave & Wenger, 1991).

Climate is a concept that gives practical information and response to something you need: Right Environments, Right Behaviors, Humanistic Responsibility, Ecology *(Ecology of Mind,* Bateson G.). Being a good leader can save energy for your own company, your own school, your hospital, office, workgroup. Climate theory allows the definition of a company's energy balance, class, resources: release energy; production is a consequence of these resource optimizations.

The "new man" is born from the theory and technology of the twentieth century in evolved scientific and work environments, which begin to emphasize, alongside the obsession of performance, career and self-affirmation, the world of human relations, interpersonal relationships, of networks, of the team. First of all, therefore, we need to consider the new contributions of the *Climate Theory* (especially those from neurobiology), namely the creation and management of climate of action and relationship, both in the field of work, of education, and in other settings of social communities. At this stage of the evolution of the theory of teaching and, more generally, of communication and transmission of information and knowledge, it is important to provide a training course geared towards the acquisition of the foundations of this theoretical body, a new philosophy full of practical feedback in the world of real life (culture and globalization), called in the European community environments with the term "Learning Culture" that pervades both the environments of education and school education (school culture) and those of enterprise culture.

This training course is necessarily inspired by the fundamental concepts coming from this European matrix, enriched by the many cultural elements and experiences of industrial and post-industrial culture, even those coming from the Far East and the South of the contemporary world, in the light of new developments of the theory of globalization.

Research question and goals

How to improve the climate of working (cognitive and relational) and the motivation to learning (Achievement) of the new students? What are the basic concepts from the Action Learning, what are the Social Skills of the collaborative team oriented towards new Human Relations in the new productive world HT? Which tools are available?

Methodology, tools and sample

Among the new contributions based on *learning–by–doing paradigm,* the on-line training course for the Climate Certified Expert (WCCE) and the related book were born as a multimedia and multimodal tool that allows a multistyle inductive and deductive approach. This Course / Stimulus formulates a general theory of the Work Climate based on the two main strands of studies born in the United States in the 1930s: on the one hand, the Lewinian Studies of Field Theory and Leadership Styles experimentally created, precursors of current models of Cooperative Learning; on the other hand, the researches of Elton G. Mayo's and successors who have also highlighted in the business world the importance of working climate and relations on the job performance.

An important point in this work is the systematic observation and evaluation of the various steps of the training process and the final evaluation of the progress made in acquiring the main components of the training subject. Consistent with what has been presented and mastered by the learners of the "Certified Working Climates" training course, it focuses heavily on the cooperative group work in which you learn and practice skills that recall categories of the type: 'Giving', 'We-ness', 'Accountability'. The five elements of this process are as follows:

1. The relevance of competence and skills relevance of the training process.
2. The importance of the assessment of the working climate.
3. The need for monitoring all steps of the training process.
4. The importance of individual accountability to affirm criteria of merit.
5. The importance, formal, substantial and highly symbolic, to achieve the certificate.

In order to realize these 'pillars' we must aim to build structures based on the group, on the cooperative group. There is no effective and efficient group that does not have a strong investment on "Climate", because group climate is a key point for the very existence of the group, not for any random, extemporaneous group, but for a group based on its particular climate, even more engaging, a highly cooperative group (meaning structured and heterogeneous with roles, rules, controls and social skills) and emotional, empathetic, communicative, encouraging, and responsible/ accountable.

Links between theoretical framework and experimentation

To systematically test the effects of classroom learning interaction on classroom climate - in its various cognitive, metacognitive and socio-affective aspects, to which students' well-being is closely connected to the learning environment, the project provides for a Research Design in which to compare subjects exposed to the Complete Experimental Stimulation (Climate Experiment Course + Peer-Group/Cooperative Learning Method

Course) with subjects not exposed to any aspect of the Stimulation or just to one of them, namely: c. No attendance at the WCCE Course and Traditional Didactics (frontal teacher lecture, study and individual examination) (on-site lower order cognitive work, individual work); d. Subjects who attended the WCCE Climate Experts Course but with traditional didactics; e. Subjects who did not attend Climate Experts Course, but with Active Didactics and Peer-Group/Social Cooperative Learning Methodology (Enriched Didactic).

Analysis and results

The analysis of results (Before/After and Experimental/Control groups) will allow to verify some important hypotheses to define the effectiveness of different training strategies.

The Outline Design of Experiments Methodology (Solomon, 1949; Campbell & Stanley, 1963) is able to analyze effects and results (dependent variables) subjected to measurement and evaluation, in particular, the wellbeing of students/learners, in its various cognitive and socio-affective aspects.

1. First of all, indicators of well-being and quality of life perceived (QL; Quality of Life: Andrews & Withey, 1973; Szalai & Andrews, 1980);
2. Social skills / core skills indicators crucial to the affective, ethical and social aspects of learning (Cresson, 1995);
3. Classical indicators of knowledge, skills, abilities (Ibid. and followers).

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THE EMOTIONAL ASPECTS REGARDING THE PROFESSIONAL DEVELOPMENT OF PHYSICAL EDUCATION TEACHERS IN TRAINING (PETT): METHODOLOGY AND RESULTS

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Introduction

The aim of this study is to understand the professional development of Physical Education Teachers in Training (PETT) confronted with emotional striking events in a class setting. Teaching is a task that involves important emotional aspects (Hargreaves, 1998, 200) and teachers in training are exposed to both positive and negative emotions during teacher education. Reports of high attrition rates among teacher in training suggest that the new teachers need help to develop strategies of coping. Beginners have a limited repertoire of problem-solving strategies (Le Maistre & Paré, 2010). Some authors confirm that the teachers in training's initial contacts with students in school results in a variety of important emotional impacts, which are stronger than during lectures at University (Hascher & Hagenauer, 2016). These initial contacts explain a large part of unforeseen influences (Bullogh, 2009). Many papers emphasize the influence of the subjective nature of teaching according to teacher's comfort or discomfort (Jokikokko, Uitto, Deketelaere & Estrola, 2017). Research has shown that the job entering is characterized as a lonely experience with little support regarding the subjective part of the teaching profession (Le Maistre & Paré, 2010). Exploring how teacher in training cope with emotional striking events could help to better prepare them for the transition into the profession. Some authors used the concept of emotional self-regulation for coping with the emotional implications of teaching for beginning teachers (Richardson et al., 2013). They conclude that teachers entering the profession need to be prepared with skills and strategies to cope with the demands of achieving an emotional balance of the interpersonal work embedded in teaching.

Feelings of helplessness, anger and an awareness of shortcomings are expressed by teachers entering the profession. These emotions are typically coped with by speaking to people in their immediate surroundings or by trying to find a solution (Pillen, Beijaard & den Brok, 2013).

Moreover, Fried (2011) argues that a greater understanding of the role of emotions in the teaching profession could help teachers' training to be well equipped to tackle

the demands of the classroom and achieve the goal of educating students who can take greater control of their lives (p. 8).

For better preparing beginning teachers to the transition into working life, it is crucial to know which event are particularly source of emotion.

A review of the international literature about the emotional aspects of the beginning teacher allows us to identify four areas of questions:

1. What types of emotional striking events are present by the PETT in a class setting during their first year at the University of teacher education?
2. What correlations exist between those emotional striking events and the different types and different intensities of emotions?
3. With whom are those emotional striking events discussed?
4. What effect have those emotional striking events on the PETT?

A mixed research design based on a questionnaire on the one hand and on the clinical activity procedure on the other hand was adopted. In this paper we focus on the first method.

Method

The presented data are taken from questionnaire responses by 98 PETT's at the University of Teacher Education in Lausanne (Switzerland). The students are all physical education specialists. They graduated at the University of Lausanne in Sport Science and they are now learning education at the University of teacher Education. The 98 PETTs have different backgrounds, but most of them made replacements in school and experienced emotional striking events, even before coming to the teacher education university. In the questionnaire they had to describe an emotional striking events they had lived during teaching. The questionnaire took into consideration three main areas of significance: immediate impact of an event (Bournel-Bosson, 2011) as well as the kind of emotions and the degree of the emotions experienced from the event. We inquire also with whom the emotions from striking events are discussed. In order to evaluate this data, the 196 responses were categorized according to the procedures of the Grounded Theory (Strauss & Corbin, 1990). These data were then crossed with verbal material of PETTs collected from the clinical activity procedure regarding a follow up of five PETT's during one year. This verbal data, material of the PETTs, has been taken from self-confrontation interview (SCI) and crossed-confrontation interview (CCI) (Clot & Faïta, 2000) and allows us to define indicators of development according to the methods borrowed from Bruno (2015). The indication about the emotions, their intensity and the persons with whom the events are discussed were treated in a statistical point of view that allows us to answer to the questions of this study.

Results

The evaluation of the data from the questionnaires shows that the emotional striking events are more often linked to the students and their: engagement/disengagement, order/disorder, compliance/conflict, and cooperation/agitation with the PETT. The results

reveal that emotional impacts from negative moments are much more frequent and have greater impact than those related to positive moments (132 negative moments and 54 positive moments). Some emotional striking events begin being negative and then they end in a positive way (9/198). Most often, negative moments are associated with: a) a violation of the rules by the students (44/196), b) conflicts between students (28/196), c) difficulties to manage students with special needs (19/196), and d) injury or physical harm to a student (23/196). The positive moments are most associated with the student's motivation (20/196) and the success of the students (17/196). Events that occur out of the lesson plan and which are a surprise result in the most dominant impacts. Overall, these sensitive and more subjective moments enhance the training of the PETTs, most notably, when they are shared and discussed with others, but not necessarily with professionals (friend, spouse, director, tutor, lecturer). Each emotional striking event impacts (in a positive or negative way) the continuance of education.

Discussion

The developmental process of the PETT takes into account the individual potential to be affected by an event or situation (Bournel-Bosson, 2011) and the emergence of intrapsychic conflicts.

Our hypothesis states that this process is triggered only if the development of the PETT is within an environment of intrapsychic conflicts and the realm of the profession, i.e. « the collective of work » (Vygotski, 1934/1985). Additionally, there is an evidence that the development is possible only with a "scaffolding" during the intrapsychic conflicts with other professionals (Vygotski, 1934/1985).

We suggest that our findings might be considered in teacher education to improve the emotional competencies of prospective teachers. Moreover, teacher training should provide opportunities to deal with emotional striking events and to use them in a positive way in their developmental process. We could for example implement in teacher education the analysis of professional practice through narrative emotional events or use video analysis showing PETT in an emotional situation. Finally, these results challenge traditional teaching methods and, by taking into account the subjective nature of the teaching profession, open up the potential value in alternation of physical education teaching.

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LIFE SATISFACTION, SCHOOL PERFORMANCE AND ACHIEVEMENT MOTIVATION: THE PARTICULAR SITUATION IN SWITZERLAND

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Introduction

Students spend a great deal of their time in school. The attained social and emotional skills as well as the school performance itself has an important impact on the students' future life. Students with high educational attainment have better chances to highly valuated occupations with high income, which is linked to well-being in adulthood (Haveman & Wolfe, 1984; Boarini et al., 2012). Thus, students' grades in school should be in general central to the perception, how their life will look like in future.

Overall comparisons with data from PISA 2015 on country level showed a particular situation in Switzerland according to school performance and life satisfaction. Across countries, students in high-achieving countries tend to report lower life satisfaction than students in low-achieving countries. In contrast, students in Switzerland, along with Netherlands and Finland, gave a high average rating on life satisfaction in combination with a high average performance in science. In addition, students in Switzerland rated their achievement motivation lower than average of OECD countries (OECD, 2017). This contribution explores the meaning of the particular situation in Switzerland regarding life satisfaction, achievement motivation and performance in PISA 2015 data in comparison with selected other countries. Thereby, we focus on the differences in well-being and the dependency of educational attainment between the countries.

Research question and objectives

Life satisfaction is one of the key aspects of subjective well-being, along with affects and eudemonics. Overall life satisfaction condenses the subjectively value of all individually relevant life domains and thus is seen as an overall measure for subjective well-being (Eurostat, 2015).

Life satisfaction and school performance

According to the thesis of organizational psychology, which has frequently been adapted to an educational context, high school performance is linked to high life satisfaction (Crede, Wirthwein, McElvany, & Steinmayr, 2015). However, the pressure on students to succeed academically is rising and the research on academic achievement and life satisfaction becomes more relevant (Crede et al., 2015). The current research shows that, although life satisfaction tends to decline in adolescence, most adolescents rate life satisfaction positive (OECD, 2017; Proctor, Linley, & Maltby, 2009). The relationship between students' school performance and life satisfaction shows conflicting results (Chang et al. 2003). The prediction of life satisfaction through subjective measures of performance is reported consistently. Results of studies with an objective performance measure are less clear (Chang et al. 2003; Crede et al., 2015; Heffner & Antaramian, 2016).

School performance is a key aspect for high educational attainment. In previous research, a strong connection between education and life-satisfaction in adults has been found (Eurostat, 2015). There is some evidence for a direct relationship as well as a mediated relationship by income, health and social trust (Boarini et al., 2012). Switzerland has one of the highest life standards (Bundesamt für Statistik (BFS), 2016) as well as one of the highest ratings of adult life satisfaction in Europe (Eurostat, 2015). Furthermore, in Switzerland the differences of the reported life satisfaction between adults with high and low educational attainment is lower than in most other European countries (Eurostat, 2015). Thus, in Switzerland, even with a low educational attainment one can live a life, one is satisfied with.

School performance and achievement motivation

Students with high levels of achievement motivation, as the belief to have the capability of succeding and give high value to success, are willing to spend energy and time for their goals and regulate behaviour in order to achieve success (OECD, 2017; Wigfield & Cambria, 2010) and thus perform better in school than a student with low levels of achievement motivation. In Wigfield and Eccles' (2000) expectancy-value theory for achievement motivation, the children's goals influence directly their success expectation and subjective task value, which lead to achievement-related choices. Expectancies for success and achievement values were found to be stable predictors of students' performance. This relationship strengthened across age and has been shown to be reciprocal (Wigfield & Cambria, 2010). Furthermore, children with mastery goals were more engaged in learning, used deeper cognitive strategies and showed higher intrinsic learning motivation (Wigfield & Cambria, 2010). Findings on performance goals are less consistent (Wigfield & Cambria, 2010).

Against this background, we researched the question, if there are differences in the connections between life satisfaction, performance and achievement motivation between Switzerland and the neighbouring countries Germany, Austria, France and Italy. Further comparisons were made along with Finland, as one of the top scoring countries in PISA, and USA, as a country which is famous for their achievement motivation. Because of the high life standard and the low differences in life satisfaction between high and low

educational attainments in Switzerland, it is assumed that (1) the correlation between performance and life satisfaction is lower for Switzerland than for the selected countries as well as (2) students in Switzerland show lower achievement motivation than students in the selected countries. It is also assumed that achievement motivation is less important for school performance in Switzerland and thus (3) the correlation between achievement motivation and performance is lower for Switzerland than for the selected countries.

Using an explorative approach, regional differences in Switzerland were examined based on representative samples, as there is some evidence for cultural and societal factors on life satisfaction and achievement motivation (Eurostat, 2015; Huebner, 2004; OECD, 2017; Wigfield & Eccles, 2002). Further research is planned on the differences in life satisfaction and performance of students with high versus low achievement motivation.

Methodology and instruments

In PISA 2015 15-year-old students were tested for performance in science, mathematics and reading. The measures were constructed based on the literacy concept of PISA, which focuses the future value of performance in society.

Life satisfaction was measured by asking students to rate their life on a scale from 0 to 10. 10 means the best possible life and 0 means the worst possible life.

For measuring achievement motivation students were asked how much they agree with five statements about their motivation to achieve. The students' ratings are combined to one index measure of achievement motivation with a mean of 0 and standard deviation of 1 across OECD countries.

First, we run descriptive analysis for the core variables for Switzerland and the different language regions as well as Germany, Austria, France, Italy, Finland and USA. Means were compared for all countries and between the language regions of Switzerland. Second, correlational analysis were conducted between life satisfaction, science performance and achievement motivation and were compared between the countries and the language regions of Switzerland. Further analysis are planned regarding performance in mathematics and reading as well as students with high versus low achievement motivation.

Results

(1) A weak correlation was found between science performance and life satisfaction, but it was significant for Switzerland and all selected countries except USA. France showed a significant higher and USA a significant lower correlation than Switzerland. No other differences of the correlation coefficient were significant.

Thus, the expected lower correlation for Switzerland between science performance and life satisfaction could only be confirmed for France. In contrast, USA showed with a non-significant correlation the lowest relation between science performance and life satisfaction.

(2) Significant differences were found in achievement motivation between Switzerland and all of the selected countries. In comparison with the neighbouring countries, Swit-

zerland showed the lowest average achievement motivation (M=-0.43). Students in Italy reported the highest achievement motivation with a mean of -0.17. Finland showed even a significant lower (M=-0.63) and USA a much higher achievement motivation (M=0.65) than Switzerland.

The expected lower rating on achievement motivation in Switzerland than other countries could be confirmed for all selected countries, except for Finland.

(3) The correlation between achievement motivation and science performance is significant for Switzerland and all selected countries. Significant differences were found in the correlation coefficient from Switzerland for Germany, France, Finland and USA, with all four countries showing higher correlation coefficients than Switzerland. No significant differences from Switzerland were found for Austria and Italy.

The expected lower correlation for Switzerland between achievement motivation and science performance could be confirmed for most countries except Austria and Italy.

The regional comparisons in Switzerland showed correlational differences between the German and French speaking part of Switzerland. For the French speaking part, the correlation between life satisfaction and science performance was higher than for the German speaking part. Whereas, the correlation between achievement motivation and science performance was higher for German speaking part. The differences between the ratings on achievement motivation were significant for all three regions, with the lowest rating in the German speaking part and the highest rating in the Italian speaking part. The Italian speaking part reaches with a mean index rating of -0.17 the same level as Italy.

Discussion

For Switzerland a high life standard and low differences in life satisfaction in adults for high and low educational attainments were reported. With life satisfaction as a key aspect of well-being and high life standard as an important factor of well-being, the prospect of adolescents on a well-lived life seems to be high and less dependent of the educational attainment in Switzerland. On this basis, we expected a lower connection of science performance and life satisfaction for PISA 2015 data of 15-year old students in Switzerland. But most of the neighbouring countries, except for France, show similar correlation values between performance and life satisfaction. USA as a country, in which the prospect of well-being seems highly connected with school performance, showed even a lower (near zero) correlation than Switzerland. So, if the prospect of well-being in an adult's life is dependent or not on educational attainment, does not seem to have an influence on the connection between school performance and life satisfaction of adolescents. Missing effects could be due to the measurement issues as the objective measure of performance and the literacy concept of the performance measure. More insight could bring the distinction of intrinsic and different levels of extrinsic goals and their influence on life satisfaction (Deci and Ryan, 2000). The results and measures will be discussed against this background.

For countries, where adult well-being is more connected with educational attainment than in Switzerland, higher ratings in achievement motivation were expected. Through

achievement motivation one can take influence on one's own educational attainment and thus take influence on one's own well-being as an adult. In Switzerland we found less achievement motivation than in all neighbouring countries and USA. In USA there was found, as expected, a much higher rating on achievement motivation than the selected European countries. Also the connection between achievement motivation and performance was less strong for Switzerland than in most of the selected countries, but Austria and Italy. So students in Switzerland do not need to have high achievement motivation, if they want to have a well life prospect, and their performance is less dependent of their achievement motivation.

Most regional differences in Switzerland tend to follow the findings of the neighbouring countries with the same spoken language. For the connection of life satisfaction and performance only France showed a significant higher correlation than Switzerland. Similar, differences in this correlation were found only between the French and the German speaking part of Switzerland. Accordingly, the rating for achievement motivation in the Italian speaking part of Switzerland were as high as the rating in Italy. The rating in the French speaking part is comparable with the rating in France. But students in the German speaking part rated much less on achievement motivation than students in Germany or Austria. According to the cultural differences in Switzerland, it is not surprising that the different language regions show the same tendencies than their neighbouring countries where the same language is spoken. Another explanation could be based on the translations of the items. Another exception on regional basis was found for the correlation between achievement motivation and performance, which was higher for the German speaking part than for the French speaking part of Switzerland. These findings do not fit in the results of the country comparisons. Further research and analysis have to be done to get more insight into the nature of this regional differences.

The results will be further discussed in view of the integration of the model of Deci and Ryan (2000) to intrinsic and the variations of extrinsic motivation. The cultural values of achievement motivation, academic performance and life satisfaction will be reflected and context variables, which are important to explain the connection of the three constructs, will be considered.

We provide a contribution to the understanding of the relationship between life satisfaction, objective measures of performance and achievement motivation in countries with different conditions for prospect of well-being in adulthood. It takes into focus, that objective measures of performance are just one part of the desired outcome. More intrinsic motivation as well as life satisfaction are central aspects for a productive mastery of life, which should be considered in research and political discussions (Kirkcaldy et al., 2004; Deci & Ryan, 2000).

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EMOTIONAL COMPETENCES AND WELL-BEING: WHICH FACETS OF EMOTIONAL AWARENESS ARE LINKED TO VARIOUS FORMS OF ANXIETY IN 10-13 YEARS OLD CHILDREN?

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Emotions characterize most part of our daily lives. How individuals experience and deal with their emotions can be considered a key factor for various aspects of our mental health and well-being. More precisely, increased emotional competence (i.e., the ability to identify, understand, express, and regulate one's own emotions and those of others) has been related to several positive outcomes such as higher happiness and positive affectivity, lower negative affectivity, better health, better social relationships, better job performance (e.g., Brasseur, Grégoire, Bourdu, & Mikolajczak, 2013).

Emotional awareness – a core element of emotional competence in children – refers to "individual differences in the way people differentiate, express, analyze, and pay attention to their own and others' emotions" (Lahaye et al., 2011, p. 418). Emotional awareness has been linked to children's physical health (e.g., somatic complaints) and social well-being (e.g., social adjustment) (Rieffe et al., 2007; Villanueva, Górriz, Prado-Gascó, & González, 2014). Moreover, a recent meta-analytic review showed that higher emotional awareness was significantly correlated (medium effect size) with less depressive and anxiety symptoms in youth aged 8-19 years (Sendzik, Schäfer, Samson, Naumann, & Tuschen-Caffier, 2017).

Interestingly, most of the studies addressing emotional awareness and anxiety, did not take into account that both concepts can be considered as multi-facetted phenomena. Therefore, the goal of this study was to examine the associations between different facets of emotional awareness, for example, differentiating emotions or bodily awareness of emotions, and anxiety, for example, test anxiety or social anxiety.

Method

Students (N = 158, aged 10-13 years, M age = 11.4 years, SD = 0.68, 46.8% female) were recruited in eight classes of six primary schools in the French part of Switzerland. As first, the author introduced the research to school directors and parents who gave

their consent to complete several questionnaires at the end of the school year, as well as to give the permission that the teachers report about their children's school grades.

Emotion awareness measure

The French version of the Emotion Awareness Questionnaire revised (EAQ-30) (Lahaye et al., 2011) was used, originally developed by Rieffe, Oosterveld, Miers, Meerum Terwogt, and Ly (2008). The questionnaire uses a three-point Likert-type response scale of 30 items yielding the six facets of emotional awareness in youth between 9 and 16 years. 1) "Verbal sharing of emotions" refers to the communication of one's own emotions and can be done in an unemotional way (e.g., "I find it hard to talk to anyone about how I feel"; reversed item); 2) "Not hiding emotions" refers to the blunt expression of one's own emotions (often nonverbal) and was formerly named Acting Out (e.g., "When I am upset about something, I often keep it to myself; reversed item); 3) "Differentiating emotions" refers to the ability to differentiate between one's own various emotions and locate their causes or antecedents (e.g., "When I am upset, I don't know if I am sad, scared, or angry"; reversed item); 4) "Bodily awareness of emotions" (or awareness that emotions are accompanied by bodily symptoms) refers to attention to the physiological aspects of the emotion experience or bodily symptoms of an emotional arousal (e.g., "When I feel upset, I can also feel it in my body"); 5) "Attending to others' emotions" refers to the willingness to face others' emotions (e.g., "It is important to know how my friends are feeling"); 6) "Analyses of emotions" refers to the willingness to face one's own emotions (e.g., "It is important to understand how I am feeling"). Internal consistency (Cronbachs' α) of the six scales in the present sample varied between .63 and .71. For each dimension, a higher score indicates a higher presence of the corresponding ability on emotional awareness (note that contrary, in Rieffe et al. [2008] a higher score on Bodily Awareness implied lower attention to bodily symptoms).

Measures on anxiety

The French version (Turgeon, Chartrand, Robaey, & Gauthier, 2006) of the Multidimensional Anxiety Scale for Children was used (MASC, March, Parker, Sullivan, Stallings, & Conners, 1997). A four-point Likert-type response scale of 39 items yielded a total score as well as four subscale scores of anxiety (Physical symptoms, Social anxiety, Separation anxiety and Harm avoidance; Cronbach's α between .63 and .82).

The French version (Brandibas, Jeunier, Gaspard, & Fouraste, 2001) of the School Refusal Assessment Scale (SRAS, Kearney & Silverman, 1993) uses a seven-point Likert-type response scale of 16 items yielding four scale scores related to "school phobia" (Avoidance of negative affectivity, Escape from aversive social situations, Attention getting behavior, Positive tangible reinforcement; Cronbach's α between .44 and .78).

The Test Anxiety Scale (TAS, Gomez & Gay, 2017) uses a five-point Likert-type response scale of nine items yielding three scale scores related to anxiety facing examinations (worry, cognitive impairments and somatic symptoms with Cronbach's α between .56 and .76).

For each measure, a higher score represents a higher level of anxiety.

Measure on School Performance

In addition, after the completion of the questionnaires, teachers filled out the final average grade of each pupil's first group (mean composed of grades in French and Mathematics).

Analyses and results

Multiple regression analyses (listwise deletion) with age, gender, final grade and the six dimensions of the EAQ as independent variables revealed the following significant results, each presented by order of magnitude of the standardized beta (β):

- Differentiating emotions predicted Cognitive impairment (TAS) ($\beta = -.403$; p. < .001), Attention getting behavior (SRAS) ($\beta = -.258$; p. < .05), Somatic symptoms (TAS) ($\beta = -.251$; p. < .05), Physical symptoms (MASC) ($\beta = -.224$; p. < .05), and Avoidance of negative affectivity (SRAS) ($\beta = -.212$; p. < .05);
- Verbal sharing of emotions predicted Social anxiety (MASC) ($\beta = -.386$; p. < .001), MASC total score ($\beta = -.374$; p. < .01), Escape from aversive social situations (SRAS) ($\beta = -.338$; p. < .01), Harm avoidance (MASC) ($\beta = -.294$; p. < .05), Separation anxiety (MASC) ($\beta = -.220$; p. < .05), and Physical symptoms (MASC) ($\beta = -.219$; p. < .05);
- Bodily awareness of emotions predicted Separation anxiety (MASC) ($\beta = .287$; p. < .01), Physical symptoms (MASC) ($\beta = .282$; p. < .01), Somatic symptoms (TAS) ($\beta = .276$; p. < .01), MASC total score ($\beta = .249$; p. < .05), Avoidance of negative affectivity (SRAS) ($\beta = .223$; p. < .05);
- Gender predicted Separation anxiety (MASC) ($\beta = -.301$; p. < .01) and Social anxiety (MASC) ($\beta = -.235$; p. < .05), indicating higher anxiety for girls;
- Age predicted Somatic symptoms (TAS) ($\beta = .233$; p. < .05) and Cognitive impairment (TAS) ($\beta = -.165$; p. < .05);
- Grades predicted Cognitive impairment (TAS) ($\beta = -.477$; p. < .001).

Discussion

Except that we found no significant relation between Not hiding emotions and the various facets of anxiety, the present study replicated previous results (e.g., Rieffe et al., 2008) with some extensions. Our results indicated that Verbal sharing of emotions seems one of the key emotional competences that is linked to lower levels of multiple symptoms related to anxiety: in the multiple regression analyses, this subscale of the EAQ predicted all facets of the MASC as well as avoidance of aversive situations related to school (Harm avoidance of the SRAS). This highlights the importance of expressing emotions and suggests that supporting children to learn how to share their emotions may lead to lower levels of many anxiety symptoms.

However, Verbal sharing may be not the best way to face test anxiety. Our results rather indicated that Differentiating emotions was linked to lower levels of test anxiety as well as to lower levels of some manifestations of school refusal. This may suggest that increasing the ability to differentiate emotions may lower test anxiety. This may lead to less cognitive impairment due to stress during examinations, which may in turn improve student's grades. It seems thus important to train students to differentiate between their various emotions and locate their antecedents, particularly in children showing poor grades and test anxiety. In this vein, even short emotion understanding training may be efficient (Sprung, Münch, Harris, Ebesutani, & Hofmann, 2015).

Finally, the present results indicated that the increased Bodily awareness of emotions was linked to physical symptoms in general (MASC) and in test situations (TAS), as well as to Separation anxiety (MASC) and Avoidance of negative affect (SRAS). In other words, greater attention to bodily symptoms is related to increased anxiety. As proposed by Rieffe et al. (2008), "the focus should be on the elements in the situation that caused the emotion (Differentiating emotions) instead of on physical signals in order to deal with an emotion evoking situation adaptively" and "bodily symptoms of the emotion experience will vanish once the emotion is dealt with adequately" (p.760). In this context, mindfulness based interventions (Zoogman, Goldberg, Hoyt, & Miller, 2015) may also be of particular interest in order to improve adaptive emotional awareness.

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LEARNERS' ACADEMIC MOTIVATION, ASSERTIVENESS AND CAREER EXPECTATIONS IN THE TRANSITION FROM COLLEGE TO ENTREPRENEURSHIP. THE HOUSE OF BRAINS - HOB PROJECT

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Introduction

Research has demonstrated that cultivating a growth mindset, the conception that human traits are malleable and changeable (Mercer & Ryan, 2010), boosts motivation, resilience, self -efficacy and self -esteem, and ultimately leads to higher academic achievement (Dweck, 2010; Zimmerman, 2000). There is growing evidence that the ability to identify, understand, use and regulate emotions is strongly linked with retention and academic achievement of students, including those transitioning into workplace settings (Parker et al., 2004). Further, contemporary research on this topic advocates for "addressing academic gaps with psychological interventions" (Yeager et al., 2013, p. 62). Although the literature suggests that motivation and self-concepts are related to one another, few studies have simultaneously examined the effects of these factors on academic achievement and career expectations. Although the relationship between self-concept and academic achievement is well established in the research literature, there is little agreement about the causal ordering of these constructs. The self-enhancement model postulates that self-concept variables are primarily causes of academic achievement whereas the Skill development model implies that academic self-concept emerges principally as a consequence of academic achievement (Calsyn & Kenny, 1977). A compromise between the skill development and self-enhancement controversy is the reciprocal effects model, which implies that self-concept and academic achievement are reciprocally related and mutually reinforcing (Guay et al., 2003). Implicit within the assumptions of self-concept research are its motivational properties (Craven & Marsh, 2004; Dőrnyei, 2000). According to the OECD (2003, p.9), motivation and self-concept are "closely tied to students' economic success and long-term health and wellbeing". To date, however, few studies endeavor to unify the numerous competing motivational constructs (Green et al., 2006). Self-efficacy, in particular, can explain certain career entry behaviors, such as college major choices and academic performance, though there is little work relating self-efficacy to career devel-

opment beyond college or exploring causal connections between self-efficacy and career behaviors. Moreover, the attractiveness of potential job opportunities can be examined though the evaluation of the importance of job attributes (Oh et al., 2016).

Research question and objectives

This paper presents some preliminary results from a European funded project, House of Brains-HoB), aimed at developing entrepreneurial competencies in college students and at facilitating their employability and transition to the workplace throughout a newly developed online training platform. For college students, finding employment is an important life transition. On the Hob platform, learners were accompanied in their transition from college to entrepreneurship by developing autonomy in learning, intrinsic motivation as well as specific entrepreneurial competencies. In this paper we are specifically concern with the relationship between motivation, assertiveness and career expectations in a sample of 42 learners participating in the HoB project.

Hypotheses

Based on the literature reviewed we hypothesized a multilevel model of positive academic development which recognizes academic motivation and assertiveness as predictive of career expectations and pReferences. Motivation-based models of assertiveness and competitiveness, suggests that individuals may possess the same social values, variously identified as pReferences, concerns, priorities, and orientations, but show dramatically different assertiveness due to different assumptions about behavioral consequences. (Ames, 2008). Bandura et al. (2001) found perceived efficacy rather than actual academic achievement to be the key determinant of perceived occupational self-efficacy and preferred choice of work life.

H1: Learners with high levels of academic autonomy (intrinsic motivation) will evidence higher levels of assertiveness that those showing the lowest level of autonomy (amotivation)

H2: High level of assertiveness will be related to career expectations and pReferences valuing autonomy and freedom, including entrepreneurship.

Methodology and methods

Participants were 42 European learners with at least a college degree (Mage=28.83, SD=8.8; 57% female) participating (voluntary) at the first two free pilots of the online Hob training (www.hobplatform.org). The self-report questionnaires were administered online anonymously as part of the Hob Assessment module.

Measures

Academic motivation
Based on Self-Determination Theory, different types of motivation are investigated using the AMS-28 scale (Vallerand et al., 1993) according to goal internalization: intrin-

sic, identified, introjected, and external regulation. Both intrinsically motivated and well-internalized activities are said to be autonomously regulated, whereas activities that have been partially internalized or not internalized at all are said to be regulated by controlled motives. In addition, Amotivation refers to the absence of motivation, a complete lack of volition with respect to the target behavior, with no perception of contingences between outcomes and own actions, accompanied by feelings of incompetence and expectancies of uncontrollability (Ntoumanis, 2005; Vallerand et al., 1992). The scale on Hob data yielded an excellent reliability for the overall scale (α=.93) and the dimensions intrinsic motivation (α=.88), extrinsic motivation (α=.89), but only acceptable for the three subscales of each dimension: Knowledge α=.70, accomplishment α=.72, stimulation α=.64, for intrinsic motivation; Identified α=.82, Introjected α=.75 and regulation α=.71 for extrinsic motivation.

Career expectations and preferences
The scale (adapted from Pemberton, 1995) includes 8 different themes: Competition, Freedom, Management, Life Balance, Organization Membership, Expertise, Learning, Entrepreneurship. All subscales yielded on Hob data a reliability ranging from acceptable (.56) to good (.80).

Interpersonal attitude
The assertiveness scale (adaped from Chalvin, 1981) comprises four attitudes, Passive (α=.66), Aggressive (α=.60), Manipulative (.37), Assertive (.65). Assertiveness, in particular, is an important social skill which promotes personal well-being. Most definitions of assertiveness emphasize direct expression of feelings, desires and thoughts in interpersonal contexts, while others place emphasis on individual rights. (Parray & Kumar, 2016). Low levels of assertiveness have been found associated with anxiety, depression and psychosomatic complains (Thompson, 2011)

Analyses and results

Sample
- 42 multicultural students
- from 4 Countries (Spain, Italy Slovenia, and Germany; partner in the European funded HoB project)
- 65% fluently spoke English
- 63% college degree
- 37% at least two years of college work
- full time students (50%)
  – working experience
- working part-time (13%) or full time (10%)
- entrepreneurs (10%) and self-employed (7.9%)
- 34% had no previous experience
- 24% 1-2 years

-   11% 2-5 years
-   16% 5-10 years
-   16% more than 10 years;
– age range:
    -   20-24 (46%)
    -   26-33 (35%)
    -   34-39 (6%)
    -   40 years older or more (13%);
– field of study:
    -   Business (32%)
    -   Social Sciences and Humanities (20%),
    -   as well as Mathematics, Statistics, Architecture, Computer Science, Agronomy;
– performance:
    -   50% is B students
    -   42% at the C level
    -   7.9% were high achievers (A students).

In terms of academic motivation, majority of students in our sample were intrinsically (55%, M=29.88, SD=10) motivated, thus most self-determined and autonomous, either by a need for knowledge (M=12.07, SD=3.8), for accomplishment (M=9.29, SD=3.7) or need for stimulation (M=8.53, SD=3.9). Those who were extrinsically motivated (33%. M=27.98, SD=10), either by identified regulation (M=10.93, SD=4.2), introjected regulation (M=7.95, SD=38) or external regulation (M=9.10, SD=3.8) were least self-determined and controlled. 12% of students showed balance between intrinsic and extrinsic motivation.

Learners on the Hob platforms were, on average, Assertive (M=12.53, SD=2.25) rather than Passive (M=7.03, SD=2.7) or Aggressive (M=7.3, SD=2.5).

Correlations

Extrinsic motivation negatively correlated with work-status (r=-.362,p <0.01) indicating that external regulation and low level of autonomy are related to low level of employment status (i.e. students, and part-time workers). A-motivation, lack of control and autonomy, were significantly negatively correlated with a career expectation and preference toward membership (r=-.444,p<0.01) and positively correlated with competition (r=.716, p<0.05), meaning that those scoring higher in lack of motivation, do not feel the need to strongly identify with organizational goals and values nor to fit into their organization, whereas whose who need success and recognition do. Interestingly, manipulative attitude significantly and positively correlated with a career expectation and preference toward competition (r=.565, p<0.05), indicating not only a higher need for success, recognition and achievement among those who are manipulative, but also the risk of dissatisfaction and frustration when achievement are not properly recognized, and Learning (r=.365, p<0.01) and Entrepreneurship (r=.641, p=<0.05). Competition

was, as expectable, also found positively related to Management (r=.467, p<0.05), where those considering rewards, position, title and status important are those who also need recognition of their achievement, success indicators and a competing working context. Moreover, Competition was found significantly and positively correlated with a career expectation and preference toward Expertise (r=.533, p<0.05), where the need for success is closely accompanied by the need to have the opportunity to specialize, develop an expertise and become more self-confident about personal values, as well as Learning (r=.613, p<0.05) and Entrepreneurship (r=.396, p<0.01).

An Aggressive attitude was found to significantly and positively correlate with a career expectation and preference toward management (r=.485, p<0.05), Learning (r=.452, p<0.05), Entrepreneurship (r=.396, p<0.01) and the career expectation and preference toward life balance (r=.380, p<0.01), the right balance between work and non-work life and flexible working conditions. Life balance as expectable was positively and significantly correlated with a career expectation and preference toward Freedom (r=.653, p<0.05), that is considerable work autonomy and an evaluation based on ultimate achievements. Entrepreneurship as well was positively and significantly correlated with Freedom (r=526, p<0.05). Assertiveness was also positively and significantly correlated with Entrepreneurship (r=.383, p<0.01). Passive and Assertive attitude were significantly negatively correlated with each other (r=-.354, p<0.01), confirming that the two constructs are opposite ends of the same continuous.

Work-status, as it could be expected, correlated significantly and positively with work-experience (r=.441, p<0.05), where workers with more experience hold full time position, are self-employed or entrepreneurs. The length of the participants' working experience (ranging from entry, 1-2 years, to senior 10+ years) also positively correlated with a career expectation and preference toward Learning (r=.416, p<0.01), indicating that the more work experienced participants thrive on being challenged and on learning new skills and acquire new expertise and need constant new learning opportunities. Moreover, work experience also positively correlated with an entrepreneurship (r=.373, p<0.01) expectation and preference. Experienced and senior workers, probable because they possess self-conviction, self-determination and self-control, seem more interested in self-employment and risk-taking.

Anova

A one-way Anova showed that Assertiveness is predictive of a career orientation and preference toward Entrepreneurship (F(1,30)=5.15, p=.031) as well as Aggressiveness (F(1,30)=3.89,p=.000).

Discussion

Findings has evidenced that academic motivation did not correlate with any of the career expectations and pReferences nor with measure of academic performance (GPA, year of graduation, scholarship). Rather, both interpersonal attitudes Aggression and Assertiveness were predictive of an Entrepreneurship mindset. Previous studies have

found assertiveness as a determinant of entrepreneurial intention (Bird & Jelinek, 1988), linked to "masculine" values such as competition and proactiveness (Branestatter, 2011).

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IMPOSTORISM AND PARENTAL CONDITIONAL SUPPORT: A LONGITUDINAL STUDY

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Introduction

Impostorism is defined as the feeling that the perception that others have of one's abilities and capabilities is exaggerated. The feeling of fooling others persists despite accomplishments, and any success that could be considered evidence of competence is attributed to external causes (Clance & Imes, 1978). It is hypothesized that the person struggling with impostorism lives in constant fear of being exposed (Langford & Clance, 1993). There is a consensus among researchers that impostorism is detrimental to psychological well-being (Clance & Imes, 1978; Harvey & Katz, 1985). Moreover, the phenomenon has been negatively associated with self-esteem, and positively associated with anxiety, frustration and perfectionism (Cozzarelli & Major, 1990; Langford & Clance, 1993; Peteet, Brown, Lige, & Lanaway, 2015; Topping & Kimmel, 1985; Thompson, Foreman, & Martin, 2000).

Many authors have suggested that parental support might be linked to the development of impostorism (Clance, 1985; Clance et al., 1995; Grays, 1992; Harvey & Katz, 1985; Kolligian, 1990; Langford & Clance, 1993). Perceiving a fragility in parents' support could lead to excessive hard work to meet their expectations. Children may think they need to be perfect in order to maintain this support. This dynamic is similar to the notion of conditional parental support, which is defined as the feeling that children may have that they are not loved for who they are, but for their capacity to satisfy parental expectations (Harter, 1992). Judging that they do not conform to these standards could lead such children to reject parts of themselves that are not valued or to adopt inauthentic attitudes and behaviors to gain parental approval (Harter, Marold, Whitesell, & Cobbs, 1996). Children who feel that their parents' support is contingent on their achievements often set higher standards for themselves (Raufelder et al., 2015). While putting a lot of effort in trying to meet those standards, they may be lead to believe that their parents perceive them as more competent than they really are. In turn, the support they get when they successfully meet those ambitious goals may further enhance the feeling that their

parents put more value on their success than on who they are. The conditional nature of this type of support has a negative impact on children's well-being, including a lower and less stable self-esteem, a negative bias on their self-evaluation of competence, and depressive symptoms (Côté & Bouffard, 2011; Harter & Marold, 1994).

Even though the feeling of inauthenticity brought on by conditional parental support is also characteristic of people struggling with impostorism, no empirical study to date has examined its role in the development of impostorism. Also, the lack of prospective studies makes it difficult to draw any firm conclusion about the directionality of the relationship between the presence of impostorism and conditional parental support. Finally, we know very little about the stability of impostorism over time and whether its consequences are influenced by its duration.

Research questions, objectives and hypothesis

This study examines the link between the development of impostorism and the perception of conditional parental support over a period of five consecutive years among typically developing students. The study examines the stability of impostorism and conditional parental support over time as well as the link between those variables for each year. Based on the literature, we hypothesized the presence of a transactional relationship between impostorism and conditional parental support where each variable influences the presence of the other the following year. The child's sex, as well as the mother's and the father's level of education and family income were used as covariables in the present study.

Methodology and methods

Participants

The 540 participating students (274 boys) were involved in a broader longitudinal project on the development of perceived competence. They were asked about their impostorism and their perception of conditional parental support over a period of five years, from Grade 5 to 10 (years 2 to 6 of the study), and information regarding sex and the father's education was obtained one year earlier (year 1 of the study). The students completed the questionnaires in their respective classroom during school hours.

Instruments

All items were rated on a Likert-type scale ranging from 1 ("not at all") to 4 ("entirely"), measuring the extent to which the students deemed themselves to be similar to the fictitious student described in each. For each variable, a higher mean score indicates a higher degree of its presence.

Impostorism was assessed using the Impostor Feelings Questionnaire for Children and Adolescents (Bouffard, Chayer, et al., 2011), which includes eight items on how the students feel with regard to what others think of their intelligence. A sample item is: "When other people tell this student that he is smart or that he is good at school, he

feels like he is fooling them." Internal consistency across the four years was satisfactory (α ranged from .83 to .87).

Perception of conditional parental support was assessed using five items from the parental support subscale of Harter's Social Support Scale for Children and Adolescents (1985). A sample item is: "This child feels that his parents love him less when he doesn't do as well as expected". Internal consistency across the five years was again satisfactory (α ranged from .78 to .86).

Analyses and results

All analyses were conducted in Mplus v.8 (Muthen & Muthen, Los Angeles, CA) which handles missing data through the Full Information Maximum Likelihood (FIML) method.

A model that included the child's sex, the mother's and father's education and family income was first tested. For parsimony's sake, in the new model we removed the mother's education and family income, path coefficients that did not reach significance. This allowed us to include 23 more participants for the analysis.

Model fit

We tested a model that assessed stability over time of both impostorism and conditional parental support, as well as their yearly concurrent associations and reciprocal associations. Since cross-time links from impostorism to parental conditional support were non-significant (but for year-2 to year-3, ß = .09, p = .05), we tested an alternate model keeping only prospective associations from conditional parental support to impostorism. The fit indices of this model show that it fits the data better than the preceding model ($\chi 2$ = (34, 1.10) = 26.05, p = 0.84, comparative fit index (CFI) = 1.00, Tucker-Lewis index (TLI) = 1.01, root mean square error of approximation (RMSEA) = 0.000 (0.000-0.019), standardized root mean square residual (SRMR) = .026).

Description of significant paths

Control variables: Initial levels of conditional parental support can be predicted by sex and the father's education. Being a boy (ß = .11, p < .001) and having a father with fewer years of schooling (ß = .04, p < .05) both predict higher conditional parental support.

Associations between concurrent measures: Positive correlations were found between the two main variables at every time of measure (r from .36 to .52, all with p < .001).

Stability: Regression analysis shows that the level of impostorism for each time of measure predicts the level of impostorism for the following year (ß from .22 to .38, all p < .001). Similar associations were found for conditional parental support (ß from .37 to .57, all p < .001). For both variables, regression analysis also reveals other predictive associations between earlier and later times of measure that did not immediately follow each other.

Cross-Lagged associations: From year to year, significant cross-time links were found from perceived conditional parental support to impostorism, except between year-2 and year-3, where the relation failed to reach the conventional significance level by a thin margin. The standardized regression coefficients are as follows: ß = .13, p = .05 from year-2 to year-3; ß = .08, p = .08 from year-3 to year-4; ß = .14, p < .01 from year-4 to year-5; ß = .15, p < .001 from year-5 to year-6.

Discussion

To our knowledge, this study is the first that directly assessed the association between impostorism and conditional parental support. Both impostorism and conditional parental support show relative stability over time. The magnitude of the association of each construct with itself from one measurement to the next, indicates that experiencing those phenomena may be momentary for some people, but somewhat persistent for others.

Consistent with the literature, concurrent measures of impostorism and conditional parental support are co-occurring in children. This suggests that the feeling of inauthenticity that follows conditional support and that defines in part the concept of impostorism may well be the key to understanding the relationship between those constructs.

In accordance with our hypothesis, perceiving conditional parental support systematically predicts later impostorism. However, contrary to our expectation, the reverse relation was not observed, leading to the conclusion that feelings of impostorism do not affect whether or not parental support is sensed as conditional. This suggests that if perceiving conditional parental support and impostorism are mutually reinforcing during early development, this dynamic changes over time. For youths, the perception that the love of the people most significant to them depends on their accomplishments instead of their personal qualities might be particularly detrimental at an age where defining one's identity and personal values are of central importance. Future studies should investigate the mechanisms through which conditional parental support acts on the development of impostorism.

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THE DOCTORAL EXPERIENCE UNDER THE LIGHT OF EMOTIONS

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Introduction

The dropout rate of PhD students varies in Europe between 30% and 60% according to the discipline (Bourdages, 2001; McAlpine & Norton, 2006). Moreover, one third of the students are in a state of or may develop psychological distress or psychological disorders such as depression (Levecque, Anseel, De Beuckelaer, Van der Heyden, & Gisle, 2017). How to explain these figures? Mainly, what further the doctoral journey, and enable PhD students to become healthy knowledgeable and skilled research professionals?

Most of the studies on persistence at the doctoral level have attempted to establish relationships between different individual or situational factors or variables (e.g. age, motivations, supervision, discipline, financial resources, occupancy rate). The main problem is that these mainly quantitative studies do not consider the earlier experiences of the PhD students, their context, examine the factors singly and/or relate to retrospective data only. Furthermore, several studies yield to contradictory or insignificant results.

Few studies have attempted to understand how PhD students perceive themselves and their environment, what they need to persist and to maintain sufficient energy and well-being to develop, progress and accomplish doctoral studies.

Theoretical frame

Emotions "serve the functions of preparing and sustaining reactions to important events and states by providing motivational and physiological energy, by focusing attention and modulating thinking, and by triggering action-related wishes and intentions" (Pekrun, Goetz, Titz, & Perry, 2002, 96).

Emotional episode explored in the light of the stimulus evaluation checks (SECs) of the Component Process Model (CPM; Scherer, 2001) reveals the appraisal that individuals make of significant events considering their needs and goals, their ability to cope and the compatibility of their actions with social norms and personal ideals.

Emotions are a meaningful source of information (Ryan & Deci, 2017) and build up our gateway to understand the needs and decisive motives underpinning the doctoral journey of the students. To explore these aspects, we rely on the mini-theories of the Self-Determination Theory (Deci & Ryan, 2000). The mini-theory of basic psychological needs suggests three needs (autonomy, competence and relatedness) that "are specifiable psychological and social nutrients which, when satisfied within the interpersonal and cultural contexts of an individual's development, facilitate growth, integrity, and well-being. Conversely, when these psychological satisfactions are frustrated or thwarted, there are serious psychological harms (Deci & Rçyan, 2000; Ryan, 1995)" (Ryan & Deci, 2017, p. 82). The social context, including among others the supervisor, they need supportive (involvement, structure/guidance, autonomy) or need-thwarting (rejection, chaos, control) elements affect strongly motivation, learning, psychological adjustment and vitality of the students (Ryan & Deci, 2017).

This integrative approach constitutes a powerful path to understanding fluctuations in the engagement and the well-being of doctoral students.

Research question and objectives

What are the subjective emotional experiences of doctoral students occurring within their activities and what are their triggers?
1. What are the individual and situational characteristics of emotional deployment during significant events directly or indirectly related to the doctoral journey?
2. What patterns of emotions appear?

In the first stage of the research, the objective is to describe the nature and the triggers of the most elicited emotions felt by doctoral students in ecological situation.

Methodology and methods

Academic emotions are investigated in context with a person-centred approach using a mixed method research design. 26 voluntary PhD students, registered at the University of Fribourg, participate in three self-observation weeks distributed between October 16 and January 17. The participants are 20 women and 5 men whose age varies between 25 and 59 (m = 32); 58% work as assistant, and 39% take part in a research project. All fields of study are represented except Medicine and Pharmacy (69% study SSH).

The doctoral students reported significant events of daily PhD life when they occur by describing and assessing their subjective feelings (free response format), the triggering situation and its consequences in an online adapted version of the Geneva Appraisal Questionnaire (GAQ; Scherer, 2001). In addition to the formal and structural events of the doctoral program (e.g. submissions, presentations, defence), the method aimed to collect significant non-formal everyday situations. A baseline questionnaire, preliminary and follow-up interviews complement the data collection to a better understanding of the doctoral journey's motivational and contextual aspects.

The results arise from primary qualitative content analysis of the event-sampling data collection. The free responses are coded using the Geneva Affect Label Code which al-

lows to "recognize 36 affective categories commonly distinguished by words in natural languages and parses text data bases for these terms and their synonyms" (Scherer, 2005, 713). The triggers are categorized using descriptors of emotional focus (initially based on Pekrun & Linnenbrink-Garcia, 2014). In addition, the temporality of emotions (concomitant to event or anticipatory) and the event-related activity was categorized.

Each event has been quantitatively and qualitatively synthesized and an overall view of them in the form of a journey plot has been done. These documents were discussed with each participant (intersubjective validation).

Results

The corpus of data consists of 256 events in which were found 36 emotions, 10 trigger categories, and 16 activity types. 81% of emotional patterns include 2 to 10 emotions, the most frequent pattern comprising 2 emotions (32%).

40% of the event involve unpleasant (or negative) emotional patterns, 31% are pleasant (or positive) and 29% are ambivalent.

Four triggers emerge particularly from the analyses: social interactions (including supervisor), the self (motives, beliefs, role, etc.), achievement & outcome (doing an activity, get or anticipate an outcome, sense of progress), and the time management.

Event with unpleasant emotional patterns:

– Stress, anxiety, frustration, fear, despair (helplessness), envy (as need for action) and culpability are the most occurring emotions of unpleasant patterns.
– Time management, sharing of resources between different spheres of life (professional, personal, social) and unfulfilled expectations towards supervisor (guidance, involvement and autonomy) are the main triggers of emotion.
– 68% of the event are considered as an impediment to the achievement of the PhD and/or the own needs, 19% are facilitators (which involve mostly stress, anxiety and/or fear).
– 85% of the event had a negative impact on well-being.

Event with pleasant emotional patterns:

– Content, relief, hope, interest, joy and pride are the most occurring emotions of pleasant patterns.
– Two main categories of emotions emerge: accomplishment and approach emotions, which foster creativity, curiosity, learning, persistence and openness to others.
– Success and sense of progress in individual activities directly linked to the doctorate are the main triggers of emotions (e.g. writing, data collection), then the interaction with the supervisor (quality of the guidance and involvement).
– 91% of the event are considered as facilitating the achievement of the PhD (what remains is neutral).
– 87% of the event had a positive impact of well-being.

The ambivalent events are at the crossroads between those patterns. Their specificity concerns their triggers: the relation with the academic community and the personal network. If PhD students see formal and non-formal contacts as interesting and providers of progress (e.g. through feedback obtained, affective support), they are

sources of stress and anticipated anxiety, fear (recognition of research topics, skills, and work done; integration into the group; comparison to peer's progression or opportunities, etc.).

In sum, the result shows the importance of non-formal activities and their impact on motivation in cases of goal attainment and success. However, in some cases unpleasant emotions and events can also foster doctoral achievement and (extrinsic) motivation even if they are in some extent prejudicial to well-being.

Our results also highlight the difficulty to articulate all spheres of life, whose resources and time management turns out to be a daily challenge. This situation comes even more complicated if the supervisor is also the hierarchical superior (for the assistants), or if relatives do not support the project.

Unpleasant patterns with stress, anxiety and despair – which if they have a long-term recurrence can lead to psychological distress or psychological disorders – were found together or separately in more than half of the events. They were expressed by almost all the PhD students. However there seems to be an oscillating effect between positive and negative patterns over time. This needs to be analysed in detail in the holistic perspective of each PhD student to understand the circumstances in which emotional equanimity (emotional recovery) turns to reactivity (and emotional tailspin).

Discussion

These results are broadly consistent with previous studies (Devos et al., 2015, 2017; publications of the international Project FINS RIDDS [https://www.fins-ridss.com/resultados-2] notably by Lynn McAlpine).

Interestingly basic psychological needs satisfaction or frustration emerges from our analysis by triggers (mutual overlap). Except for supervision, we couldn't analyse those results in depth because of the event description's compactness in the questionnaires. The issue of needs satisfaction has relevant implications for doctoral education, as a large number of studies have shown (Ryan & Deci, 2017):

- Sustain the intrinsic motivation, which affects the quality of engagement and is related to more creativity and performance.
- Foster, the internalization and the integration of social values and practices, which are essential to the construction of the future researcher's professional identity.
- Affects the integrity, well-being and psychological health of individuals.

In the next months, further analyses will be conducted in the qualitative data (interviews) to better understand the regulation of the doctoral journey's continuous emotional fluctuations and the underlying needs perceived in this descriptive step.

In the next stage of analysis, we will explore in detail the two most significant events for each PhD student. The focus is placed on the comprehension of configurations that facilitate or slow down or even stop the completion of the doctorate from the perspective of PhD students (their needs, motivations, aspirations, self-belief and past experiences) interacting with their context.

The new insights would be integrated into the presentation.

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DETERMINATION OF THE OPINIONS OF THE SCIENCE TEACHERS ABOUT EFFECTIVE CLASSROOM MANAGEMENT

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Introduction

New trends in science, pedagogy and technology require modern, flexible, and effective elementary science curricula. A reform curriculum which provides better understanding of science, should make connections with daily life, and prepare students for future trends and new developments in society. The Turkish Elementary Science Curriculum was redesigned and disseminated in light of these factors. After almost ten years of implementation, although designers are experienced academicians and teachers, it is not yet known whether the reforms have effectively penetrated to the sublevels of the educational system (Elmas, Ozturk, Irmak, & Cobern, 2014).

The 2004 and 2013 Turkish science curriculum reform brought major changes in philosophy of instruction, teaching styles, teacher and student roles, and curriculum organization based on a constructivistic approach of instruction. The goal is to educate children as scientifically literate citizens regardless of their individual differences (MoNE, 2004). The curriculum emphasizes conceptual learning, multiple intelligences, active learning and reflective thinking. Within the framework of a spiral curriculum, topics are expanded and elaborated throughout the years. A thematic approach is used in the organization of the content (Education Reform Initiative(ERI), 2005) and there are four learning areas: Living Organisms and Life, Matter and Change, Physical Events, and The Earth and the Universe. There are also three learning areas related to skills, attitude and values, which are Science Process Skills, Science-Technology-Society-Environment, and Attitudes and Values (ERI, 2005). Moreover, current curriculum aims to develop skills on critical thinking, creativity, communication, problem solving, and investigation and emphasizes decision-making process, and use of information Technologies (Elmas, Ozturk, Irmak, & Cobern, 2014; MoNE, 2006).

The 2004 and 2013 curriculum incorporates crucial changes about student and teacher roles. First of all, it includes teaching strategies with respect to the constructivist approach (ERI, 2005). Student roles change from passive listeners to active partici-

pants who investigate, question, and solve the problems on their own (ERI, 2005). The teacher is the "facilitator" who organizes the teaching environment, guides the learners during the activities, involves students in decision making process, encourages students to share and discuss their ideas and makes connections between daily life examples and scientific concepts. Finally, the 2004 curriculum has different assessment approaches. The aim of the assessment is to assess not the end-product but the entire process with the aid of performance tasks, concept maps, structured grids, projects and poster presentations (Elmas, Ozturk, Irmak, & Cobern, 2014).

The quality of teaching at schools mostly depends on teachers' competencies. The teaching profession competence requires the teacher's acquiring the necessary knowledge and skills with regard to his/her teaching area. It is important that teachers should be trained in a way that they become competent in three competency areas which are general knowledge about the teaching profession, field knowledge, and pedagogical knowledge. Competence fields in the process of teaching and learning are planning, teaching process, classroom management, communication, assessment and evaluation. It is crucial that teachers should apply these features properly for lasting and meaningful learning process in order to have a complete professional competence. Some characteristics of an effective teacher include "use of effective teaching methods in the classroom", "being an expert at classroom management," and "being just in terms of assessment and evaluation". In sum teacher competence in the teaching learning process is therefore important for meaningful and effective learning (Kubat, 2015).

We know that a good teacher is many things, among them a caring person. But a good teacher is also a skillful practitioner, meaning adept at certain specifiable, observable actions (Saphier, Speca & Gower, 2008). Well-managed classrooms support learning. In contrast, poorly managed classrooms can become seas of chaos. The students are inattentive and disruptive, the reacher is frazzled and exhausted, and little learning takes place (Jakobsen, Eggen & Kauchak, 2006). Jones (2000) defines classroom management as a "system that includes instructional strategies focused on making students independent and resourceful, motivational strategies that help students be more conscientious and accountable, and discipline strategies that reduce goofing off, set limits, and train students to be responsible and cooperate with one another". Several research studies indicate that effective teachers organize their classrooms and design learning actvities so that most management problems are prevented rather than stopped once they occur. Classroom management includes the actions that create and maintain an orderly learning environment. Well-managed classrooms result in higher achievement and increased learners' motivation (Jakobsen et al., 2006). It is essential to emphasize the significance of classroom settings addressing to students' interests, expectations, and requirements, and ensuring student participation in teaching and learning activities (Good & Brophy, 2006).

Research question and objectives

The aim of this study is to reveal views of science teachers about effective classroom management.

How do science teachers improve student and teacher communication in their classroom?

How do science teachers organize their classroom to prevent management problems?

How do science teachers regulate schedules so that students get the most productive learning time?

How do science teachers motivate students?

What do science teachers to make the most advantageous use of classroom and school space?

Methodology and methods

The semi-structured interview technique was used to collect data. In order to answer the research questions, interviews were conducted with 14 science teachers at the middle school, in Turkey. The participants were randomly chosen from a sample of 140 teachers by selecting every fifth teacher on list in the 2016-2017 academic years. This is a qualitative research study based on five open-ended questions and semi-structured interviews that were conducted among 14 science teachers. In qualitative research, qualitative data collection methods such as observation, interview and document analysis are used and inherent perceptions and events are revealed in a realistic and holistic view (Yildirim & Simsek, 2013). For all participants, data collection was conducted on the same day and time and took approximately 15 minutes for each. The five open-ended questions were developed by the researcher. Concerning validity, four expert opinions were asked and according to their comments, revisions were made. Final five questions were: "How do you improve student and teacher communication in their classroom", "How do you organize their classroom to prevent management problems?", "How do you regulate schedules so that students get the most productive learning time?", "How do you motivate students? and lastly "What do you make the most advantageous use of classroom and school space?".

Analyses and results

The interviews were recorded by the researcher. Data obtained from pre-service science teachers' responses were analyzed by content analysis. Content analysis is used to analyze new material recorded by the researchers, and to classify open-ended responses to interview or survey questions. Content analysis is one of the most common qualitative data analysis methods; first, the collected data are conceptualized, then the resulting concepts are put in order in a rational way, and themes that explain the data are determined (Yildirim & Simsek, 2013). In terms of reliability of coding procedure, the coding process was repeated by a researcher working in science education field with expertise in qualitative research methods. In order to test the reliability of the analyses, the agreement rate formula suggested by Miles and Huberman (1994) was used. Another researcher was asked to code the interview records and codes were compared. As a result of this comparison, the reliability of data collection was calculated at 87%. Accordingly, it has been concluded that the analyses were conducted in a reliable way. The privacy of

personal information of the interviewed teachers regarded by coding them as T1, T2, T3 ...T14. T1 points to first teacher while T6 represents 6th teacher and T14 stands for 14th teacher.

Discussion

Results reveal that science teachers were interventionist on the instructional management dimension. Science teachers appear to be familiar with intervention, but they lack the appropriate knowledge and practice regarding this intervention. Despite their deficiency of knowledge and practice, almost all say that they would apply the intervention. These results raise questions about how well they would apply it without the required knowledge and skills. The science teachers prefer a U shaped classroom setting and will conduct experiments. A rich learning environment depends on physical arrangement of the classroom. U of chairs or desks enables eye contact among all the students and supports true discussion better than other arrangements. This arrangement is highly desirable (Saphier et al., 2008). According to the findings, a great deal of class time is spent on instructional activities. More than half of the teachers seem unaware of the value of time as resource. Students commonly break rules. Students need to be constantly aware of rules' existence. Findings of the study demonstrate that the majority of the science teachers lack creating a well-designed system of rules. If parents involve in their children's education, the classroom management can be effective. None of the teachers mentioned about communication with parents. In any management system communication with parents is very important.

Well-managed classrooms result in higher achievement. Skillful teachers use their time efficiently, provide their students feedback. Planning for effective management involves creating clear rules and procedures, taking the developmental characteristics of pupils into account, and arranging the physical environment to avoid disruptions. A teacher's skill makes a difference in students' sense of fullfillment in school and their feelings of well-being. Teacher effects dwarf all others on student learning (Saphier, Speca, Gower; 2008). In summary, well-managed classrooms support learning.

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REFRAMING REALITY. THE CONTRIBUTION OF THE CONSTRUCTIVIST STRATEGIC APPROACH TO TEACHER TRAINING

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In this work I would like to describe how some distinctive features of the Constructivist Strategic Approach resulting from educational research conducted by the Arezzo Strategic Therapy Center[1] can be used for teacher training to change problematic situations quickly and improve teachers', students' and parents' well-being.

The best way to illustrate this highly pragmatic approach is to present an example of how it can be applied to a real-life situation. Here is the story of Alessia.

Alessia, a child attending the fourth year of elementary school with pretty low grades, found it really difficult to pronounce a variety of words. Since the beginning of elementary school she was helped by a speech therapist: Alessia initially improved, but there was no progress after her second year of school. The teacher said she seemed to have good potential but at the age of nine she talked as if she were in kindergarten. Both the teacher and the speech therapist worked in the same way with Alessia, by supporting her and trying to motivate her to pronounce words properly.

The speech therapist claimed that the reason why the child could not speak well was probably psychological, and the teacher agreed. They thought it would be beneficial for Alessia to start psychotherapy in order to understand what it was that prevented her from improving.

Quite by chance, on that same day, Alessia's teacher attended a training session dealing with group supervision of school problems, from which something apparently odd emerged.

The next morning the teacher said to the child: "Alessia, I have to apologize for chiding you for your speaking mistakes. I thought about it and I realized that actually you help me. In fact, when you pronounce words wrongly, you give me the opportunity to bring out the skills of your classmates, who are already able to speak correctly". The child stared in amazement at the teacher, smiled and began to pronounce words properly.

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[1] The Strategic Therapy Center was established in 1987 by Paul Watzlawich and Giorgio Nardone and is currently directed by the latter.

This story may seem confusing if you are looking for a psychological past cause which made the child unable to speak properly. However, according to a constructivist strategy, one should not focus on the causes of a problem but rather on its enacted mechanisms and on adults' attempts to find a solution. According to Paul Watzlawich, repeated ineffective attempts to solve a problem will only preserve and make it worse (Watzlawich, 1990).

Considering that the working mechanisms of a problem are commonly disclosed by the solution to it, in Alessia's case, it can be deduced that the attempts to deal with the child's difficulties in pronunciation were ineffective: absurdly, the more the child behaved in an undesirable way, the more she got the adults' attention, which reinforced her behaviour. The attempted solution of paying close attention to her lexical difficulties maintained and bolstered the problem.

But why did the teacher's words trigger a change in the child's behaviour? This happened because he used one of the most efficient strategies in the educational field, namely the *Reframing Technique*. To reframe a point of view means to change the sense and the relevance one attributes to one's perceptions (Watzlawich, 1976). Behavioural and communication strategies used by the Strategic Approach are often characterized by apparently contradictory logic, which leads to perceiving reality in a different way by using stratagems.

With his words, Alessia's teacher reframed reality: her speaking mistakes stopped being a convenient way to make the teacher focus on her and became an advantage for her classmates only. So the girl gave up her strategy and began to pronounce words properly.

At this point, the teacher started to reinforce Alessia's correct behaviour; the problem was solved, her learning process improved and went on without relapses.

Is it possible to replicate this kind of intervention?

At the beginning of 1990, the Arezzo Strategic Therapy Center launched an intervention research project over two years to identify the most common problems occurring in a school setting.

The following main problems came to light:
– Attention Deficit / Hyperactivity Disorder
– Oppositional Defiant Disorder
– Selective Mutism
– Avoidance Disorder
– Conflicts and hostilities between classmates (Fiorenza, Nardone, 1995, p.51).

For each one of these categories the researchers tried to:
– describe problematic behaviours in the most objective way possible, avoiding interpretations;
– list the inefficient attempted solutions: what people tried to do in order to solve the problem, but without success;
– identify a specific, measurable and realistic goal to reach;
– agree upon a set of behavioural and communication strategies that could change the situation;
– restate the problem after change occurred.

The aim of this work was to draw up some intervention protocols consisting of sets of effective strategies and techniques that teachers can resort to when dealing with classroom difficulties.

This model was constructed empirically by observing how adults and children create and exacerbate problems by interacting in a dysfunctional way.

This work and the protocols related to it have been used to design a continuous training course for teachers, which was initially taught at the Alta Scuola Pedagogica in Locarno and later at SUPSI's Department of Education and Learning (DFA) in Locarno. Titled *"How to survive difficult children and teenagers with a smile"*, the course describes and deals with typical school problems in a pragmatic way.

The story of Liam is an example of a typical attention difficulty and how the use of non - ordinary logic can help.

Liam was a 7 year old boy who could not sit still for long. During lessons at school he often made noises, stood up and strolled around, bothering his classmates. The teacher's attempted solutions consisted of asking him to stop, but the more she tried to contain Liam, the more he seemed to be unruly and annoying. The teacher decided to discontinue solution patterns she had previously attempted without success and told him: "Hey Liam, I'm sorry for scolding you when you stood up and made noises. I realized that when you act like this your classmates seem to be more concentrated on their tasks. So, I really need your help: could you take a little stroll or make a noise every time I touch my hair?" Liam was astonished, but then smiled and claimed he was willing to do it. At the beginning he diligently did what he was asked to do, every time his teacher requested it, but as time went by his strolls became shorter and the noises weaker, until they disappeared. Two days later Liam asked his teacher if she could touch her hair less frequently, because he was not able to satisfy her requests and do his schoolwork at the same time. In the following days, the child was less and less capable of behaving in the problematic way, so his schoolwork improved, as did his relationship with his classmates.

In Liam's case, the teacher's intervention allowed the child to go through a *corrective emotional experience* (Alexander, 1956); in other words, he discovered that he was able to finish his schoolwork and establish more cooperative relationships with his classmates. This attitude persisted over time.

The use of paradoxical instructions makes teachers curious and enables them to interact with their pupils in a different way: by prescribing instead of banning certain behaviours, teachers allow pupils to experience their ability to control such dysfunctional behaviours. The theory behind the application of paradoxical logic can be summarised as follows: "When dealing with dysfunctional behaviour presenting itself as spontaneous and uncontrollable, it is really effective to prescribe the behaviour itself, placing the person in a paradoxical situation in which the voluntary execution of the behaviour will lead to its elimination. The paradoxical injunction is used to elicit the behaviour needing to be curbed, so that it loses its spontaneity, while the person receiving the order is put in a double bind situation." (Nardone, Mariotti, Milanese, & Fiorenza, 2000, p.87).

Comprised of a basic level which provides an overview of treatment protocols and an advanced level focusing on the supervision of problematic cases, the training course *"How to survive difficult children and teenagers with a smile"* is sought after by teachers

because of its ability to offer "apparently easy" solutions to complex situations.

In school years 2010-11 through 2016-17 the training course was attended by:
– "*How to survive difficult children and teenagers with a smile*", basic level: 408 teachers
– "*How to survive difficult children and teenagers with a smile*", advanced level: 324 teachers

Course sessions were held at the Department of Education and Training of the University of Applied Sciences and Arts of Southern Switzerland, as well in a number of schools; in some of these the advanced courses on an ongoing basis over the years was organised, and a process of supervision of difficult cases has started, in which teachers reflect together on how to use communication and problem solving techniques in an effective way, with the shared goal of increasing well-being in educational contexts.

I wish to conclude this paper by quoting Giorgio Nardone:

"Interventions in the field of education and schooling can prevent many relational difficulties and some critical pathologies and make it possible to use a network approach to tackle emerging difficulties of children and teenagers at an early stage, before they can evolve into real pathologies. [...]. To make the educational community and its actors capable of better training young people is crucial to anyone who cares about human beings and their healthy expression of life".

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PROSPECTIVE ASSOCIATION BETWEEN UNSAFE SCHOOL CLIMATE AND DEPRESSIVE SYMPTOMS IN SECONDARY SCHOOL: THE MODERATING ROLE OF STUDENT NEUROTICISM

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Introduction

School violence has become a major issue in Canada, as elsewhere (Janosz & al., 2012). Studies suggest that school violence can induce internalizing problems, such as high depressive symptoms (Hawker & Boulton, 2002; Flannery & al., 2004). School violence has been mainly studied in terms of direct violence. However, exposure to violence goes beyond the direct violence experienced by students (bullying, victimization, etc.). Almost all students are victims of violence indirectly, as witnesses (Janosz & al., 2012), and a large proportion of students feel unsafe in their own school (Jacobson, Riesch, Temkin, Kedrowski & Kluba, 2011). Unsafe school climate, which is defined by the degree to which students are exposed to school violence as witnesses and perceive their school to be unsafe, may influence their emotional well-being in different ways. Unsafe school climate may have a direct impact on students' self-esteem (Zhang, Xuan, Chen, Zhang, Luo & Wang, 2016) while low self-esteem prospectively predicts depression in adolescence (Orth, Robins & Roberts, 2008). In addition, an unsafe school climate may be a source of stress for young people (Hammen, 2005; Cicchetti & Toth, 1998). Importantly, an unsafe climate may be a source of chronic stress, that is constantly present in the school environment even when violent events do not occur. Chronic stress is a particularly strong risk factor of depressive symptoms, presumably because it erodes coping resources and biological resilience over time (Compas, Orosan & Grant, 1993).

Few studies have examined the association between unsafe school climate and depressive symptoms, especially taking into account direct victimization. In their prospective study, Loukas and Murphy (2007) have shown unsafe climate to increase depressive symptoms in students, but another did not find a similar relation (Kasen, Johnson & Cohen, 1990). These contradictory results suggest that unsafe school climate does not affect all students in the same way and that factors may moderate the relation between safety climate and depressive symptoms. One of these factors may be the personality trait of neuroticism (Goldberg, 1993). Students who have a neurotic personality tend to experi-

ence negative emotions in a frequent and intense manner (Klein & al., 2013). They are at greater risk of depression, especially when exposed to negative life events (Middeldorp & al., 2008). For this reason, it is plausible that these students may be subgroup at particular risk of experiencing depressive symptoms when exposed to an unsafe school climate.

Research question and aims

The purpose of this research was to study the prospective association between perceived unsafe school climate and depressive symptoms in students followed throughout high school. We also examined whether neurotic personality traits in students moderated this association.

Methodology and methods. Participants. Participants came from a large evaluation of the New Approaches, New Solutions initative (Janosz, 2010) aimed at increasing academic success in disadvantaged communities in Quebec. Participants attended one of 71 secondary schools across the province of Quebec, Canada. For this study, we used data from one NANS cohort that included more than 10, 592 students. We only retained individuals with no missing data. Thus, the sample used for the analyses is composed of 2,676 students. The sample is predominantly of Quebec-born Caucasian (91.80%). It is also composed of slightly more girls than boys (girls - 57.50%). Procedure. Data were obtained by self-reported questionnaires administered in the classroom by trained assistants and teachers. Data were collected twice a year, in the fall and in spring from 2003 to 2008. Measures. Depressive symptoms (dependent variable) were assessed by using the Center for Epidemiologic Studies-Depression (CES-D) questionnaire. The CES-D is a 20-item scale (α =.84) (Radloff, 1977), that includes items such as "I felt that people dislike me" or "I was bothered by things that usually don't bother me". Unsafe school climate (independent variable) was assessed using the Socio-Educational Environment Questionnaire. This variable includes two scales: perceptions of school safety measured by 5 items (α =.81) and witnessing school violence (reversed) measured by 12 items (α =.89) (Janosz & al., 2012). The perceptions of school safety scale contains items such as "There is a risk of being assaulted in this school". The witnessing school violence scale asks students to report the frequency of minor (verbal insults or verbal threats between students) and major violence (physical assaults between students, weapon carrying) that they were exposed to as witness. The neurotic personality (moderator) is an 8 item scale (α =.78) measured by using the Big Five Inventory (Goldberg, 1993). This scale contains items sush as "I see myself as someone who worries a lot or is emotionally stable, not easily upset". Socio-demographic characteristics of students are sex (0 = boy, 1 = girl), ethnicity (0 = quebec-born Caucasian, 1 = other), age and and baseline CES-D depressive symptoms are included in the analysis as control variables.

Analyses and results

Multiple regression was used to test the association between unsafe school climate in grade 8 and depressive symptoms two years after. We also tested an interaction term between unsafe school climate and neuroticism in predicting depressive symptoms. These analyses were performed using IBM SPSS statistic 24.

Results showed that an unsafe school climate was modestly associated with higher depressive symptoms two years later in students, even after adjusting for control variables (Beta = 0.06, p < 0.001). Results also showed a statistically significant interaction between unsafe school climate and neuroticism (p < 0.001). We decomposed this interaction using the simple slope method proposed by Aiken and West (1991). We subtracted and added a standard deviation to the mean of neuroticism to differentiate low neuroticism and high neuroticism respectively. Decomposing the interaction showed that an unsafe school climate did not predict depressive symptoms in students with low neuroticism (Beta = 0.01, CI = - 0.05 to 0.06, p < 0.829), but that it did in students with elevated neuroticism (Beta = 0.14, CI = 0.09 to 0.20, p < 0.001).

Discussion

This prospective study showed that students who perceived their school climate as unsafe are at increased risk of developing depressive symptoms two years later. This result is consistent with those of previous studies (Coté-Lussier & Fitzpatrick, 2016; Loukas & Murphy, 2007). We also showed that students with high neuroticism were particularly likely to be negatively affected by an unsafe climate. Thus, young neurotic people exposed to an unsafe school climate are at greater risk of developing depressive symptoms. This study contributed to identifying individual and environmental vulnerabilities that represent risk factors for depression, which is highly prevalent and associated with several negative outcomes in adolescents.

Despite a longitudinal design and a large sample, this study has several limitations. First, participants mainly come from disadvantaged schools and we did not retain students with missing data. Thus, results may not be generalize to all students. Second, students at risk of depression may have a tendency to perceive their school environment negatively because of a negative cognitive style, which could confound the association found in this study. Future studies should use multi-level analyses to study unsafe climate at the school level to overcome this limit. Finally, safety climate is only one dimension of the school climate (Janosz & al., 2008). It will be important for future studies to take into account other dimensions of the school climate in order to better understand the problem.

This study highlights the importance of considering the impact of the unsafe school climate on the emotional well-being of students in school context. These results suggest that developing ways to improve the sense of school safety in students may be a way to promote mental well-being in schools. Strategies could include the adoption of a plan to decrease school violence. A coordinator could be selected to facilitate implementation. In addition, the establishment and updating of conduct rules could foster a safer climate. Training activities on civics rules are also needed at the beginning of the school year (Gouvernement du Québec, 2010). Our study also indicates that students who have high levels of neuroticism are particularly vulnerable to the level of violence in their environment and are at greater risk of experiencing negative emotional consequences of unsafe school climate. Therefore, neuroticism is a risk factor for depression. These students may benefit from targeted approach. Several theoretical and empirical studies

show that cognitive-behavioral approach (CBT) therapies are needed for individuals with high neuroticism. CBT is the more effective approach, since these individuals have more irrational thoughts (Center & Kemp, 2003). This study encourages the screening of adolescents with this type of personality. Screening can be done by personality tests who are reliable to identify neuroticism personality (Kampen, Coolidge and Pietro San Martini, 2012). Thus, young people with elevated neuroticism could be targeted as participants in intervention programs using personality screening.

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SCHOOL UNEASINESS AND RESORT TO PRIVATE TUTORING. EVIDENCES OF A STUDY IN THE UPPER SECONDARY SCHOOLS OF CANTON TICINO

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Since the early 2000s the attention on the phenomenon of private tutoring, initially focused on Asian countries such as Japan and South Korea, turned to other parts of the world where it had grown considerably (Bray, 1999, 2003; Baker & LeTendre, 2005; Southgate, 2009). Nowadays in Switzerland, as in many other Western countries, the importance of private tutoring, which consists in instruction in subjects of relevance to student progression which is provided for a fee outside of regular school hours (Bray & Lykins, 2012), can be easily perceived (Mariotta & Nicoli, 2005; Hof & Wolter, 2012; Zanolla, 2013). For example, in the Swiss Canton of Ticino, the Italian-speaking region to which the present work refers, more than 37% of 15 years old pupils declare to have attended private tutoring at least occasionally in the last year as well as 31% of upper secondary school students (Zanolla, 2013). These rates resemble the proportion of other central European countries although the use of different definitions for this phenomenon and its frequency (Bray, 2011) makes the comparison difficult.

The resort to private tutoring is first of all a matter of inequality since, as it is easy to imagine, it may be a too heavy burden on low-income families (Bray, 2011). Moreover, according to some studies, investing in private tutoring has often more to do with the logic of enrichment than with that of remedial (Hof & Wolter, 2012; Zanolla, 2013): even with better school results and less need for extra lessons, students with a more advantaged social origin show a greater propensity to use private tutoring. The parental style of concerted cultivation (Lareau, 2003) is typical of middle and upper class families and includes attempts to transmit to their children, through enrichment activities, the cultural capital that will guarantee them a positional advantage in competitive education and labour market. These parents tend to report higher level of school dissatisfaction which are probably due to higher expectations about school quality (Gibbons & Silva, 2011) and their parental style can add to its beneficial effects the side effect of making children exhausted and more likely to experience anxiety and decreased well-being (Elliot & Thrash, 2004; Bayer et al., 2006; Fischer et al., 2007; Sideridis & Kafetsios, 2008; Spokas & Heimberg, 2009; Creveling et al., 2010; LeMoyne &

Buchanan, 2011; Affrunti & Ginsburg, 2012; Schiffrin et al., 2014; Schiffrin et al., 2015). Sometimes the fear of teachers, of failing examinations or of getting bad grades experienced by the students are independent from the parental approach and have more to do with the wish to escape aversive social or evaluative situations at school (Kearney et al., 2007). Whatever the origin of school uneasiness, private tutoring can constitute both an opportunity for a more individualized learning through which middle and upper class families can ensure that their offspring do well in school and progress in higher education and a way to decrease achievement anxiety (Maszl, 2004; Mischo & Kessel, 2005). This is found more than ever in systems which are teacher-centred and/or intolerant of slow learners (Bray, 2003).

This contribution, derived from a wider study commissioned in 2012 by Canton Ticino's Department of Education, Culture and Sport in which an online questionnaire was administered to all the students attending the first and the last grade of all the six public upper secondary schools of the canton (5 lyceums and the Cantonal School of Commerce of Bellinzona), is aimed at testing the hypothesis that, other things (socio-cultural background, gender, school attended, school grade and self-evaluation of school performance) being equal, the use of private tutoring is more typical among students who show higher levels of school stress, nervousness and fear of asking when something is not clear. This hypothesis was tested through a logistic regression model, a method which is suitable for cases in which the object of analysis is a dichotomous variable typically associated with making a choice and which allows evaluation of whether - and to what extent - each of the independent variables entered in the model contributes to changing the way in which the dependent variable manifests itself, all other things being equal.

What emerges is that the three variables regarding the school uneasiness increase the probability to use private tutoring. For example if an upper class male student attending the first grade of the lyceum of Bellinzona with a poor school performance but who rarely experiences states of stress, nervousness and fear to ask when something is not clear, has a probability to use private tutoring that amounts to 0.33. The probability raises to 0.68 for a student with the same characteristics but who often experiences feelings of stress, nervousness and fear to ask, and drops to 0.57 if the second mentioned student has a more disadvantaged social background.

In conclusion, both a certain degree of school uneasiness and social origin influence the decision to invest in private tutoring. Private tutoring is probably a means to obtain a custom-made education and get individual attention without feeling criticized in case of difficulties in learning. When asked about the possible strategies in order to reduce the phenomenon of the resort to private tutoring, many students have in fact answered that if school offered some lessons outside school hours and gave more attention to individuals, the phenomenon of private tutoring could be reduced.

One of the limitations of this work concerns the operationalization of the concept of school uneasiness. The questionnaire was in fact not conceived for this purpose but was aimed at quantifying and providing a general description of the phenomenon of private tutoring. This work however can be a starting point for further investigation about the student - teacher relationship, the quality of the classroom climate and school anxiety.

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BULLYING AND PREVENTION

PSYCHOLOGICAL SAFETY AT SCHOOL: A MULTIDIMENSIONAL CONCEPT TO ANALYSE THE FEELING OF WELL-BEING IN THE CLASSROOM SETTING

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Introduction

For many years, schools gave priority to school performance and learning outcomes. However, individuals have to develop their emotional intelligence to enhance their personal and professional life (Zanna, 2010). Recently, social and emotional learning have gained attention, for instance they are considered to understand learning achievement and students' development (Zins, Bloodworth, Weissberg, & Walberg, 2004). Indeed, "schooling is an emotional process" (Fried, 2011, p. 123): emotions vehicle learning processes and they have the power to influence cognitive or motivation processes.

Moreover, "school is a social place and learning is a social process" (Zins et al., 2004, p. 3). Social interactions at school also are a central point for students' school experiences and performances. In particular, peer relationships impact students' emotional well-being (Osterman, 2000). Thus, social environment at school influences not only learning processes but also individual feelings and the perception of experiences.

In organisational field, team outcomes have been considered as a consequence of team structure (Edmondson, 1999). Indeed, the way in which people interacts and responds to colleagues' actions generates singular group's dynamic. However, individual's reactions influence individual judgment of work climate. Perception about interpersonal risk taking thus explains individual's feeling of safety (Edmondson, 2003). When people perceive their environment as a safe place, they are able to act without fearing others' reactions. So, psychological safety represents such perception that allows learning behaviours like speaking about personal mistake, sharing opinions, asking for help, etc. (Edmondson, 1999).

The interest is to understand in which way psychological safety influence student's behaviours at school. In particular, classroom is a specific environment that clusters individuals: peer relationships are likely to enhance or inhibit individual perception of safety. Researches in classroom context have to study this kind of feeling to highlight

individuals' behaviours and, therefore, school achievements. Find dimensions that characterize psychological safety at school may offer new ways to include social and emotional process to study well-being in classroom.

Research question and objectives

The purpose of our research is to analyse the way in which psychological safety in classroom is involved in school involvement. In particular, we want to find students' behaviours that reflect the perception of being safe in classroom. Firstly, we want to identify the way in which students behave in classroom during some specifics situations that imply some interpersonal risk taking. This will allow us to find answers to the question what are the effects of classroom's perception on student's interactions with peers. Secondly, from the analysis of students' behaviours, we want to investigate dimensions of psychological safety. In this way, we should better understand what are the issues concerning the feeling of being safe in the classroom from students' point of view. Thirdly, we want to determine what are students' motivations at school. Hence, this allows us to find any potential relationships with safety perception in classroom. Fourthly, our study should highlight any relevance of current instrument to measure psychological safety at school. Thus, the question is to understand in which way the comparison between qualitative and quantitative data opens up lines for improving instruments in this field.

Finally, our research should identify the dimensions of well-being at school in terms of perception's safety. Students' behaviour during peers' interactions and students' motivation are issues that explain interpersonal risks reflecting classroom's perception. The specific aim of our study is to analyse the dimensions of psychological safety at school in relation to academic motivation. So, our goal is to identify in which way the feeling of a comfortable classroom climate may influence student's engagement and attitude toward school.

Methodology and methods

For this research, we used a mixed methodology. Firstly, we create a questionnaire testing feeling of safety in classroom context. Then, we conducted interviews, whose guideline was based on questionnaire's items.

Therefore, we defined from the scientific literature dimensions that characterize feeling of safety at school. In so doing, we identify four elements that can be applied in school context: acceptance by schoolmates, freedom of expression, peer support, eligibility of error at school. For each of this dimensions, we constructed six items. An intercoder agreement procedure validated the model structure.

Then, we combined the psychological safety questionnaire with other concepts, in particular with the motivation at secondary school. In order to measure this last term, we utilized a validated questionnaire – the Echelle multidimensionnelle de la motivation au Cycle d'orientation [CO] (Genoud, Ruiz, & Gurtner, 2009) – that identifies four dimensions of academic motivation: willingness to learn, feelings of competence, attractiveness of education and state of anxiety.

Firstly, we conducted 12 semi-structured interviews with secondary school's students from French Swiss. Participants were 9 girls and 3 boys between the ages from 13 and 16

years. They come from different types and grade of secondary school and they voluntary participated in our research. Parent's permission was request before collecting data. Every interview was followed by the administration of the questionnaire. Hence, we can highlight possible individual differences between qualitative and quantitative answers.

Secondly, we administered the questionnaire of psychological safety to a larger sample (159 participants, 75 of which answer also questions about motivation at school) in order to conduct quantitative analysis. Participants (half girls and half boys) between the ages from 12 and 15 took part in our study. They come from the three different class' type (prégymnasiale, générale, à exigences de base) of the 9th HarmoS grade. Educational instance from canton of Fribourg in Switzerland accepted the request and we could collect data in four classes.

Thanks to the qualitative data collected by participants' oral contributions, we can enrich quantitative results. This mixed method constitutes a powerful approach to enhance knowledge on psychological safety at school.

Analyses and results

Firstly, we choose to exploit students' responses at questionnaires. That way allows us to have a first specific framework on our sample. Such a quantitative analysis highlights interest to study dimensions of psychological safety to better understand student's engagement and motivation at school. For example, statistical regressions show that attractiveness of education lean on help and acceptance by peers. Then, feeling competent depends on perception about mistake's eligibility in classroom context. Moreover, feeling competent also differ from the three different school's type. Students from the one that is the most demanding feel more competent than students from the others school's type. Statistical analysis reveals some other results that permit to have a general point of view on the selected psychological safety dimensions linking with school motivation.

Secondly, interviews' analyses are in progress. They are supposed to broad the discussion on both on feeling of safety at school and academic motivation. The interaction between these concepts will be analysed in order to identify potential similarities or differences compared to results from questionnaires. At present, participant's oral contributions enable a larger understanding on psychological safety's dimensions. For example, being mocked emerges as key point to explain student's fear of taking action during lessons. Other features – like the importance of perception about peer group belonging – may enrich our knowledge about dimensions of psychological safety in classroom context.

Discussion

The research on psychological safety in classroom is an innovative field to study well-being in school context. Our study represents a starting point to identify peer's actions that enhance or inhibit students' feeling of safety. Indeed, the way in which individuals perceive their classroom context allows the identification of behaviours that depend on this safety's feeling.

Our study identifies some psychological safety's dimensions that participate in students' academic motivation. Speaking in classroom without fearing peers' critics, talking about errors without being ridiculed in classroom, being accepted by peer, etc. are some key factors that explain psychological safety in classroom. Such a feeling enables academic motivation and engagement in learning behaviours.

Finally, our study shows the importance of including perception of safety at school in order to better understand students' school experiences. This opens news prospects for future researches in the field of well-being in classroom.

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PREVENTING CHILD ABUSE AND NEGLECT: A GLOBAL CONCEPT IN THE ITALIAN SPEAKING PART OF SWITZERLAND

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Introduction

ASPI is a private foundation (NGO) working in the Italian speaking part of Switzerland (www.aspi.ch).

ASPI means Aid, Support and Protection of Children (in Italian Aiuto, Supporto, Protezione, Infanzia).

ASPI's mission is to promote a culture in society of respect for the child – meant as a human being aged between 0 and 18 years – and to work toward the elimination of any form of maltreatment through awareness raising, prevention and training.

Child Abuse is a prevalent problem, which has involved many children also in Switzerland (Averijk, Müller-Johnson, & Eisner, 2011).

All types of child maltreatment (physical, emotional, sexual and neglect) compromise the well-being and future of our children. The potential health consequences of violence against children are now well known (WHO, 2014).

It has also been demonstrated that prevention can make a difference, as Paolo Sergio Pinheiro (2006), claims: "No violence against children is justifiable; all violence against children is preventable. There should be no more excuses".

Methods

In accordance with the report of ISPCAN (International Society for the Prevention of Child Abuse and Neglect) and WHO (2006), for the past 25 years the ASPI Foundation has developed a comprehensive approach of the prevention of child maltreatment:
- General Awareness: State Actors, Civil Society, Media, ...
- Training in the school, health and justice sectors
- Prevention programs in school for students, parents and teachers
- Networking to promote the application of the UN Convention on the Rights of the Child
- Expert consultation in specific cases

Three Primary Prevention programs for Child Abuse

"Untold words"

After a decade of general awareness raising, in 2003 ASPI initiated its first prevention program called "Untold words", an evidence-based child abuse prevention program developed by Alberto Pellai (2000). The structure of the program comprises 5 educational sessions with 9 to 10 years-old students, 5 educational sessions with their parents, 4 educational sessions with the teachers, ongoing planning and evaluation with the teachers and team supervision. The key messages for the children are:

– I am unique and special
– My body and related-feelings
– Good touch and bad touch
– Say no, run away and tell somebody
– No secrets with me

"I am unique and precious!"

In 2006 ASPI initiated a second prevention program for younger children, aged 7-9 years that is complementary to the first one. Primary school children learn the basics of prevention through six interactive play stations during a two-hour visit, coached by ASPI trainers. This interactive exhibition called, "I am unique and precious!" offers six messages which are presented and discussed with the children:

– My body is mine
– I trust my feelings
– I know how to recognize the differences between a good and a bad touch
– I can say NO!
– I understand the differences between a surprise and a secret
– I'm bright - I know how to ask for help

Parents and the teachers are also involved in the program.

Parents are invited to an information evening, to a further in-depth meeting and to open-door Saturday mornings. The content and modality of the second meeting for parents were reviewed during the course of the year in order to respond better to and comply with the desired objective, in other words to allow reflection on the themes of the activity's path so as to be able to integrate the messages of prevention given to the children in everyday family life.

Teachers are invited to take part in a guided visit and have the opportunity to attend four two-hour sessions of in-service training on topics strictly related to the subject of prevention of maltreatment including sexual abuse, and to the everyday practice of their profession.

These training offerings are highly appreciated and the attendance of parents and teachers is very good; the open-door mornings for parents are attended in large numbers.

In recent years ASPI has developed an adaptation of the "I am unique and precious!" path of activities for the disabled, in partnership with agencies concerned with disability and special-needs teaching, in cooperation with "Care and Quality of Life in institutions for invalids" (GO3), the working group set up by the canton of Ticino.

"e-www@i!"

The program "e-www@i!" was developed by ASPI in 2009 based on some studies in the Italian part of Switzerland (Mainardi & Zgraggen, 2009, 2010; Mainardi, Zgraggen, & Balerna, 2010). The Internet as a subject is more than ever topical and the use of this technology is of great concern to all adults, but especially parents and teachers. Reactions go from absolute prohibition to a sense of impotence and surrender in front of both the evolution of the instruments that give access to the Internet as well as the minors' ability to use them, which is often superior to that of their parents and teachers. As a result, there is great request for the "e-www@i!" program for secondary schools and more and more for the final two years of primary school and for the comprehensive school.

The parents are invited to a meeting with the aim of reflecting on their educational involvement with regard to the use of information and communication technologies (ICT).

Results 1

Since 2003, more than 50'000 children were involved in these 3 primary prevention programs on child abuse. More than 10'000 adults (parents and teachers) participated in the parallel training activities proposed by ASPI.

Evolution

As a result of awareness raising, since 2012 ASPI is also responsible for a broad prevention programme in the field of sport (Prevention of Child Abuse in the field of sport – Youth and Sport training).

A basic module lasting 11⁄2 hours is included in the basic training of all future instructors in the different sports. A one-day module is open to all administrators and instructors of sports clubs and clubs that operate in a youth environment.

There are two parts to the training: theory, which allows for the creation of a common basis of knowledge and awareness on the subject of primary prevention of child abuse, especially sexual abuse, and a part which aims at transferring the theoretical concepts to the sporting context of each of the different sports and clubs in which the participants operate. The participants reflect on real-life situations connected with the sporting world with the aim of defining concrete preventive strategies for each of them.

Results 2

From 2012 to the end of 2016 more than 3'000 sportsmen and sportswomen were involved in one or other prevention training modules with ASPI.

Results 3

A comprehensive approach to the prevention of child abuse at the regional level

The pillars on which ASPI's work rests are awareness, prevention and training. Each of these pillars is developed with knowledge of its indirect repercussions: awareness leads to the

request for prevention program and training courses. Prevention activities frequently prompt requests for more specialized courses, with teachers as well as parents. These meetings in their turn lead to interest in taking part in prevention programs. Both the prevention activities and training courses fuel awareness thanks to the media interest that is regularly shown.

In short, the three fields of activity reinforce each other and often generate a fourth: expertise.

Expertise

This word is defined as the combination of knowledge and particular skills that make it possible to manage a specific problem, in this case connected with child abuse. Thanks to their experience and expertise, for example, ASPI's director and the ASPI team are able to help parents and/or professionals to speak about the subject when a case of abuse or concerning behavior that requires a specific intervention by adults in authority has been discovered. In fact, to say the right words about what has happened, while respecting procedures (investigation) and individuals, without starting a witch-hunt, requires in addition to a marked sensibility an understanding of the sequence of events and the consequences of such situations. In the same way, talking to children who have been directly affected when they realize that someone close to them has behaved badly, requires delicacy, empathy and the ability to explain what one can about what has happened (while respecting the confidentiality of the investigation) congruent with the messages of prevention. Recourse to ASPI in the event of delicate situations increases year by year.

Collaboration

A comprehensive approach to the prevention of child abuse at the national and international level:
- ASPI cooperates at a national level with the Swiss Foundation for the Protection of Children, Kinderschutz Schweiz
- On an international level, the director of ASPI actively collaborates with ISPCAN, the International Society for the Prevention of Child Abuse and Neglect. In fact, Myriam Caranzano is a member of the ISPCAN council and in this capacity she is involved in many committees and working groups in the field of child abuse prevention (ISPCAN Congress and Conferences Committee, Chair for the Masterclass in The Hagues Conference 2017 and Praga Congress 2018, Global Partnership to end Violence against Children (GPeVAC)...). This special role of the director of ASPI means the privilege of being constantly up-to-date and able to bring to the Italian part of Switzerland the newest knowledge in the field.

Conclusion

ASPI has been working for more than 25 years and is committed to contributing to the prevention of child abuse in the Italian part of Switzerland. The collaboration with the school is essential to reaching any child and the greatest possible number of families.

As Marta Santos Pais, Special Representative of the Secretary-General on Violence against Children, declares (2017), "We can help build the world that children themselves wish to see: a world free from fear and from violence. This is the vision of the 2030 Agenda for Sustainable Development...The framework provided by the 2030 Agenda has created an unmissable opportunity to build momentum, galvanize political will and generate wide social support for children's protection."

ASPI believes in this vision and wants all of adults to promote respect for the rights of the child.

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"GOPEER" PROJECT: PREVENTION OF BULLYING AND CYBER-BULLYING BY MEANS OF PEER EDUCATION

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Introduction

The "GOPeer" project is part of a prevention programme promoted and supported by the Swiss Red Cross (CRS - Sottoceneri Section- Canton Ticino), in collaboration with the University of Applied Sciences and Arts of Southern Switzerland (SUPSI) – Department of Business Economics, Health and Social Care (DEASS). Over the years CRS has developed specific projects examining bullying and cyber-bullying in school settings as worrying phenomena, both because of the wide extent to which they are experienced and because of the ensuing negative impact on young people. The new aspect arising from the partnership with SUPSI consists of how this issue has been tackled in schools, in terms of approach. More specifically, we discuss the strategy of *peer education* (also defined as "education between peers"), understood as a form of participatory educational intervention directed toward young students, and which aims to initiate a horizontal process (peer to peer) of knowledge and experience transfer by way of direct discussion between students who have been specifically trained, who we will call "peer educators", and other students of the same age and equivalent status.

This experiment began in 2015 and involved two secondary schools in the Lugano and Bellinzona regions; more specifically, these schools (Pregassona Middle School and Giubiasco Middle School) had raised the issue of the need to address these topics, and provide pupils with something other than simply the message that bullying must be prevented. The peer education interventions were addressed to pupils from the second, third and fourth years of Middle School, and the objective was to unveil the intrinsic value of adolescence, in operational terms, in order to stimulate student engagement from the perspective of responsibility and the acquisition of competences.

Aims and objectives

The main aim of the "GoPeer" experiment was to create a culture of prevention as regards situations of bullying and cyber-bullying at school, by utilising a cutting-edge ed-

ucational strategy based on a horizontal communication model, which represents a valid pedagogical alternative to the traditional teaching and prevention model, focused on a vertical-type communication method (top-down), where the adult (teacher or external expert) constitutes the driving element of the didactic process. The objective of peer education, on the other hand, is to reinforce the social dimension of learning (Boda, 2001) by means of group-centred content creation and by negotiating meanings.

Greater value is therefore attached to the contributions made by the young students, creating in-school resources, while at the same time encouraging teachers to take on a different role. In fact, the role of the adult is located on two distinct planes: the external trainers/facilitators who coordinate and administer the training sessions and the interventions in the schools; and a group of volunteer teachers, guided by the trainers, who temporarily set aside their content-transmission tasks in order to take on the role of antenna for behaviours and/or issues identified by the students inside and outside the Peer Education spaces (in class or in the corridors), who offer the peer educators their support in terms of intervention organisation, and who act as linkers between peer education activities and classroom teaching.

More specifically, the objectives identified include:

1. Make the actors (peer educators, school administration, teachers) and beneficiaries (class groups) receptors of potentially risk situations at school, and promoters of school events, continuous and intrinsic to the life of the institute, aimed at the promotion of wellbeing;
2. Create and train a volunteer group of peer educators in the institute, for one academic year. This group will acquire specific tools related to the issues of bullying and cyber-bullying, and for conducting prevention activities in class;
3. Organise, arrange and schedule two activity sessions in the classes that have benefited from one or more peer educator interventions;
4. Engage and guide a group of teachers who support the peer educators in terms of preparing and conducting the class interventions, and who act as internal school referents sensitive to the issues tackled, in this case bullying and cyber-bullying (they are known as the "GOPeer support group).

Subject matter and methodology

Over the years, understanding the issues, the educational needs and the features of the young-persons universe, a natural "habitat" that is often packed with contradictions and questions (Boda, 2006), has fostered the creation and development of school programmes aimed at promoting best practice and preventing risk behaviours. Some of these behaviours have roots lying further back in the past, while others are now taking centre stage in the form of relatively recent social emergencies and phenomena that appear to be increasingly dissimilar to the experiences of previous generations. The system of adults must therefore question itself regarding the most appropriate methods for establishing contact with the vast range of issues and thorny questions that involve young people, and that are found to be closely related to protecting the global development of their personalities and wellbeing. We are talking particularly about inappropriate sexual conduct, alcohol abuse, tobacco dependence, addictions, bullying and the phenomenon of cyber-bullying.

These proven transformations force us to reflect seriously in order to extrapolate a valid educational intervention, particularly when at the same time the age at which young people first experiment these experiences has decreased. For example, one striking indicator is the increase in the number of episodes of violence and abuse of power to the detriment of other individuals in the increasingly depersonalised ways that have emerged with the advent of new technologies and media tools. The phenomenon of bullying among young people, or, in other words, that specific form of violence defined as a "systematic abuse of power, continuous dominance, aimed at intimidating, manipulating or wounding another person", is a problem that affects most educational systems, and that involves students of all ages and from all secondary school contexts. With the difference that, while at one time the victims of Franti (the little boy who behaved like a bully, from the novel "Cuore" by Edmondo De Amicis) could go home and, usually, find a safe place, providing protective separation from the outside world, nowadays technology allows bullies to enter the homes of their victims, to pop up in their lives at any time, with messages, images and videos sent by mobile phone or published on the web (social networks, web sites, chat rooms), by using the internet (Pisano, Saturno 2008).

So while it is true that, on the one hand, adolescents are affected by the axiological poverty that forms the fabric of postmodern society (D'Alonzo, 2009), it is also true that, as an agency of socialisation, the school is invited to share in an ecological and systematic project to promote the wellbeing of its pupils and to prevent unease. Adolescents often struggle to distinguish constant educational References, but it is equally true that they have access to resources and potential that adults must be able to grasp and take advantage of in order to promote growth and the assumption of responsibility. School therefore represents an authentic training ground for life, and certainly also for peer group relationships, friendships formed both in class and outside the spaces that are strictly institutional in nature, interactions between people of the same age who feel related in terms of symmetry and meaningfulness. It is precisely inside a peer group that interpersonal influence is triggered, by way of imitation and social reinforcement; in a process that is mostly spontaneous, young people learn various things from one another, and they feel more accepted in an atmosphere of freedom that permits open-mindedness and peaceful discussion. (Larson, 1983).

Starting from the acknowledgement and valorisation of these natural relationships and aspects, it is possible to set up peer-education type educational and training programmes that, by way of a natural transfer appropriately organised and supervised by an adult educator, promote the communication of knowledge, emotions and experiences from some members of a group (the peer educators) to others of equal status (companions who benefit from the intervention). The web of relationships and competences, needs and reactions helps the young people to become "active protagonists of knowledge (D'Alonzo, 2009), and therefore individuals aware of their choices and actions.".

Organisation and operational structure of the approach

The experience matured in our local area is borrowed from the Peer Education competence practice programme promoted by the Associazione Contorno Viola, which, in the

late 1990s, in the area of Verbano-Cusio-Ossola (IT), launched a new approach to the prevention of risk behaviours.

The structure of a peer education project is spread over a number of years, following a mindset of cascade awareness raising. The task is therefore to design the structure starting from a minimum two-year cycle. In the first year of experimentation it is essential to present the project to the entire institute (institutional referents, teachers and students), before subsequently recruiting the future volunteer *junior peer educators* (1st level training), who will complete a training course on group leadership and management methodologies. At the same time, specific information on the issue will be provided (in our case, bullying and cyber-bullying). Drawing on this training, the junior peers will have the opportunity to intervene in classes of younger pupils (for example, two fourth-year peer educators will intervene in a third-year class), with the aim of fostering discussion during meetings, and thematizing the topic selected and studied during the training programme.

In the second year of the experiment, the students trained as junior peers in the previous year now become senior peers (2nd level training), and will take on the task of supporting the new junior peers in their training programme, and in the subsequent interventions. In collaboration with the GOPeer support group, they will have the task of designing awareness-raising activities and/or collective events on this topic in the school, and also of discussing potential new areas of interest.

Interventions generally last for one school period, and take place only in the presence of the peer educators, usually two or three, who, enter the class and introduce themselves, explaining who they are and why they are there. Icebreaker games will be used to create a friendly atmosphere with the class group. The issue (previously selected together with the trainers) will then be presented, implementing expression modalities such as brainstorming, or focus groups, supported by thematic stimuli through role-play, videos, articles, photos, etc., with the aim of initiating a mediated and guided discussion. The meeting concludes with a review of the experience, the activity conducted and the need for further investigation.

Some evaluation elements

This initial two-year experience has made it possible to assemble a number of evaluation elements extrapolated from the surveys conducted with the classes involved (by means of a questionnaire with open, qualitative-type questions, given by the class teachers), and by discussions with the GOPeer support group and with the peer educators themselves (focus groups were used for this). As regards the organisational structure of the process, it certainly requires significant investment on the part of the people (in this case the two deputy head teachers) who were responsible for coordinating with the external trainers in order to organise the training spaces for the peer educators, and particularly as regards arranging and organising the classroom interventions. The assistance provided by the support group was certainly effective as regards promoting and advocating the project in the institute, but was particularly useful in terms of supporting the peer educators both before and after the interventions.

On the other hand, as regards the assessment of the impact made by the interventions, a series of elements of satisfaction were seen to emerge, particularly for the peer education approach. More specifically, the beneficiaries greatly appreciated the opportunity to discuss issues with their peers, without an adult being present, a situation that allowed them to express themselves more fully: *"Interesting experience without the teachers"; "I like it because they are the same age as us and they maybe understand us more"; "it's useful because if these things had been said by an adult, we wouldn't have thought about them the same way"; "with someone the same age as us maybe we manage to talk more"*. Another aspect appreciated is instead associated with the issues discussed. In effect, there was particular appreciation for the fact that the issues discussed were close to, and closely related to, their own interests: *"you can talk about things that you can't talk to teachers about"; "it's interesting because you talk about issues that we are interested in"*.

Nevertheless, a number of critical aspects emerged, raised particularly by the classmates who were beneficiaries of the interventions. The main criticisms referred to the peer educators' ability to manage the class group, and predominantly to the problems encountered by some of the peer educators in their attempts to actively involve all the members of the class: *"some people talked all the time"; "the peers should have been more assertive because some classmates weren't paying attention"*.

The information assembled in these initial two years of experimentation clearly generates a partial (and certainly not comprehensive) result regarding this relatively new peer education experience conducted at middle school level; in fact, peer education can prove to be an approach that is difficult to evaluate since it involves various typologies of participants and environments, since it uses the impact of social dynamics (Ottolini, Rivoltella, 2014), and since the time frame considered must be relatively long in order to see the "results" in terms of prevention. However, elements have certainly been identified that can be fruitful for developing and conducting projects aimed at establishing a school culture designed to promote the psycho-physical health of pupils. Close collaboration with the scholastic and institutional referents of the schools involved is therefore laying foundations that will support and uphold this project in the coming years, while also allowing it to be broadened and extended to other institutes in Canton Ticino.

Conclusions

Schools put themselves forward as an important socialisation space for young people: they are primarily places of study, knowledge, learning, but also theatres of friendship and affection, places of education and citizenship where pupils can think for themselves, evaluate and discuss the issues and topics closely related to their own experience categories and categories of interest.

Adults must therefore consider what might be the most appropriate methods and tactics for approaching these issues in which young people are the protagonists, with a view to promoting wellbeing and preventing unease and risk behaviours (Boda, 2006).

Basically, this involves promoting auto-educational forms and opportunities, where young people are asked to take care of their peers as a qualifying element of existence, from the perspective of responsibility and civil coexistence.

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THE IMPACT OF WELL-BEING AT SCHOOL ON BULLYING AND ACADEMIC ACHIEVEMENT

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Research question and objectives

Bullying at school can cause lifetime consequences for adolescents. The psychological well-being of victims, bullies and even bystanders is impaired (OECD, 2017; Drydakis, 2014). Without adequate investment to develop students' well-being capacities in the present, pupils are unlikely to enjoy well-being as adults. The perhaps most distressing threat to students' well-being is bullying. On average around 11% of students across OECD Countries reported that they are frequently (at least a few times per month) made fun of, 7% of pupils reported that they are frequently left out of things. 8% reported that they are frequently the object of nasty rumors in school. Approximately 4% of students reported that they have been pushed or hit at least a few times per month – nearly one per class (OECD, 2017).

Beside implications to behavioral, emotional and well-being factors, bullying is related to school achievement, which is being affected considerably (Jantzer et al., 2012). Across OECD countries, low performers in academic achievement were more likely to report exposure to physical, verbal and relational bullying (OEDC, 2017). It seems likely that having been a victim of bullying also has economic implications later in life due to withdrawal from the labor market and lower wages (Drydakis, 2014). Accordingly, the relevance to reduce bullying at school to increase student performance is uncontroversial.

The relevance of social ties for academic achievement has been well documented (Schmitt, 2012). Adolescents look for strong social ties and value acceptance, care and support from others. Teenagers who feel that they are part of a school community are more likely to be more motivated and perform better academically in school. According to the PISA 2015 data, one major threat to students' sense of belonging at school is their detection of a negative relationship with their teachers. Furthermore the relationship to classmates was also supposed to have an impact of the feeling being part of a school community: On average, students across OECD countries who reported that they feel

like an outsider at school scored 22 points lower in science (OECD Average 493 points), than those who didn't report so. This gap remained significant in the large majority of countries even after accounting for student's socio-economic status (OECD, 2017).

In addition, the PISA results indicate also a strong relationship between the likelihood of reporting feeling like an outsider at school and low satisfaction with life (a level of 4 or lower on a life-satisfaction scale that ranges from 0 to 10). Satisfaction with life is an important factor to measure well-being. Students in OECD countries who reported to feel like an outsider at school where three times more likely to state that they are not satisfied with their life, compared to those who do not feel like an outsider (OECD, 2017). The association between students' satisfaction with life and academic performance revealed conflicting results. While subjective measures of academic achievement (such as self-evaluated academic competence) have been shown to predict satisfaction with life (Crede et al., 2015), evidence for the relationship between objective indicators of academic performance (such as test scores) and satisfaction with life is less obvious (Chang et al., 2003).

The relationship between dimensions of well-being, bullying and academic achievement is unquestioned. This paper focuses on the relationship between bullying, other dimensions of victims' well-being and student's academic performance in Switzerland. It deals with the question, if a high sense of belonging to schools correlates with a reduced perception of mobbing (from a victim's perspective), an increased life satisfaction and higher performance in school and how the existing differences in this matter between the three language regions in Switzerland can be explained.

This study with data from PISA 2015 shed light on these relationships within a representative sample of 15-years old student. Data have been analyzed for all Switzerland as well as for its three language regions.

Methodology and methods

The latest PISA assessment 2015 focused on science, reading, mathematics and collaborative problem solving as marginal areas of assessment. PISA also looked beyond students' academic capabilities to offer a more detailed examination of their enjoyment of life. Nearly 540'000 students participated in PISA 2015, representing about 29 million 15-year-olds in the schools of the 72 participating countries and economies (35 OECD countries and 37 partner countries and economies). The underlying sample for Switzerland contains nearly 6'000 students.

Bullying was measured by an index consisting of 6 items (e.g. "I got hit or pushed around by other students.") that reported the perception of exposure to bullying out of the victims' perspective.

The students' perception of the quality of one's life was measured by one question were students had to rate their satisfaction with life on a scale from 1 to 10.

Students' sense of belonging at school has been measured by an index of 6 items (e.g. "I feel like I belong at school.") and reported the feeling of the students being a member of the school community.

Students' achievement in PISA in all the three domains math, science, and reading measured students' performance.

First, we run some descriptive analyses for all Switzerland as well as for the three different language regions in Switzerland (French, Italian, German) with respect to the crucial factors that are important to understand differences in the sense of belonging, bullying, life satisfaction and performance on the individual and school level. Further, the associations between bullying, life satisfaction and performance have been evaluated by correlational analysis and in dependency from the students' sense of belonging at schools. Further analyses on the individual and the school level are planned to explain the existing differences in this matter between the three language regions in Switzerland.

First results

First results showed that in Switzerland around 11% of pupils reported that they are frequently made fun of, 6% of students reported that they are frequently left out of things (at least a few times per month). 7% reported that they are frequently the object of nasty rumors in school. Almost 3% of students reported that they have been hit or pushed around by others and more than 2% have been threatened by other students at least a few times per month. 5% of pupils indicated that others took away or destroyed things at least a few times per month. Summarized results imply that approximately 17% of students in Switzerland who reported being bullied at any type of bullying act at least a few times a month. Mentioned the two items, which are not used for the exposure to bullying scale showed the results that around 14% of pupils got called names by other students and almost 6% got picked on by other students at least a few times a month.

Considered by regions, the findings varied. In the Italian part of Switzerland around 13%, in the German part almost 12% of the students indicated that they got called names by other students (at least a few times per month), while in the French part of Switzerland more than 18% reported, getting called names by others. About 3% of students in the French and German Part reported being hit or pushed around by other students, whereas in the Italian part only half indicated so.

First results showed a negative association between being frequently bullied and students' sense of belonging to school. Furthermore a negative correlation between frequently bullied students and academic achievement has been found. Differences between the three language regions will be explained by differences on the individual and the school level.

Discussion

Nearly 17% of students in Switzerland have reported being bullied at least a few times a month. There are significant differences in the students' perception of bullying in the three language regions in Switzerland. Bullying at school plays a crucial role for students' well-being and may reduce students' school achievement. Satisfaction with life is an important factor to measure well-being. Furthermore, teenagers who feel that they are part of a school community are more likely to be more motivated and perform better academically in school. Thus, how the differences in the perception of bullying can be explained on individual and school level and its dependency from the sense of belonging at school is important.

Bullying and its dependency of the students' sense of belonging at school fosters the insight, that the encouraging of a respectful and save school-environment can reduce bullying and supports students' well-being and achievement.

Because there is no general approach to prevent bullying, the first step to point out the crucial factors on the individual and the school level to reduce students' perception of bullying. Over all it is strongly advisable to support schools in the difficult struggle to assure students' safety and increase the life satisfaction and school performance.

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BE HAPPY, AT SCHOOL!
181 TEACHERS AGAINST BULLYING

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Here we describe a project for research, training and intervention to support wellbeing in school, considering wellbeing a protective factor for preventing maladjustment and bullying.

Teachers are the main target of the project; the secondary targets are parents and kids.

The project is the result of a collaboration set up by Don Gino Rigoldi, the founder of Comunità Nuova, important charity and rehab organization, Ismo, a training institution directed by Vito Volpe and Giovanna Garuti, and Ugo Castellano from Fondazione Sodalitas, Milan.

Three years of field work have been completed in 2012 with a book entitled "Essere Felici a scuola, 181 insegnanti contro il bullismo" (Castellano & Rizzotti, 2012).

The overall objective of the project was to identify the needs, develop and implement meaningful actions, directed specifically at school: promoting wellbeing in school, with the aim to empower young people, with their needs, desires, cognitive and social experiences, through the empowerment of the teacher educator, with the clear goal of preventing discomfort and promoting educational community.

From different points of view, scientific research and experience (see contributions reported in bibliography) show that a good participation in school life, in all its aspects, from contents to relationship, could become the most powerful tool for the prevention of youth problems, since it enables those personal resources that often remain unused if not repressed.

Recent studies on prevention (see contributions reported in bibliography) largely agree on the need for conducting practices and interventions not only in case of emergency or sporadically, but mainly on systematic basis; the main focus should be the introduction and maintaining of meaningful relationships as the basis for teaching and training, in order to build capacity and expression of the creativity of young people and adults.

The theoretical assumption, widely shared, is that improving relational skills allows to improve the quality of learning, and activates the ongoing processes to prevent discomfort, of which bullying is just one possible expression.

Bullying has to be seen as a symptom, and not as an objective or emergency itself; bullying is the result of a situation on which one can intervene by supporting teachers in their ability to be educators and promoters of the pupils' growth in the classroom.

Why a project dedicated to teachers

The analysis of the working group of the project aimed at establishing a continuous intervention strongly dedicated to teachers, to promote and support their educational activity.

In fact, many teachers in the Italian school suffer a situation of great difficulty, squeezed on one side by the institutional bureaucracy, and, on the other, by the fast change of the new generations, in a profession that is no longer positively considered, both on a social level and by their students' families.

Therefore, we have planned a structured intervention aiming at enhancing the educational and relational skills of teachers.

The project was designed for a group of teachers of 67 upper secondary schools in Milan. We decided to focus on this school grade and pupils aged between 11-14 years for several reasons: the changes caused by the physical and cognitive transformation, sometimes abrupt and difficult to manage, due to an increase in the load of cognitive and behavioral commitment required; the particularly critical situation of teachers of this school grade; the generally mature age (average of 49 years) of teachers who are often poorly supported in terms of motivation; the emerging adapting difficulties caused by the sexual maturation and the coexistence in the classroom. The intervention was later conducted with primary and upper secondary school teachers.

In total, 63 educational districts, 73 comprehensive schools (primary, middle school), 45 high schools, 8 provinces (Lombardia and Piemonte), and 181 teachers were involved in the project.

After three years, the project involved at least 25/30,000 students and at least 4,000 parents. Being teachers the primary target of the training project, we believe we have created a virtuous circle of knowledge: in fact, while students remain in the school institute for a couple of years, teachers would probably work longer for the same school.

Structure of the intervention

The intervention consisted of: a. "listening-research" on a sample of children and teachers; b. eleven residential training workshops for teachers focused on relational competences (being happy at school); c. regular team meetings and working with tutors/supervisors, to improve the projects and, more importantly, to meet, know and work with gradually trained teachers and colleagues in the various editions of the laboratories; d. a follow up for each school/teacher with 32 hours of supervision on projects of prevention and health promotion at school. Those projects would last at least a year in each school, and start with a workshop for the enhancement of the competence of each teacher. Teachers would be considered as "experienced connoisseur" of their daily school reality; e. preparation of a web site, with emails and reserved access area; d. listening research on a sample of teachers.

In every social planning of some complexity, research (a.), is used as a resource both to conduct an analysis of the needs, and to explore new ways to design the intervention itself.

A phase of qualitative research was conducted on a sample of pupils of the second and third year of lower secondary school, and a sample of teachers of the same school grade, coming from different schools and teaching different subject matters.

The emerged evidences have confirmed and strengthen, where possible, the need for relationship that regards both teachers and pupils. Instead of having the difficulties as a starting point, all the respondents, kids and teachers, are seeking the same thing: a good climate and good relations that help overcome difficulties,

Then, a questionnaire was created in order to detect, where required, the level of wellbeing at school. The investigation involved a significant sample of 320 teachers of schools of every level.

Residential training workshops for teachers (b.) focused on relational competences. The workshops, in groups of 20/25 teachers every 2/3 months, were led by trainers of ISMO, expert in the management of the group training, with the participation of the tutors of Comunità Nuova, and the associated researcher. The tutors and the researcher followed teachers in the second phase of the project (groups of territorial planning and intervention in schools).

The workshop, four days of intense work, in large and small group, focuses on the relational dimension, proposing a concrete practice about their listening skills, empathetic, proactive leadership attention, and assertive communication.

Developing good relations requires the ability to assume one's role responsibly, to give importance to the differences, and to use those differences constructively.

Regular team meetings and working with tutors/supervisors of projects to upgrade projects (c.) were also scheduled.

Coming back from the training experience, which was highly demanding and challenging for all, we developed a "coming back home" training with four objectives: - enable a path for a progressive implementation of what has been learned in the workshop, according to everyday reality and each teacher/school; re-read and identify the needs of their own school environment, with the objective of "being happy at school"; keep the size of the group as a resource, to have and exchange ideas, find difficulties or opportunities, especially, to meet, know and work, drawing on each other the earned experience; stay connected to project and tutors, as a transitional time to go step by step in an autonomous action.

The next intervention was a follow up for each school/teacher with a 32 hours supervision for each school (d.). At this stage, mentoring and individual supervision (approximately six months), run by trainers/experts (mentors participating to experiential workshops) were offered to teachers. In a specific section of the book by Castellano and Rizzotti (2012; step 4. The design teams and projects of schools), all projects made and the people involved are illustrated. Some designs have reached the optimal goal of being integrated into the school curriculum and the official formative plan, becoming in this way fully autonomous from the project (including funding).

In order to facilitate communication during the project, and, above all, to encourage communication and exchanges of materials and experiences among the 181 teachers

trained, a dedicated e-mail address for teachers (e.) was activated, simultaneously with the start of the first lab. Through this address the project has officially started communicating with the schools, and teachers obtained a virtual space where to meet, contact and share documents.

Evaluation

All stages of the planning and execution were continually re-discussed and redirected by the Working Group on the basis of the criteria established and agreed upon during the workshop, to give coherence to the assigned objectives, and to make a useful and practical intervention fitting with the reality of needs. The evaluation has also involved the follow-up phase, and saw the participation of teachers' recipients, so as to introduce a model with feedbacks and corrections if necessary.

The overall result of evaluation of great interest is, even for those who invest in such a project, the following: training for relations and for good climate practices would last a lifelong. In fact, the teacher himself would remain the protagonist and creator of classroom management, and of his/her relationships with colleagues and with the school institution.

This means that schools are progressively independent from external experts, which are a strong resource when interventions are focused, organized and tailored on specific situations. External interventions would progressively be more and more rare and sporadic, especially for reducing discomfort and promoting good practices at school.

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TOLERANCE DANCE. MOTOR-EXPRESSIVE ACTIVITIES FOR STUDENTS' WELL-BEING AT SCHOOL AND FOR THE DEVELOPMENT OF A TOLERANT SOCIAL MODEL

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Introduction

This school experience, which took place in a Physical Education and Sports programme, resolved to contribute to students' formation by generating a condition of wellbeing under a eudemonic perspective, which states that: "Individual happiness […] can only be achieved in a process of mutual interaction between the individual and the social context" (Zambianchi, 2015, p.55). Thus, the etymologic "Well-being" of the word wellbeing can become "co-existing well".

An expression-centred motor group activity was proposed, referable to the thematic nucleus: "Self-perception and completion of functional development of motor and expressive abilities" (Indicazioni Nazionali, DPR 89/210). This sphere has the ability to produce processes based on pleasantness, empathy and collaboration, thus suggesting a motor model which reflects the values of tolerance. This hypothesis is supported by the etymological meaning of the word "tolerate", from Latin *toleràre*, whose root "*tol*" means *"to lift"* (Pianigiani, 1907, p.1437). Lifting is a technical element of some type of expression-centred couple or group dances and sports, together with other actions called: contacts, collaborations, connections, exchanges; a terminology which let understand the kind of psycho-physic correlation that this kind of activity stimulates, such as values of support, closeness, relationship, and union.

From here, the proposition of a Tolerance Dance (TD) whose motor "grammar" is directly related, in its signifier and meaning, to the concept of tolerance as "elevation" of what is different from the self. Besides, the Dance wants to interpose itself to the androcentric logic which, as a matter of fact, rules teenagers' education to movement in school, believing that this is the only way to teach to understand and respect the values of both genders identities.

It is believed that the following elements which constitute it may generate Wellbeing:
1. Holds with lifting and "*human pyramids*" (Fodero & Furblur, 1989, p.78): they expect situations of trust, determined by the height and balance in which the

bodies are put to complete the figures, in a situation in which the balance of one determines the balance of the other. This exalts the concept of "positive interdependence". Human pyramids increase the values of the following diversities:

– Gender: male and female together;
– Physic constitution: the sturdy ones at the base of the pyramid have to *"support"* the thin ones. Ulterior etymologic acceptation of "tolerate" (Pianigiani, 1907);
– Motor abilities: strength flexibility, general coordination, and balance;
– Temperament: novelty seeking, harm avoidance, reward dependence, and persistence.

2. Mimic-expressive actions with music and use of voice: they allow to "ex-press" (from Latin exprimĕre) emotions and live, know and listen to them because, as Gianoli (2015) points out: "they bring us messages about our state of wellbeing or malaise and indicate what we need [...]". Living emotions allows to develop what Goleman (1998, p.375) calls emotive intelligence, that is "the ability to know our feelings and other's and motivate ourselves to positively control emotions, internally as well as in our relationships". The music facilitates the induction of emotions because it stimulates the amygdala first. The use of the voice allows to project "beyond the limits of the body, and it is the indispensable condition to discover the other and pass from what is lived inside the body to the open space where there is the life of others" (Galimberti 1987, p.101).

3. Contact: "con-tact", therefore in a sensitive, careful, respective way, complementary of balance, support, help, abandonment. The pleasant sensations experienced through such a kind of touching reduce anxiety and represent the affective tonalities of a language which is at the base of communication (to put in common), contributing to create, as Guanzini (2017, p.91) says: "bodies and minds sensitive to contact. [...] thanks to this knowledge it is possible to organise, in the politic community, active circuits, joyous to share, [...] and journeys of socialisation and humanisation".

4. Rhythm adagio: it expresses feeling at ease. At-ease, according to Guanzini (2017, p.120) "corresponds to a sensation of deep freedom, to a kind of smoothness in a strictly codified system of rules". Therefore, the choice of music in which the group identifies itself, symbolically coordinating and uniting.

5. Creativity, cooperation and autonomy: they represent respectively the cognitive ability and the operative modalities, which focus on the centralisation of the student, making him/her the protagonist of the learning process, in a free but organised way, in a group seen as an "ensemble" of singles.

Description of the experience

The TD is addressed to High School terminal classes, to which it reveals itself as adequate as far as aim and competences go: disciplinary competences, soft skills, concerning national and European citizenship.

These competences "encourage self-wellbeing because they allow the development and realization of every individual's potential in order to enrich their personality" (Ryan & Deci, 2001).

The cooperative method that has been chosen to pursue them "involves a journey of development through integration with the surrounding world" (Nussbaum & Sen, 1993), in which individual happiness is realized in the sphere of social space.

This is an activity which aims to conceive and develop a group choreography based on a musical backing track. The choreography is composed by these specific requirements:

1. Sequence of group aerobic gymnastics, with possible style variations: popular dance, modern, jazz, hip hop, breakdance, funky, etc.;
2. Elements of body miming;
3. Elements of body expression;
4. Use of voice;
5. Touching;
6. Holds and lifting;
7. Human pyramids;
8. Various formations and wide and three-dimensional use of space;
9. Time: between 2' and 3'.

The activity took place during the Academic Year 2016/2017 in three final classes of a scientific High School in Treviso, Italy. The students involved were 72 (39 females, 33 male) aged of 18-19 years. The Unit of learning consisted of 12 lessons, each 1-hour long. The twelve-lesson retook and strengthened the motor and expressive prerequisites developed during the previous Academic Years, in order to assemble them into the TD. The methodology was that of *"Cooperative learning: positive interdependence; to face to face promotional interaction; individual responsibility; socials skills; group revision"* (Comoglio, 1998, p.58).

Lesson 1: Presentation of the activity and sharing with the students: goals, time and procedures; invitation "to face to face promotional interaction"; free division of the class into two groups; free choice of music.

Lesson 2: Sequence of group aerobic gymnastics with music, with possible contamination of other styles.

Lesson 3: Experiences of "Miming as an expressive tool committed to gestures and facial movements" (Galimberti, 1992, p.582) and Body expression: "to communicate feelings, emotions, thoughts and ideas" also through the use of voice (Galimberti, 1992, p.371). Activities were done individually, in couples, in small or large groups.

Lesson 4: Body touching in proxemics progression i.e. Approaching, Con-tact with the contraposition of objects, Con-tact with the classmate with progressively more extended and unusual body parts until the contact of the glazes is kept for a long time.

Lesson 5: Holds and lifting in a progressive numeric augmentation of difficulty and trust, until a condition of a relaxed and trustful body is reached, in silence.

Lesson 6: Human pyramids, numerically increasing and with a progressive request of balance, elevation and interdependence.

Lessons 7-8-9-10-11: Creation of the choreography conceived by the students, based on a musical backing track.

Lesson 12: Verification. Significant work: execution of the Dance on a backing track. Filming by the teacher. The verification involved:

1. Watching of the video.
2. Auto evaluation based on two evaluation rubrics with indicators and descriptors based on three levels of achieved competences: elementary (6-7), intermediate (8), advanced (9-10):
   a. Rubric 1: disciplinary competences.
   Indicators: coordination, rhythm, expressiveness, composition, originality.
   Group assessment grid: it expresses a collective evaluation of the final product.
   b. Rubric 2: transversal competences.
   Indicators: collaboration, adaptation, communication, organization, creativity.
   Personal assessment grid: it expresses the level of perception of individual auto-efficiency in comparison with each indicator.
3. Group revision. Metacognitive personal reflection.
4. Writing, in one word and anonymously, of the prevalent perception during the activity.

Conclusions

The conclusive considerations describe what has been observed by the teacher and perceived by the students during the experience, in order to understand which attitudes and perceptions the TD generated.

The teacher's observation was made to understand the psycho-motor attitudes of each student in relation to the group/situation and in dealing with the technical elements constitutive of the TD and its ideational/operative modalities. The attitudes have been noted in a Logbook and observed focusing the attention on three aspects, according to "Rosenberg and Hovland tripartite model (1960)" (Sacchi 2009, p.3): Cognitive: information and beliefs; Affective: emotional reaction; and Behavioural: actions of approaching or removing with particular attention to the motor act.

The positive attitudes emerged were:
– Curiosity; trust; participation; enthusiasm; respect; support; help, sharing; closeness; contact; coordination; synergy; synchrony; balance; fluidity; interdependence; union; collaboration; abandon; communication; understanding; relaxation; spontaneity; serenity; hilarity; fun; attention; focus; sense of responsibility; organisation; autonomy; positive leadership; coping.
– The smile and the auto-applause which were generated respectively during and at the end of the verification expressed "happy in co-existing", even from the students who had manifested some bad attitudes.

The negative attitudes emerged were:
– Initial resistances by some male students generated by the prejudice of doing a "girl" activity, manifested as: insufficient active participation, polemic behaviours;
– Embarrassment in sharing emotions;
– Intolerance to body touching with classmates;
– Difficulty to collaborate.

Concerning students' perception, here are the words indicated by the 72 students to describe the prevailing perception during the experience:

– Positive words (53):
  fun (9); union (7); collaboration (3); satisfaction (3); sharing (3); thoughtlessness (3); cohesion (2); engagement (2); freedom (2); happiness (2); joy (2); lightness (2); closeness; courage; creativity; enthusiasm; euphoria; life; interest; naturalness; novelty; passion; stimulating; timing; wonder.
– Negative words (19):
  difficulty of collaboration (3); indifference (3); shame (3); embarrassment (2); bother; chaotic; disgust; disorganisation; frenzy; obligation; patience; senseless.

What reported above outlines a majority of positive attitudes and perceptions. The positive ones have largely prevailed, creating a climate favourable to the learning process and stimulating the "sense of individual responsibility". The choreographic final "product" was indeed concluded in the right terms and times, involving each student.

The positive perceptions, registered by the students, were 73,6%. It is interesting that this data can be explained by three main factors: pleasantness (33); empathy (12); collaboration (8). The negative perceptions were 26,4% and outline a possible lack of maturity of the Person, not adequate social skills and resources of these kinds below:
– Cognitive: gender prejudices and stereotypes;
– Affective: difficulty of self-expression and emotions:
– Behavioural: difficulties in collaborating and touching.

We think that the results can represent an encouraging start for future researches which aim to prove them as totally true. The positive things that emerged, together with climate created in the classroom and the "smile", seem to generate a condition of Wellbeing, according to the acceptation of "happy co-existence", founded on tolerance. TD also seems to be responding to the "warm cognition" method: "[…] it is needed to teach with the smile, therefore with this emotion of wellbeing […] with the best emotions!" (Lucangeli, 2015).

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THE WELL-BEING OF CHILDREN
WITH SPECIAL EDUCATIONAL NEEDS

CHARACTER STRENGTHS AND CHILDREN WITH SPECIAL NEEDS: A WAY TO PROMOTE WELL-BEING ALL TOGETHER!

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Peterson and Seligman (2004) developed the Values-In-Action Strengths Classification in order to measure how high people score on six virtues encompassing 24 character strengths (e.g., Humanity as a virtue encompassing love, kindness, social intelligence; Knowledge encompassing creativity, curiosity, judgment, love of learning, perspective; Temperance encompassing forgiveness, self-regulation). Happiness increase is observed through some strengths-oriented interventions for adults (e.g. Gander, Proyer, Ruch, & Wyss, 2013).

Concerning school, a growing number of researches have shown several benefits of interventions in which pupils or students learned to identify and develop strengths (e.g., White & Waters, 2015; Shankland & Rosset, 2016). These benefits include individual as well as relationship (or group) outcomes, especially increasing children's well-being, level of positive affect, school engagement and achievement (e.g. Wagner & Ruch, 2015).

More precisely, in a randomized control experiment, Seligman and colleagues (2009) compared 347 US adolescents (aged 14-15) following either standard Language Arts classes (control group) or a Language Arts classes including discussion about character strengths, in-class and homework activities and a follow-up journal reflection (experimental group). The approximately 20–25 80-minutes sessions enhanced enjoyment and engagement in school (these results were found also two years after the end of the intervention). Moreover, evaluations of the teachers (not knowing which students participated in the intervention or the control group) indicated that this curriculum focusing on character strengths improved learning and engagement in school as well as curiosity, love of learning, and creativity. In another recent study, Quinlan and colleagues (2014) showed that after a short (six-session) program of 90 min (with a further review session one month later), 9-12-year-old pupils learned, among other things, to recognize strengths in themselves and others and to use them more often. Furthermore, intervention classes in comparison to control classes reported higher levels of class cohesion and relatedness need satisfaction, and lower scores on class friction.

Considering the benefits for relationships in the classroom, such interventions may be particularly relevant in the context of including children with special needs in the

ordinary curriculum. In this vein, Niemiec, Shogren and Wehmeyer (2017, p.15) have recently outlined the lack of research regarding character strengths programs in children with intellectual and developmental disabilities. They suggest that: "such interventions may provide a way to address issues commonly identified related to building relationships between people with intellectual disability and their peers, as people with disabilities are often cast in roles of needing help, rather than giving help, limiting reciprocal relationships (Snell & Brown, 2010). However, by creating structured ways for people with intellectual disability to use their strengths to contribute to the lives of their peers, the reciprocity of peer relationships could be enhanced. But, to our knowledge, no study has examined the positive outcomes of such interventions in inclusive setting for pupils with special needs."

Consequently, and because children with special needs are "extraordinary", we hypothesize that identifying, developing and promoting the strengths of those children may be particularly interesting in order to improve their inclusion in the classroom as well as their positive affects (such as benefits for the whole class where children with special needs are present). In this context, we proposed and pre-tested interventions based on these character strengths that aimed to reduce discrimination between children and improve class climate where everyone is recognized for what they can bring up to the group more than for their difficulties.

These interventions took place in Valais/Wallis (Switzerland), a well-known place where inclusion projects meet special education goals. Indeed, most of the children with special needs are integrated in ordinary primary schools. There is a political tendency to promote these types of approach by decentralizing the special aids in the ordinary classes. Thus, integration with the other children from the village, is sought taking into account the well-being of all the children as well as the developmental possibilities of the child with special needs (Staat Wallis, 2014). Even though this integration logic does not exactly correspond to an inclusion approach (Tremblay, 2012), the children with special needs and the other children are together in school for an important part of the week.

We introduced character strengths in a class integrating a child with Asperger syndrome (ASD). This approach was based on the following five steps proposed by Linkins, Niemiec, Gillham, and Mayerson (2014, p. 3):

1) Developing a character strengths language and lens using VIA survey (Peterson & Seligman, 2004) which allow identifying strengths rather than weakness (e.g., describing friend's strengths);
2) Recognizing and thinking about strengths in others (e.g., looking for strengths in the classroom environment);
3) Recognizing and thinking about one's own strengths (e.g., identifying three own strengths in different contexts);
4) Practicing and applying strengths (e.g., thinking about how to use one's strengths in a new way or in new contexts);
5) Identifying, celebrating, and cultivating group strengths (e.g., collecting facts about the diversity of strengths in the classroom).

At this point, we don't know if this intervention was adapted to ASD children. However, we were motivated to go into this approach in depth and to try to measure its

effects by the testimonies of the children and the teacher. ASD child said, for example: "I felt really better [after the intervention]. [...] I think I learned new ways to increase relationships with peers". Another pupil reported: "It was interesting to find good things for each child". From his point of view, the teacher doesn't see any inconvenient in going deeper in such strengths-based activities. He sees indeed compatibility with the official curriculum.

The next step is to go further and deeper in an intervention at a wider level. Following this promising pilot study and the enthusiasm of all teachers and managers who heard about the project, it was proposed to introduce in the whole school center (450 pupils less than 12 years old) the following aspects:

– Decoration of the school agenda with the 24 strengths;
– Elaboration of a game with the 24 strengths;
– Information to teachers on what are the strengths and what impact is expected;
– Linkins and collaborators' intervention (2014) in two integration classes.

The advantage of such intervention is that it (Shankland & Rosset, 2016):

– Can be put into place by individual teachers;
– Can be carried out by one teacher or several in the school;
– Can be integrated into the existing curriculum;
– Can be put into place without administrative red tape;
– Does not require extensive time to put into place;
– Can be used/adapted with students of different ages;
– Is aimed at increasing the positive instead of fixing weaknesses.

Our aim is to measure over a whole year the impact of these propositions on different dimensions of well-being (positive emotions, prosocial behavior, perception of diversity in the classroom, psychological well-being) and relatedness, in both ordinary and integrated children, as well as the quality of the integration of children with special needs (e.g., tolerance by other children, teacher's beliefs).

We expect to see the classes which had the Linkins program (2014) to make more progress than the other classes which had only the agenda with the strengths and the strengths game. Finally, a key variable is the teacher's belief in the intervention: he/she will be surely an important source of change in his/her classroom.

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AUGMENTATIVE AND ALTERNATIVE COMMUNICATION FOR THE PROMOTION OF WELLNESS AND PARTICIPATION IN CHILDREN WITH INTELLECTUAL DISABILITY

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Introduction

With "Participation" we mean the involvement of a person in a situation of life. In order to be considered "participation" it has to "work well". With "functioning" we mean the level of integration between the type of activity to be performed, the body structures and functions and theindividual needs: all these dimensions relate to the context (Viziello, 2008).

Participating is a fundamental human right and the well-being of the individual is given by being able to participate in the situations of one's life. The concept of participation recalls the concept of positive semeiotics in the clinic, that is, how to read the positive signs and the potentialities of the individual, rather than his negative deviation from the usual.

The International Classification of Functioning, Disability and Health (ICF, 2001) is an important breakthrough in the concept of relationship between health-pathology-handicap and environment because it considers the latter central for the prognostic evaluation of how the subject, regardless of its personal framework, is able to deal with him-herself and manage a given environment. The concept of compromise becomes therefore the expression of the dynamic interaction between a health condition and the context factors. In taking over and checking the interventions, we must consider the weight that the intervention itself takes on the subject's living environment.

The difficulties in individual operation can be categorized into two types: activity limitations (difficulty in performing tasks) and participation restrictions (life-related issues).

For this reason, the concept of participation becomes fundamental when considering the area of disability, since the difficulties of participation concern both the manner in which it is expressed (quality) and the size (quantity).

When talking about disability, it becomes therefore important to consider what are the barriers to participation, that is, the set of factors that, by their presence or absence, limit the functioning and prevent the participation of an individual.

We can distinguish personal barriers (impairment, disabilities) and environmental (characteristics of the physical and social world). It is possible to intervene on the barriers by providing facilitators: both environmental (attitudes, expectations, strategies or environmental changes) and personal (psychological, affective and behavioral aspects).

Among the many meanings of the term "participation" there is one related to the concept of communication: to participate means to communicate, to disclose a news, an event, a request. To participate communicating means therefore sharing with somebody else: telling an event or simply revealing one's own need.

Many types of disability are often associated with communicative difficulties, resulting in problems related to the incompatibility or misunderstanding of the real needs, wishes, demands and thoughts of the individual.

This set of conditions causes very heavy frustrations, not only for the people that are involved in first person, but also for all those around them, unable to understand the real needs of individuals and to react in a proper way.

The Augmentative and Alternative Communication (AAC) can thus represent a very important facilitating tool, which reduces the barriers to their participation: it can therefore be considered an environmental facilitator.

The AAC is an approach that can foster, improve, compensate, increase, and structure the communication (both expressive and receptive), able to integrate but not replace with other supports used in the set operational framework. This new clinical-rehabilitative-educational orientation takes advantage of specific knowledge and integrated techniques, technological tools, communication strategies and alternative codes (such as images) useful for promoting communicative abilities in people lacking or without (temporary or permanent), especially verbal communication (Cafiero, 2009).

In this essay, we will present a summary of the psycho-educational interventions carried out in the Ability Center in Trento, "Il Paese di Oz" (Anffas Trentino Onlus) with preschool and schoolchildren with intellectual and relational disabilities. These interventions have considered the use of AAC in order to increase the participation and therefore the well-being and the children's quality of life in different situations of their lives. The constant work of networking between family and school has allowed us to share all the methods and used tools, described here.

Aims

The main aim is to increase the social participation of disabled children with communication difficulties or language-specific disorders, identifying functional "alternative" communicative methods, that are shared and useful in their contexts of life (center, home, school, territory). Educational interventions promote the development of various skills, such as: communicative skills (making choices and demands, eg. in peer games, vocabulary expansion), emotional-relational skills (having proper interactions with each other, awareness of emotions, such as what happens at school or at home), cognitive skills (develop planning / organization skills, useful in school contexts and daily life activities), behavioral skills (reducing dysfunctional behaviors at home and school), autonomy (shopping, prepare a simple product to share with others).

Method

The psycho-educational interventions are carried out in everyday life situations (eg. kitchen, supermarket) and through concrete activities (eg cooking, shopping) with pre-school and school children (primary school) with intellectual disabilities, followed in an Ability Center for Developmental Age: two one-hour sessions of educational intervention per week, during a full school year. There is a constant networking for each child, that is characterized by: counseling sessions and meetings with educational figures (three per school year), technical talks only with teachers and parental interviews to identify possible new needs and share useful and functional strategies.

The tools used with every child, are established ad hoc by the child's reference team after an assessment of skills and needs.

The methods are based on the Task Analysis and the use of the Augmentative and Alternative Communication (AAC).

In the Theories of Learning, the Task Analysis indicates a procedure that breaks down a skill or task in sub-skills or simpler actions that it implies, so that the abilities can be achieved, because already owned by all subjects, to whom the task is proposed in learning (Gagnè, 1985; Mager, 1975).

The Augmentative and Alternative Communication (AAC) is an area of clinical practice that tries to offset the temporary or permanent disability of people with complex communication needs. It uses all the person's communicative skills, including vocalizations or verbal language, gestures, signs, auxiliary communication, and advanced technology.

It is not simply an application of a rehabilitation technique, but the AAC builds a flexible customized system ad hoc for every person, to be promoted in all times and places of life, because communication is for everybody necessary and indispensable always, and not only in the therapy room. The lack of chances for communicating with others has serious negative impacts on the development of relationships, language, cognitive and social development.

The AAC tools used to intervene within the contexts of life of our disabled children include the use of communication tables such as: choice tables, themes, word strings (to make requests), rules tables (indicating, with images, the behaviors required in a particular context).

The sequential photographs are also used, representing the various phases of the task (eg. washing hands): through a Task Analysis, the child has the ability to monitor the sequencing of the task. Very useful are AAC personal books (which tell personal stories of child life) and edited books (stories "adapted" and translated into symbols). The most commonly used communication softwares are: Boardmaker, Symwriter, Go Talk Now. Some children also use Vocal Output Communication Aids (VOCAs): voice-based communicators that facilitate interaction within the school context.

The educational intervention includes also the use of technology, such as computers, tablets, cameras and camcorders, to create and view the child's photos and videos in order to re-elaborate experiences and share them with family and school.

The check of intervention efficacy is done through indirect (home / school talks) and direct observations, also with the use of observation grids.

Practical implications

Although the interventions take place in the Center and on the territory (supermarket, restaurant), there are many relapses at home and at school.

At school, for example, the child develops the ability to make choices (a game, a book to read, a friend to play) or requests, the ability to organize its school material (with Theme Tables) and the opportunity to share, through photographs and tables, their own experiences and the rules of the different contexts of life. In children with tetraparesis, VOCAs allow them to create communicative routines (eg. activate voice output to greet classmates at entry / exit moments).

Discussion

The value of communication is not given by the form it takes, but rather by the effects that it is able to produce. In fact, it is able to promote new opportunities for participation and interaction with others, facilitating relationships, improving mutual understanding and consequently also the social skills of the individual.

The Augmentative and Alternative Communication therefore promotes the opportunity to express oneself and to be understood by the people around the individual, promoting greater self-determination, autonomy, a better sense of self and self-awareness, optimizing the quality of own life and of people that surround oneself (Cafiero, 2005).

The possibility to understand and to be understood from the other, through shared codes, helps also reducing some dysfunctional behaviors, considering the relationship between communication difficulties and behavioral problems. The early start of Augmentative Communication Interventions can help to prevent further communicative, symbolic and cognitive impoverishment and the appearance of behavioral disorders, otherwise widespread as an attention strategy (Cafiero, 2009).

The relapses in school and family environment are positive. Firstly, because the child has the opportunity to experience in more contexts, then generalize and consolidate, its communication tools. In addition, thanks to networking, we can identify ad hoc strategies for each child to meet its daily needs. Finally, also the peers and the reference adults (parents, teachers, therapists) experience less and less unilateral ways of communication: it is no longer the other that "gives voice" to the child, but it is the latter who becomes the master of its own tools to participate in the context in which it lives.

The Augmentative and Alternative Communication becomes a tool for the child's active participation, within the context of the school and the reality around it, but we can't avoid detecting the initial difficulty of such instruments, where, in order to make the child use the tools, the presence of an adult is necessary that can help in the use and in the relationship with the other.

In addition, the use of specific materials for the child requires networking and skills expansion, for example by teachers, who often find themselves having little or no resources to build materials targeted training.

It is therefore important to raise awareness of the different school contexts so that they can recieve softwares and make time available for the recognition of the teachers' work.

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TRANSITION FROM SCHOOL TO VOCATIONAL EDUCATION FOR YOUNG PEOPLE WITH SPECIAL EDUCATIONAL NEEDS: APPRENTICESHIP SITUATION, SUPPORT AND WELL-BEING

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Introduction

The transition from school to work is one of the major developmental tasks for young adults and has important consequences for further career development (Grob & Jaschinski, 2003; Nurmi, Salmela-Aro & Koivisto, 2002). It is also known that satisfaction with work (or vocational education and training (VET)) as one important life-domain in this age-group influences well-being in general and mental health specifically (Kälin et al., 2000). This is especially true for young people with learning difficulties and special educational needs: transition from school to work is a particular challenge for them, because they may face more difficulties finding a suitable apprenticeship and fulfilling the requirements at the company and at school (Felkendorf & Lischer, 2005). Since most studies on vocational development in Switzerland neglect youths with special educational needs not much is known about their situation and career development (Bertschy, Böni & Meyer, 2007). In light of this, the University of Applied Sciences of Special Needs Education Zurich and the Swiss Federal Institute of Vocational Education and Training Lausanne teamed up to conduct a longitudinal study (2016-2019) to follow the vocational paths of learners on two vocational levels (two year basic apprenticeships with federal VET Certificate and practical training by INSOS) and in four sectors (gastronomy, home economics, joinery and building sector). The study is financed by the State Secretariat for Education, Research and Innovation (SERI).

In this paper we focus on the first months of the apprenticeship-time. This period is especially challenging for different reasons: young apprentices have to get used to a new work rhythm and social environment, must adopt new roles and form new relationships in the VET-company and in VET-school (Nägele & Neuenschwander, 2014). Besides they are in the transition to adulthood and become more independent from their family (Grob & Jaschinski, 2003). The transition is likely to involve both positive and negative experiences, may be experienced more or less as stressful and thus probably affect job-related well-being and satisfaction (Kälin et al., 2000). On the other hand, general well-

being probably facilitates to cope with the upcoming demands of the apprenticeship (Creed, Fallon & Hood, 2009). Thus, it seems to be important to differentiate between job-related well-being (or satisfaction with the apprenticeship), well-being in general and potential spill-over effects from work to non-work domains (Grebner, Semmer & Elfering, 2005). Other factors should be taken into account as well, namely support and professional/organizational commitment as potential protective factors: support from VET-trainers and teachers were shown to be important for self-esteem and career aspirations (Hofmann, Stalder, Tschan & Häfeli, 2014). Parents on the other hand are usually unfamiliar with the demands of specific work or training environments, but can help to reinterpret difficult training situations and thus protect self-esteem of their youngsters (Vignoli, 2009) and reduce self-devaluation during transition period (Neuenschwander, Frey & Gasser, 2007). Furthermore, different studies investigated the interrelations between organizational commitment, fit perceptions and the success of the adjustment process (Nägele & Neuenschwander, 2014).

Research question and objectives

Our main interest in this part of the study is the question how satisfaction with the apprenticeship and general well-being of the apprentices in these first months can be best explained by different antecedent and contextual factors:

1) First we aim to explore the question how different experiences with career choice (exploration, support) and characteristics of the transitional process (directly, gap between) are related to later fit perceptions, satisfaction with the apprenticeship and general well-being.
2) Secondly we will focus on the question, how the perceived situations in VET-school and at the VET-company (e.g. stress, social integration, support) are related to satisfaction and well-being. Which paths lead from these situational variables to satisfaction with the apprenticeship and to general well-being (direct or indirect, spill-over effects)?
3) Thirdly we'd like to know more about the interplay and the mutual influences between these influencing factors: what is the role of support (especially from parents) and professional commitment as moderating variables in these relations: are they likely to "buffer" negative effects of detrimental training conditions?

Methodology and methods

This study is part of a longitudinal research with different measurement points that started in 2016 and is carried out in six German-speaking and three French speaking cantons of Switzerland. The view of the trainees is central to this enquiry: about three months after beginning their training they have been surveyed for the first time (T1) with written questionnaires in their vocational school classes. Participants at T1 were 788 young adults (Mean age 19.01 years; SD=4.1 years; 39.3% females). Out of this population 628 (80%) were in a two-year basic training with federal VET certificate and 160 (20%) in a practical training by INSOS. The participants came from different

sectors: 247 (31.2%) worked in gastronomy; 156 (19.7%) in joinery, 178 (22.5%) in home economics, 187 (23.6%) in the building sector and 23 (2.9%) in other sectors.

At this first point of measurement the apprentices were asked about their background (family, migration), about their school careers, their career choice and the time between finishing school and entering the apprenticeship (in retrospective). A big part of the written questionnaire addressed the current situation in apprenticeship, using measures from former studies (partly adapted for our population), e.g. stress at the VET-company and at the VET-school (Semmer, Zapf & Dunckel, 1999), social integration in the work-team (Neuenschwander, Hermann, Frank & Faschinger, 2013), professional commitment (Neuenschwander, 1998), fit perceptions (Neuenschwander et al., 2013), satisfaction with the apprenticeship (Baillod & Rogger, 1989), social support (Frese, 1999) and positive attitudes towards life (Grob et al., 1991).

Analyses and results

Results of our ongoing descriptive analyses show that a high percentage of the apprentices are satisfied (from "rather" to "extraordinary") with their apprenticeship in general (82.7%), with their school (86.2%) and their company (86.1%). Most of the apprentices agreed with different statements about their "fit" (measuring fit perception), as learning this profession is the best solution for them (87.9%), fits to their person (82.9%), to their abilities at school (80.0%), to their interests (81.9%) and to their professional abilities (88.0%). As expected, general satisfaction with the apprenticeship correlates positively with satisfaction in school (r=.37) and with the company (r=.73), and with fit perceptions (r=.53).

As a next step we investigated the correlational patterns to learn more about the relationship between career choice and experiences during transition from school to apprenticeship and later between fit perception and satisfaction with the apprenticeship (questions 1). Analyses so far show that exploring the profession ("Schnuppern") and knowledge about the profession and the company are positively related to later fit perception (r=.19 – r=.25) and overall satisfaction with the apprenticeship (r=.14 – r=.21). Former support from teachers is also relevant for later fit perception (r= .09) and support from teachers and parents for later satisfaction (r=.13 – r=.13). We also have some counterintuitive results that need further investigations, e.g. the number of work experiences before is negatively related to overall satisfaction (r=-.11) and to fit perception (r=-.09).

Methods of the ongoing data analysis include descriptive statistics and correlational analyses. The following steps of analyses will focus on the relations between the situation in apprenticeship and well-being (question 2), potential moderating effects of support a professional commitment (question 3) and include more advanced methods of analysing our data, using regression- or structural equation modeling (see discussion).

Discussion

Our results so far show that the population of the two programs are very heterogeneous: apprentices differ in their age, come from very different countries and had very different experiences before entering apprenticeship (some come from compulsory school directly,

others had several years in between). Nevertheless we can state, that the level of satisfaction and fit perception is quite high. Thus most of the apprentices seem to cope well with the different demands of entering an apprenticeship.

Further analyses will include more of the different measured conditions of the apprenticeship as influencing factors on satisfaction (e.g. stress at school and at the company, social integration) and focus on the interplay with characteristics of the transition process before starting the apprenticeship. An alternative strategy of analyzing our data could be to compare different groups (e.g. four groups combining "difficult" vs. "easy" transition – "high" vs. "low" satisfaction). This strategy focuses more on different patterns of transition instead of linear relationships and probably fits better to the complexity of possible transition processes and mutual influences between the involved factors.

There are some limitations of the study that have to be mentioned at last: first, our analyses so far are based on cross-sectional data and therefore don't allow causal conclusions. Secondly, we rely on self-reported data coming from one single source. Finally, we conducted our research with a special sample of young people with learning difficulties which is not representative for young people in the transition process in general. Nevertheless this is a group that needs particular attention at this first transition step.

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PROMOTING PSYCHOLOGICAL WELLBEING AND REDUCING PROBLEMATIC BEHAVIOURS: A PSYCHO-EDUCATIONAL PROJECT FOR YOUNG PEOPLE WITH MEDIUM-LOW INTELLECTUAL DISABILITY

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Introduction

Studies on socio-affective and emotional-relational development in people with intellectual disabilities, along with the possibility to implement educational interventions in these areas in case of dysfunctional aspects, are quite recent. For many years, problems relating to these areas were considered innate to the mental disorder, thus ignoring clinical evaluations of emotional and behavioral disorders.

Children with intellectual disability certainly show more problems due to the cognitive deficit, but there are also other factors to take into account, which can be intrinsic (as biological and attitudinal predisposition), and extrinsic (in infancy, factors involved in care and the definition of the socio-emotional relationship between child and parent; later, the experiences gained in the social environment, family variables as the quality of the domestic climate and parents' ability to use appropriate educational strategies). External factors are often influenced by the impact the deficit has in these people's life (Matarazzo & Zammuner, 2009).

Because of this combination of internal and external elements, people with intellectual disability frequently develop a distorted and deficient mode in interpreting many relational situations, or an excessive sensitivity. This results in negative states of mind and emotions, which they might not be fully aware of, or able to regulate or face with appropriate interpersonal problem solving strategies, thus showing inadequate behaviors (Ianes, 2007; Fedeli, 2005).

The interpretation of relational contexts, often altered, and the marked sensitivity do not only affect their psychological wellbeing and that of people who share their daily life, but above all they significantly impede school, social and work integration (Fedeli, 2005).

The behavioral cognitive approach of the RET model started to help people in difficulty to better understand their emotional processes and acquire strategies to regulate them (Di Pietro, 2016).

The essence of RET is summarized in the A-B-C-D-E paradigm, where: A is the activating event, that can be an external or internal situation (like memories and fantasies), B are the thoughts about that event, C are the emotional and behavioral consequences, D is the questioning of the thoughts (B) and E are the effects that the discussion has on emotions, behavior and thoughts. RET is thus based on the assertion that thinking processes are modifiable and have a fundamental role in the origin and maintenance of psychological wellbeing (or malaise) and behaviors. Only starting to reason in a rational and positive way does not, however, induce a change new ways of thinking are not consolidated through frequent exercises. It is also important to point out that rational thinking leads to a decrease in frequency, duration and intensity of negative emotions, and not a lack of emotionality.

Reported here is a project developed following the RET model and integrated with a specific project on emotion awareness that was carried out at the "CentrAvanti" Educational Centre of Anffas Trentino "Il Paese di Oz" and involved a group of 6 young people, including boys and girls, with light to moderate intellectual disabilities aged between 14 and 18 years attending ordinary professional schools.

Goals

The purpose of this project was to promote participants' psychological wellbeing and to improve their behavior in every situation, especially at school and in relationships with peers. To pursue these goals, educators sought to promote the ability to self-reflect on experiences and behaviors, and to develop mentalization skills, helping to explore the relationship between thoughts, emotions and behaviors, and to understand what they could "say" to modify their emotional experience, and "do" to reduce inadequate behaviors.

Specifically, the objectives were as follows:
– Gaining greater awareness of emotions, even at body level;
– Helping them to share and compare emotions and affective events with a peer group in order to develop a sense of belonging (as we all feel emotions and have reactions to them) rather than exclusion;
– Helping to understand that the other person can have different thoughts and experience different emotions;
– Helping to understand the emotional process in its components (triggering event - thoughts -emotion - behaviors): why do we feel a certain emotion, what can be the thoughts and the behaviors;
– Teaching strategies to have more constructive and positive thoughts and more appropriate behaviors, especially in stressful and emotionally engaging situations;
– Teaching to ask for help if they feel they are not going to make it emotionally, in particularly difficult moments.

Methodology

Before the start of the school year, the project was presented to teachers and parents, as they had expressed similar needs and guidelines at the end of the previous school year, in order to share with them the goals and the initial value of their indicators. Parents

received a document with a brief project description, the methodological aspects, the goals and the initial indicators, and a column to insert the final values at the end of the project. The initial indicators outlined the initial skill level for each individual goal. Throughout the project there were other moments of exchange and confrontation with teachers and with parents: CentrAvanti reported any criticism or positive aspects, and so did the school and family, so that interventions were always synergistic. At the end of the school year, educators shared with teachers and parents the general trend and the final values of the indicators.

At the Centre the project included two-hour weekly meetings and lasted eight months; it was led by an educator, with the support of a trainee, supervised by the psycho-pedagogist of the Centre. Meetings have never been individual, since the comparison with the peer group and the group social reinforcement were thought to be much more effective than a 1-to-1 session with an adult.

The first object was making participants more aware of the basic emotions (happiness, sadness, fear, anger), starting from telling their emotional experiences. The described situations were analyzed together to identify the two key elements: a triggering (external or internal) situation and the emotion felt, with particular focus on the latter. The boys and girls had to express at body level (posture, facial mimicry, tone of voice and muscular tonicity) the different emotional states they experienced while photographed or video-taken. Later they had to process them together and find out which parts of their body they felt most, supported also by their images reproduced on the interactive whiteboard.

After they gained sufficient awareness of the emotions, they were asked to repeat their narratives to split the emotional process, represented by a flower, into its various components: the grass was the triggering event, the leaf the thoughts that originated from it, the pistil the emotion felt, and the petals the behaviors. This analysis has almost always begun by identifying the emotional state, so that it was clear what they felt, and continued by going back to the triggering event, the thoughts, and finally the behaviors. After completing the flower, kids were asked to focus on what they said and wrote in the various flower parts, focusing on the type of thought they had after the event, discussing how rational, "smart-person-like" it was, and trying to identify more constructive and positive thoughts that also considered the point of view of the other person involved. Special attention was given to the behaviors that the group considered inadequate and were then replaced by other "smart" behaviors. The flower thus gained another leaf with new thoughts and other petals of different colour from the first ones, on which they wrote the adequate behaviors.

Through the discussion with peers and the educator's support, kids then tried to change their thoughts, often irrational and negative, into more constructive and positive ones. Attempts were also made to make the behavior less childish and in some cases less disruptive.

By focusing on the ways of thinking, boys and girls could see how the experienced emotion could change in intensity, which tended to diminish, and how negative emotions could become positive. To better understand the intensity, the "thermometer of emotions" was used: this way they could visually perceive how the experienced intensity

could vary and that an increase in temperature corresponded to a stronger emotional activation that might have needed to be adjusted with rational thinking.

Discussions with the peer group provided good food for thought and helped realize how the same triggering event, depending on how it was interpreted, could produce different emotions, not only in intensity.

After concluding a Flower, i.e. the analysis and reflection on a specific emotional process, participants were then asked to think about other situations where they could transfer what they had learnt. In some cases, to facilitate the understanding of the triggering situation and to help consider that there may be different points of view, the event described was drawn using the "Comic strip conversation" technique.

This allowed them to consider different perspectives and alternatives or to correct erroneous assumptions, thereby enabling them to discover other people's thoughts, beliefs, knowledge and intentions.

Throughout the project, educators tried to stimulate kids to reflect and support them in reasoning in a "Cognitive Mediation" approach.

To motivate them to "grow" in thinking and behaviors, educators focused on their motivation to become "big guys", "smart people."

Discussion

Over the past few decades, there has been an increasing interest in the affective dimension of the school-age kids (Goleman, 1996, 2006; Frijda, 2009). New teaching programmes also focus on the emotional variables that come into play in the educational and learning process. All this makes it more likely that educational systems will be further improved, even for people with intellectual disabilities, becoming more effective in promoting a "full" development of the child (Di Pietro, 2016).

With this project, educators did not try to shape kids' emotions according to adult-like mental patterns, but rather they tried to make them more aware of their emotional world and able to possess thinking modes and strategies that can help them calmly face relational situations and consequently have better relationships, especially with schoolmates.

The assessment of the overall wellbeing of participants by comparing the initial values of the indicators with the final ones and sharing these evaluations with school and family highlighted that this project surely helped the kids to be a bit calmer and more competent both emotionally and relationally: they started, with support, to regulate their emotions, to begin to understand that the other can have different perspectives, and to have fewer dysfunctional behaviors during critical events. Teachers, on their side, reported better relations with schoolmates and consequently better school integration. By analyzing goals, end-indicators and the behaviors observed at the end of the project, the latter had improved proportionally to the goal achievement. For example, teachers indicated that those who had gained more awareness of what they experienced on a physical level when they felt emotions and had better understood the emotional process, were also particularly able to control their impulses at school. Likewise, those who had become more aware that their interlocutor could have different thoughts and different emotions, had managed to have better relationships with schoolmates. In general, the

school reported that, in addition to an improvement in kids' relationships with their schoolmates, also behaviors and consequently the quality of integration had improved.

While the project generated modest improvements in psychological wellbeing and behaviors, all subjects (the Centre, school, family) agreed that it was too short to make the children totally self-sufficient in managing their emotions. Presumably, a relational-affective project should accompany young people with intellectual disabilities over a longer period and in critical moments. The project highlighted the necessity to share a course on these issues with caregivers, especially with teachers, so that kids are helped to reflect on their emotional world, especially within school, the main educational system. Teachers also reported the necessity for a specific training on this topic.

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WELL-BEING AND THE TRANSITION TO POST-PRIMARY SCHOOL OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN IRELAND

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Introduction

The first longitudinal study of its kind in Ireland, Growing Up in Ireland (GUI) is a rich source of data on the lives of children. GUI follows two cohorts of children, starting at age 9 months (infant cohort) and 9 years (child cohort). This paper reports on analyses of data from the child cohort at ages 9 and 13 (with data collection beginning in 2007-2008).

This paper is part of a wider study of the National Council for Special Education (NCSE). The NCSE tasked a team from the Educational Research Centre (ERC) and the Dublin City University (DCU) School of Inclusive & Special Education with the analysis of the GUI data under the title 'A Secondary Analysis of Growing Up in Ireland Data on Educational Experiences and Outcomes for Children with Special Educational Needs'. Work began on the project in April 2013, with the first report published on children's outcomes and experiences at age 9 in 2014 (Cosgrove et al., 2014) and the second report on outcomes at ages 9 and 13 in 2017 (Cosgrove et al., in press).

The aim of the broader study was to provide new evidence to help us understand more clearly how Irish children with special educational needs, and specific identifiable subgroups within this cohort if possible, are faring at school in terms of, academic attainment, achievement and expectations of the same, engagement with school and learning, wellbeing and relationships. The study set out to identify and analyse the factors associated with these experiences and both formal and less formal educational outcomes, and to identify potential implications for educational policy and/or practice.

Research question and objectives

This paper looks at more specifically at children's transition to post-primary school, subjective wellbeing, and experience of being bullied, using data collected when they were aged 9 and aged 13. The focus of the analysis is a set of comparisons between children with and without special educational needs.

Research questions are:

1. Are there differences between children with and without SEN in their transition (settling in) to post-primary school?
2. To what extent are children's self-reported wellbeing relevant to their experiences of transition to post-primary school?
3. To what extent are children's experiences of bullying relevant to their experiences of transition to post-primary school?

Methodology and methods

As noted, this study uses data from Wave 1 and Wave 2 of the child cohort of the Growing Up in Ireland (GUI).

In order to describe and understand the outcomes of children with special educational needs, a classification scheme was developed, categorising children into groups of special educational needs, based on teachers' reports (Wave 1) and parents' reports (Waves 1 and 2). The classification scheme is described in detail in Cosgrove et al. (2014; in press). It should be noted that GUI was not designed specifically with special educational needs in mind, and some of the groups include children without a formally identified special educational need. Just under a quarter of children (23.2%) had special educational needs at age 9 and/or 13, and seven groups were categorised using the GUI data at age 13:

- Behavioural, emotional or social difficulties (BESD) (4.1%)
- General learning disabilities or difficulties (GLDD) (2.5%)
- Specific learning difficulties or speech and language difficulties (SLDD) (8.0%)
- Autistic Spectrum Disorders (ASD) (1.4%)
- Physical/sensory disabilities that impact on daily life (PHYS) (0.7%)
- Multiple or unclassified special educational needs (Multiple SEN) (1.3%)
- Special educational needs at age 9 only (SEN age 9 only) (8.9%).

Examining the stability of the classification of children between age 9 and age 13, apart from multiple and unclassified SEN, three groups were particularly unstable: behavioural, emotional and social difficulties (BESD), general learning difficulties or disabilities (GLDD), and physical or sensory disability . Only one in three children with GLDD at age 9 remained in this group at age 13, while about half of the children with BESD at age 9 were also classified in the BESD group at age 13. It was more common for children with behavioural, emotional or social difficulties to be identified as such at age 9 only or age 13 only than at both ages. This could suggest that some forms of BESD are developmental in nature, may be related to other issues, rather than being of long-term duration.

Taking this classification scheme from when children were age 13, this paper examines three areas related to children's outcomes, children's transition from primary to post-primary school, children's subjective wellbeing and children's experiences of bullying:

- The transition to post-primary school is measured using an index of four items related to children's adjustment to their new school environment.

- Subjective wellbeing is explored using two instruments administered to 13 years-old children, Piers-Harris self-concept scale (Piers et al., 2007) and the Short Mood and Feelings Questionnaire (SMFQ; Angold et al., 1995).
- Children's experiences of bullying is investigated based on self-reported and parent-reported bullying at ages 9 and 13.

Wellbeing and bullying was examined in relation to the outcome at age 13, a comparison between age 9 and 13. Additionally, the findings related to children's self-concept and experiences of bullying include a multi-level model that take into account some of the individual, home and school characteristics of children's own environments.

Analyses and results

Transition to post-primary school

On the basis of parents' perceptions of how their children settled into post-primary school, there is a moderate-sized difference of between adjustment of children with and without special educational needs. Each of the seven SEN groups (including children with SEN at age 9 only) have statistically significantly lower scores than children without special educational needs on this index, meaning that they did not settle into post-primary school as well or as smoothly. Scores are particularly low for children with Autistic Spectrum Disorders (ASD), behavioural, emotional and social difficulties (BESD) and general learning disabilities or difficulties (GLDD).

The practical implications of these findings become apparent when we consider the relationship between the index of adjustment to post-primary school and the wellbeing outcomes of these children: there is a significant positive relationship, meaning when children experience a better transition to post-primary school, their wellbeing increases ($r = .272$, $p < .001$).

Wellbeing

Children with SEN had significantly lower levels of wellbeing than children with no SEN, both in the total scores and in the six sub-scales that form the Piers-Harris measure of wellbeing. Wellbeing scores were particularly low among children with BESD, GLDD, ASD, and multiple or unclassified SEN. It is noteworthy that three of these groups of children also had the least smooth transition experiences (as described in the previous section).

Examining change in wellbeing between ages 9 and 13, across all children, there was a small increase in mean wellbeing scores. This increase was more marked among children with special educational needs, which is an encouraging finding. At ages 9 and 13, wellbeing scores were moderately positively related to one another, indicating a modest degree of stability in children's wellbeing. Even after children's wellbeing scores at age 9 were taken into account, children in all seven SEN groups had significantly lower wellbeing scores than children with no special educational needs at age 13. Adjusted scores were particularly low among children with BESD, ASD, physical or sensory disabilities, and GLDD.

Exploring wellbeing of 13 year olds in the context of individual, home and school characteristics (using multilevel analysis), showed that children's wellbeing did not vary across DEIS status (at primary or post-primary) or by post-primary school sector. However, the additional analysis indicated one finding that merits further investigation: being bullied at age 9 has a negative association with wellbeing scores at age 13 (after accounting for other characteristics). This suggests a long-term negative impact of bullying.

In addition to being asked about their wellbeing in general, children at age 13 were asked a series of questions about their mood and feelings (the Mood and Feelings Questionnaire; MFQ). The same four groups emerged as having the highest scores on this measure (and hence the lowest mood) as for the wellbeing measures. It is of concern that almost four times as many children with BESD and GLDD than children without special educational needs had very low mood.

Bullying

At age 13, 10% of all children reported that they had been bullied during the past three months. Twice as many children with SEN (16%) than without SEN (8%) reported having been bullied. Experiencing bullying was most common among children with BESD, GLDD, and multiple or unclassified SEN. Comparisons of reports of bullying were compared at ages 9 and 13. About four times as many parents of children with special educational needs (11.3%) than with no special educational needs (2.7%) reported that their child had been bullied at both ages 9 and 13. However, regardless of SEN status, parents who reported that their child had been bullied at age 9 were about 2.8 times more likely to report that they had been bullied at age 13.

Analyses using individual, home and school characteristics to explore parents' reports of the child being bullied indicated that no school-level characteristics were associated with being bullied (i.e. post-primary school sector and DEIS status, and primary school DEIS status). A lower likelihood of bullying was found for boys, Second Years, and having more close friends.

Discussion

There has been both continuity and change in the relationship between SEN and children's outcomes between age 9 and 13. Many of the social and wellbeing outcomes have remained stable between the ages of 9 and 13, but there are some findings which indicate that the needs of children with special educational needs could be better supported, particularly in relation to their wellbeing.

Many children with special educational needs transition less smoothly to post-primary school than their peers without such needs: in particular, this study indicates that children with ASD, BESD and GLDD experience transition difficulties, and these groups along with children with multiple or unclassified SEN are emotionally vulnerable. There may be a need to develop targeted, tailored supports for a significant minority of children with special educational needs as they transition from primary to

post-primary school. The results also suggest the importance of a smooth transition from primary to post-primary school among vulnerable children, as the interrelationship between successful transition and emotional wellbeing was confirmed.

On a positive note, there is some indication that the emotional wellbeing of some children has improved, as indicated by a small increase in the wellbeing (Piers-Harris) scores of children with special educational needs between age 9 and 13. However, it is noted that these children were starting from a very low base at age 9, and their scores are still significantly lower than children without special educational needs at age 13. Also, it is evident from the Mood and Feelings Questionnaire that quite a number of children with special educational needs, particularly, children with BESD and GLDD, were experiencing very low mood at age 13.

The combined evidence from both waves of GUI also suggests that some children may be more vulnerable to bullying than others, and the higher prevalence of bullying among in particular, children with BESD, GLDD, and multiple or unclassified SEN, was apparent at both ages 9 and 13.

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RAISING SCHOOL AWARENESS TO ENHANCE WELLBEING IN CHILDREN WITH DISABILITIES AND IN THEIR PEERS

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Introduction

School awareness arises from the work of a network (family, school and centers) aiming to know disability and diversity as an opportunity of enrichment both for students and for their families.

In fact, as part of its autonomy, the school sets global integration as a priority for the pupils, as experimenting with training activities. These activities are more and more responsive to the educational needs of each child and to the didactic actions. These aspects are important because it is necessary to have continuity in the transition between the social institutions and school, not only for the well-being of "able-bodied" students but also and specially for all those with disabilities (Canevaro, 2007).

The school, for this reason, finds itself working with the local community, not only for the strictly educational but also for the rehabilitative field. In fact, children with disabilities are often linked to rehabilitation centers during the developmental age, since centers might be not only a support to the development and skills of the child with disabilities, but also a point of reference for both teachers and parents.

Through networking and sharing, integration and knowledge are built for students, not only with respect to the disability of their classmates, but also with respect to the places where students with disability are helped (Ianes, 2004).

The school integration of disabled students has always been, for our city (Trento), a priority in which engaging human and economic resources, with particular attention to quality as well as quantity. We are, however, convinced that school integration is a passage, certainly indispensable, for another goal: a full social integration throughout life beyond school age (Pavone, 2014). Even though we live in a reality where, for years, all pupils with severe disabilities are included in the classes, we know that there is no space for in-depth lessons or lessons on this subject in school curricula. Experience has suggested, however, that the practice of integration can become much more educational if it is combined with better information, knowledge and awareness on disability. Together

we have acted on the assumption that it is essential to prepare the students, so that they are competent and able to communicate spontaneously with their disabled mate, with a view to mutual discovery and enrichment, without the destructive interference of inadequate fantasies generated by not knowing the "other from me" situations, also in order to put in act help strategies and solidarity effective to their disabled friends. Replacing the magical thought of children (who, often, not knowing a disability, think it is contagious or that their mate is disabled to a punishment of the sky or because they are bad and disobeying to their parents) with correct information and knowledge, unlocks the emotional meeting and affective sharing from elements that would pollute the beauty and the pleasure of sharing.

Today's children and teenagers are tomorrow's citizens and leveraging their skills, preparing and involving them, they will be sensitive, caring and active citizens for the successful integration process of all those who are in a state of disability (Minasso, 2007).

Aims

The aims of this practice are: Through playful activities, making the kids experiment what is diversity and what can be the difficulty of a child with disabilities; Give word to the possible difficulties that the children have in their daily lives with a child with disabilities; Give space to the possible questions that children have regarding the disability of their mate and diversity in general; Letting know the places that a child with disabilities can attend given their difficulties; Create a bridge between the school-class and the rehabilitation center-child with disabilities; Allow classmates of a child with disabilities to know the place that he/she regularly frequents and whom they always hear about; Make the child with disabilities more competent than the class: support what he can do and express in a place known to him/her; To be perceived as and be competent: the child with disabilities becomes an active part to let his mates know the center, that he frequents.

Methods

The school awareness is a good practice for primary and secondary schools of children and young people with disabilities, which follow the therapies in an Ability Center of Trento, "Il Paese di Oz", of Anffas Trentino Onlus. It is a practice that allows networking and opening to disability.

The school awareness is structured within two contexts that characterize the daily life of a child with disabilities: 1. School; 2. The center of development age, where the child does his or her therapies. The various interventions are conducted by the team that follows the child in the Ability Center (project referent, clinical coordinator, educator, therapists and specifically logopedist, neuropsicomotor therapist, physiotherapist, and occupational therapist, who follow the child).

In school meetings it is given the opportunity to classmates to express, without inhibitions, doubts, thoughts and emotions related to the relationship with the child with disabilities and disabilities in general. Through a role play, children can experience first-

hand some difficulties and dynamics related to diversity and disability in general. The team proposes, according to the age range of children, games that can allow children to identify themselves in the physical limit of a disabled person (e.g. "snack in the dark"; "communicate without the word"). This activity is followed by a moment of reprocessing and discussing about the dynamics and emotions felt, trying to make a bridge with the experience of their classmate in difficulty. Children are asked to express the limits that they encounter every day in dealing with their disabled companion and to recognize all the qualities and skills that they find in their friend or classmate.

To finish the meetings in the school context, the story of "Il Pentolino di Antonino" (Carrier, 2011) is read in the classroom: a child who always carries a pot, metaphor of disability and difficulties in general. Children reflect on the container of their own pot and how much, the one of their classmate with disabilities is bigger and more "bulky".

During the period where the awareness takes place at school, the group of therapists prepares the disabled child during his treatments, at the arrival of his class in his rehabilitation center. The child thus becomes the protagonist and along with the therapist decides the activities to offer to his schoolmates. In fact, the school awareness involves a last intervention in the Ability Center where the child is followed in therapy. This last meeting provides a first welcome of children's fantasies, concerning what they think an Ability Center is. The team explains that the Ability Center is a place where children with difficulty come to work with special teachers. For example, children who cannot speak well, come to play with the logopedist, who helps them better articulating words or saying good phrases; or children who cannot walk well or who have difficulty moving, coming to play with the physiotherapist teacher who helps them in movement; etc. Finally, the class is divided into two groups, to which two activities are proposed in parallel: 1. An activity that the disabled child does within his therapy session (e.g. games with words; prepare all the snacks together; sensory games); 2. A tour of the center to show them the therapy rooms and where their classmate does their therapies. Both groups carry out both activities.

Discussion

The school institution, nowadays, as a service, must face social dynamics including the ethical and cultural problems of our time. It focuses more on integration pedagogy, although there is great difficulty at the didactic level. Indeed, it often happens that at the news of the disabled student's arrival in the classroom, the reaction of teachers and classmates is a concern connected to meeting and communicative problems. The meeting problem depends on misunderstanding of the cultural, values and social meanings of the student with disabilities. The second problem comes from the difficulty of the child with disabilities to relate to his / her mates, having a different linguistic / relational code. Therefore the task of the school is to create free personalities in choices, in the assumption of commitments, in the interpersonal relationships, on the basis of acceptance, respect for the other and integration, which begin in the school context and extend to the social one. Networking with the territory facilitates this work of relational weaving and leads to a greater opening to mutual sharing and enrichment.

The project of integration allows the classmates to understand more about the difficulties of the children with disabilities and to meet them with respect to a diversity; and permits the child with disability to be himself an agent, competent and active in this project. Parents report that the children begin to engage in a process of greater awareness of their difficulties and sharing with their family. The schools highlight a positive propensity to "diversity" and a change in the class regarding a child with disabilities. In addition, for the child him/herself, there is an increase in general well-being: greater self-confidence and self-perception, a sense of belonging to one's own class and a perception of competence concerning knowing what to do. Therefore, the school awareness becomes a possibility of general well-being, both for children with disabilities and for the different contexts in which the child himself is involved.

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SEXUALITY AND DISABILITY: PROMOTING WELL-BEING IN TEENAGERS WITH INTELLECTUAL DISABILITY THOUGH A PLAN ON AFFECTION AND SEXUALITY

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Introduction

Sexual development in people with intellectual disability is not different than in neuro-typical, though it can be slowed due to biological factors. The more severe the cognitive deficit, in fact, the greater is the delay in the development of secondary sexual characteristics. Moreover, people with intellectual disabilities have a lower fertility rate (Mosier, Grossman, & Dingman, 1962).

Nonetheless, aspects related to the physical sexuality of a disabled are not different than those characterizing neuro-typical people. There are however many cultural prejudices towards sexuality in disabled people and these represent some environmental contextual factors that limit their ability expression and reduce social participation according to the International Classification of Functioning, Disability and Health (ICF).

The general behavior in our society can be summarized in two preconceptions: on the one hand, disabled people (especially those with physical disabilities) would be hypo-sexual or even asexual individuals, while on the other hand people with intellectual disorders, without evident disablement or physical deficits, would be hyper-sexual, without any inhibitions, irresponsible and sometimes even pervert.

Recently we have started assisting to a third kind of behavior, especially in people willing to show "modern and open" positions, i.e. the desire to sexualize people with disabilities (especially cognitive disabilities) at all costs, highlighting presumed needs and sexual impulses, that might be only projections of an external observer (Parrilli, 1999).

Such stereotypes and cultural taboos clearly affect caregivers' attitude (parents, teachers and educators) towards these people, so the general opinion and social conventions tend to all be opposite to an adequate expression of the sexual sphere and hence to a general wellbeing of people with disabilities (Kupper, Ambler, & Valdivieso, 1992).

In addition to these unfavorable contextual elements, the same limitations caused by the disability may result in restrictions on social participation in various aspects. The interaction of internal and external factors of the person with disabilities results in a

final impairment of personal and social functioning, which limits the development and life serenity (Wolfe, 1997).

The project reported here is a good practice of "CentrAvanti" educational project at the Educational Centre of Anffas Trentino "Il Paese di Oz". The project was born to satisfy the needs of teenagers with so many body impulses, which they often do not know to give a name and meaning to, and a mind full of desires and fantasies. It involved a group of 6 boys aged between 15 and 18, all attending High Schools. Four of them were with Down syndrome, one was autistic, and one had an intellectual disability of unknown etiology: all of them had a medium intellectual disability. The project included one-and-a-half-hour weekly meetings and lasted 8 months, from October through May.

Goals

This project had the purpose of promoting boys' psychological wellbeing through greater awareness of their own teenage body, their emotions and impulses, improving relationships with schoolmates and therefore school integration.

Specifically, the objectives were as follows:
– Knowing the body in all its parts;
– Being aware of the changes the body has had in puberty;
– Becoming aware of the importance of daily hygiene and personal care;
– Being aware of what they like or do not like of their body, not at a sexual level;
– Recognising moods and emotions related to the affective-sexual sphere;
– Gaining awareness of what happens in the body as a result of emotions relating to the affective-sexual sphere;
– Understanding the meaning of masturbating;
– Understanding the meaning of gestures by distinguishing between appropriate and inappropriate gestures in different situations (relationships and contexts);
– Gaining an initial awareness that others can enjoy different situations and experience different emotions;
– Understanding what it is like to be in love: physical states - emotions - gestures.

Methodology

At the beginning of the school year, before its start, the project was presented to teachers and parents, as they had expressed similar needs and guidelines at the end of the previous school year, in order to share the goals and the initial value of the respective indicators. Parents received a document with a brief project description, the methodological aspects, the goals and the initial indicators, and a column to insert the final values at the end of the project. The initial indicators outlined the initial skill level for each individual goal. Throughout the project there were other moments of exchange and confrontation with teachers and with parents: CentrAvanti reported any criticism or positive aspects, and so did the school and family, so that interventions were always synergistic. At the end of the school year, educators shared with teachers and parents the general trend and the final values of the indicators.

At CentrAvanti the project was conducted by two educators supervised by a psychopedagogist. The meetings started by asking the boys what topics they wanted to deal with relating to the question "What does it mean to become a man?". The topics emerged were: to know the emotions, the body and its changes, to take a crush.

The methodological approach referred to the "narrative interactive" model by Professor Fabio Veglia (Veglia, 2005, 2014): each meeting always started from what the boys knew in relation to the different topics identified together. The educators' task was to give an order and meaning to the different subjects, integrating individual ones with those of the group. To make it easier to understand what was said, visual aids were used (drawings, photos, videos, icons, writing). Throughout the project, educators acted in a way not to anticipate or replace participants, but rather stimulate their thinking and support them in reasoning, in a "cognitive mediation" approach. During the meetings, the following topics were handled:

1. Being a man: every boy built his own silhouette on a billboard, trying to imagine themselves naked in front of the mirror. Each of them presented it to the group, trying to name the various parts of the body drawn, especially the sexual attributes, and writing them on an adhesive sheet that was then fixed onto the silhouette itself. Lastly, boys were encouraged to reflect on what was drawn and on any missing aspects in their silhouette.

2. The changing body: Once the silhouette had been completed, the discussion focused on the changes in their bodies, asking them to identify the physical aspects that make them realize that they are no longer kids and that they are becoming men (e.g. beard, hair on the legs...).

3. Body care: once they gained awareness of becoming adult and their body was changing, the discussion continued on the importance of caring for their body and aspect, emphasizing the importance of dressing properly in different situations. Starting from real examples of their daily lives (e.g. brothers, dad), the boys marked on a chart how a man should look like when he goes out. This was also supported by a little trip to the supermarket to buy self-care products (e.g. gel, perfume, etc.).

4. Listening to My Body: to learn how to listen to the body, boys were presented sensory experiences, focusing on what and how they feel. Through these experiences, the boys realized that not all feelings are the same, and that there are aspects of their own body they love more, and others they might love less. In addition, the group found that similar sensory stimuli can cause different reactions: what one feels may be different from what the other feels. This work was also supported by images (newspaper, clippings, drawings) to help them define the different situations and what makes their body feel more or less comfortable. This part also ended with an experiential activity: together with the educators, the boys went to a wellness centre they chose.

5. In addition to the topics described above, at the beginning of almost all meetings educators focused also on emotions, as required by the boys themselves, and their recognition in the different situations. From these interventions, it emerged that the boys had difficulty in distinguishing happiness from excitement, so a further

targeted action was taken on what their body did when they were happy rather than excited, and vice versa. Concretely, through videos and simulations with the boys, they were asked to think about what happens to their body when they receive a gift or when they are near a girl they like. With this type of work the boys reported many of their experiences: hardening of the pubic part, inability to control the penis, over-excitement, erection, masturbation.

6. Taking a crunch: From the boys' narratives, through movies and pictures (newspaper clippings), the project included a work on the behaviors with a friend and those with a girlfriend.

Discussion

From an overall assessment of the boys' behavior in peer relationships (especially of different sex), from a comparison of the initial and final values of the indicators and the sharing of both estimates with the school and the family, results showed that all boys became aware of their teenage body and the signals it sends, both on the physical and the emotional level; the boys, though with different modalities and to different extents, have been able to express what they felt in "touching" themselves and masturbating, to begin to decentre, to understand that others can enjoy different things, and then to have more adequate behaviors in relationships. Still to different extents, the boys have become a bit more aware of relationships as friends or as a couple and of the emotions they feel, and more prone to listening to and respecting the others' needs. Teachers reported an improvement in relationships with their female schoolmates. By analyzing goals and indicators, the boys who had gained more awareness of what was happening in their body as a result of emotional/sexual emotions were less embarrassed with girls and were able to better manage the relationships. These relationships further improved in boys who had gained a greater understanding of the gesture meaning and an initial awareness that the others can enjoy different situations and experience different emotions. Overall, the school reported that peer relationships had improved and this had clearly benefited the quality of integration.

It is therefore essential to carry out sexual orientation projects for young people with intellectual disabilities, not only to give them the right to consciously experience life in all its parts, but also to enable them to establish good interpersonal relationships in the sexual-affective sphere and thus to promote better integration both at school and in other social contexts. Only with educational interventions in this direction it is possible to improve the life quality of these people and their families, who daily live in bounds and resources, desires and fears, illusions, pains or extraordinary confirmations.

"If it will be pain, we can at least say we have tried, they can talk about themselves in a story like all of us. It is our duty as operators and family members to protect people, without taking hope out of their lives. When we say "no, do not do it, you cannot", let's also say that we will still strive to find a way they can go, at least as far as their disability allows them to go" (Veglia, 2005, p. 319).

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TEACHER BURNOUT AND RESILIENCE

AMONG ADVERSITIES AND RESOURCES: AN EXPLORATORY STUDY ON TEACHERS' RESILIENCE IN VOCATIONAL EDUCATION AND TRAINING IN SWITZERLAND

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Introduction

In literature there is a wide consensus on the threatening nature of the teaching profession, being it intellectually, emotionally and relationally a highly demanding job (Gu & Day, 2007; Kyriacou, 2000; Richardson, Watt & Devos, 2013). Teachers are indeed exposed to several and differentiated challenging situations, such as disruptive students' behaviors, frustration of expectancies, unsupportive school leadership, low social recognition, and excessive workload, to cite just a few of them. Despite all these risk factors, however, a number of teachers seem to be able to cope successfully with professional challenges, keeping a positive adaptation despite the adversities they naturally encounter. Scientific literature has been putting an increasing interest on this population with the main intent to identify which resources and strategies most support them to be resilient, that is to have the ability to maintain professional commitment and positive motivation towards the profession despite various difficulties and adversities that naturally characterize the teaching profession (Brunetti, 2006).

Extensive literature deals with the issue of resilience in the teaching population; however a substantial shortage of theoretical and empirical studies on Vocational Education and Training (VET) population has been pointed out, despite the peculiarities that characterize their activity and context. The present study addresses therefore the issue of VET teachers' resilience in their daily work.

In line with a socio-ecological perspective of resilience (Griffiths & Edwards, 2014), we conceptualize teachers' resilience as a successful, functional and positive adaptation (Masten, Best, and Garmezy, 1990) that is the results of the dynamic (Luthar, Cicchetti, & Becker, 2000) and continuous interplay among the following two components: 1) the perceived threatening stressors and adversities, including individual contextual conditions and events, 2) the perceived protective resources, including individual attitudes and abilities and contextual resources.

Research questions and aims

Basing on the model described above, a first exploratory study was conducted in order to detect VET teachers' perceived critical challenges and protective factors, starting from the assumption that specific challenges and resources aiming this population can be identified.

Methodology and methods

37 VET teachers from the Italian-speaking part of Switzerland participated voluntarily to the study. The sample consisted of 22 women and 15 men; among them, 8 work in the commercial training sector, 11 in the health-care training sector and 18 in the industrial and hand-craft sector.

Teachers were involved in semi-structured face-to-face individual interviews about perceived adversities and resources to persist in teaching. Interviews aiming at recalling professional critical events in terms of loss of motivation, satisfaction, or eventually attrition; the interviewees were asked to detail the concrete challenges trackable in those situations and the resources addressed.

Data analysis was supported by N-Vivo software. Interviews were analyzed applying an inductive categorical content analysis. The coding scheme allowed obtaining categories of all the critical situations and resources named by the interviewees. For each code, portions of texts have been isolated and codified. Then, a quantification of quotations for each code has been calculated. A sub-sample of the whole corpus, corresponding to the 10% of it, was coded by two raters, in order to test inter-rater reliability.

Results

Results confirm different challenges and protective factors emerging from the literature reviews (Beltman, Mansfield & Price, 2011; Mansfield, Beltman, Price & McConney, 2012) focussed on general teachers' population.

The study supported in fact the relevance of adversities deriving both from macro-contextual conditions – such as difficulties coming from educational and work policies, exposure to reforms, etc. – and from micro-contextual conditions – such as for example challenging students, negative leadership played by school principals, and a lack of collaboration and shared culture among teacher colleagues. Moreover, specific adversities are related to specific nature of teaching, such as the emotional and relational labor and investment that it requires didactical and instructional difficulties and challenges related to the teaching role assumption. Besides attitudes towards the profession have been also cited as potential risks and stressors.

With respect to perceived protective resources, results show evidences about the relevance of context-related factors (e.g. collegiality and positive relationship with colleagues, positive school leadership, opportunity of training, etc.) and individual ones (e.g. teaching competences, relational competences, professional identification, and general personal resources).

In addition to these elements shared with the general teachers' population, the study pointed out that specific adversities and resources do exist for VET teachers in Switzerland. In terms of specific adversities on a macro-contextual level, the teachers' low social recognition is emphasized in the VET track, sometimes perceived as a "second choice" school; the exposure to curricula reforms generate stress and pressure being them related to requests of standardization of contents and changes in subjects. On a micro-system level it is relevant to mention the frustration derived from students' low vocational motivation and maturity and specific instructional and didactics challenges emerging in vocational subject adaptation. In terms of resources, we found that the ability to diversify professional role (Sappa, Boldrini & Aprea, 2015), alternating school activities and extra-curricular one is perceived as a supportive factor.

Results supported a first development of training implications and guidelines for policy makers, as well as the development of a more extensive quantitative study on a national level.

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THE IMPACT OF THE SECONDARY SCHOOL ENVIRONMENT ON TEACHERS' BURNOUT

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Introduction

Occupational burnout is usually defined as a prolonged response to chronic exposition to emotional and interpersonal stressors at work (Maslach, Schaufeli, & Leiter, 2001). Three dimensions often characterize this syndrome: physical and emotional exhaustion, reduced feelings of work-related personal accomplishments and inefficacy feelings, and depersonalization (for instance, cynicism toward students and colleagues) (Maslach & Jackson, 1981). Teaching is acknowledged as a high-risk job for burnout (Maslach, 1999; Tardif, 2013). Mainly, exhaustion and feelings of inefficacy at work seem to be the dimensions most affected (Soares, 2004). About 10% of teachers would be affected by occupational burnout (King & Pert, 1992) but 50% expresses feelings of exhaustion and professional discouragement at one point during their career (Tardif & Lessard, 2002). In consequence, occupational burnout is a major cause of professional nonattendance, disability and job resignation (Chouinard, 2000; O'Brien, Goddard, & Keeffe, 2008).

Nevertheless, significant gaps in our current knowledge weaken our ability to effectively prevent the problem and its consequences. Firstly, there is a lack of longitudinal and multilevel studies on the subject. In addition, very few studies have documented the impact of alterable elements of the school environment on teachers' burnout. In consequence, the present study aims to answer the following question: What elements of the organizational context (unchangeable aspects like school size, language, geographical localization, students' characteristics, etc.) and of the organizational processes (modifiable aspects like interpersonal relationships, leadership, school climate, etc.) of the school environment are associated with burnout among teachers?

Method

Sample

A self-reported questionnaire was administered to 3258 teachers from 76 public secondary schools located in the province of Quebec (Canada). Fifty-eight percent were female

teachers, about 25% had between 20 and 30 years of experience, 32% between 31 and 40 years, 22% between 41 and 50 years and 20% had more than 51 years of experience. Also, 80% of the sample were assigned regular classes while 20% were assigned special education classes.

Fifteen percent of the 76-secondary school were English speaking while 85% were French speaking. Regarding the school's size, 16 % (0-199 students) was small, 54 % (200-999 students) of middle size and 30 % (≥ 1000 students) were large. Furthermore, 18% were in rural settings, 57% in urban settings and 32% in major cities. Finally, 88% of these schools were from low SES (socio-economic status) surroundings.

Instrument

A self-reported questionnaire was administered two times to each participant in a two-year longitudinal follow-up. Two subscales comprised items inspired by Maslach, Jackson and Leiter (1996), formulated in French and English and validated by Janosz et al. (2010). The first subscale measured participants' physical and emotional exhaustion and comprised 6 items (α=.85) like "I no longer feel able to give myself as before in my task of teaching". The second subscale measured participants' feelings of inefficacy at work and comprised 4 items (α=.73) like "I consider myself efficient in my work" (reversed). Participants expressed their opinion on a 6 points Likert-type scale ranging from 1 ("Totally disagree") to 6 ("Totally agree"). Other scales measured participants' perceptions of different characteristics of their school processes (classroom management and discipline, quality of teaching, relationships, school climate, management and leadership of the school, school-families-community relationships and relatedness). All these scales were also adapted and validated by Janosz et al. (2010) and show adequate measurement properties.

Data treatment

Multilevel analyses controlling for participants' gender, age and experience were performed on the data. Also, inefficacy was controlled for the analyses on exhaustion while exhaustion was controlled for inefficacy. Finally, cross-sectional comparisons were performed to document which factors are associated with the presence of exhaustion and inefficacy while a longitudinal approach was used to document which factors are associated with the development of exhaustion and inefficacy.

Results

A preliminary look at the data indicates that 15% of the participants reported exhaustion and 3% feelings of inefficacy (cut point 3.5/6). Only 2% reported both. In addition, no effect of age or experience was detected on exhaustion but gender and assignment had significant effects, with female and special classes' assignment reporting a higher level of exhaustion. None of these factors was significantly associated with inefficacy.

What elements of the organizational context of the school environment (unchangeable aspects) are associated with burnout among teachers?

Cross-sectional multilevel analyses on structural factors indicated that the level of exhaustion is higher in larger schools and in schools located in urban settings or capital cities and that teachers in French schools reported higher level of inefficacy. Analyses on students' characteristics showed that the level of exhaustion was higher in low SES settings, in multiethnic environment, in schools where achievement was lower and violence higher and in schools where students reported more feelings of depression. Low achievement was the only factor significantly associated with inefficacy.

However, all these significant relationships disappeared in the subsequent longitudinal analyses that controlled for the previous score of the dependent variables two years before.

What elements of the organizational processes (modifiable aspects) of the school environment are associated with burnout?

All elements were significantly associated with both dimensions of occupational burnout (classroom management and discipline, quality of teaching, relationships, school climate, management and leadership of the school, school-families-community relationships, and relatedness). Relatedness, classroom management and discipline, security climate and perceived violence showed a strong association with exhaustion while relatedness, quality of teaching and relationships were strongly but negatively associated with inefficacy. These relationships are not affected by gender, age, experience or class assignment.

Moreover, these relationships remain significant even after controlling for the previous scores on exhaustion and inefficacy.

Discussion

Our results show that occupational burnout did not affect a large proportion of our sample but that some schools' structural characteristics were significantly related with exhaustion and inefficacy. Also, many students' characteristics were related with teachers' burnout, mostly with the exhaustion dimension. Nevertheless, these relationships disappear after controlling for the previous state of the dependent variables. In our opinion, several elements could explain these results. Firstly, it is likely that these factors, mostly stables by nature, were already exerting their influence in the time of the first measurement, two years before. In addition, controlling for the previous state of the dependent variables is a severe statistical procedure that does not take much into account the influence of the other variables introduced in the model.

Overall, our results on the impact of the organizational processes of the schools indicate that the subjective perceptions of these processes by teachers are closely related with both dimensions, exhaustion and inefficacy, of occupational burnout in secondary schools. These results show that teachers are more vulnerable in school comprising more at risk students or in low SES surroundings. This represent in our opinion a special challenge for disadvantaged schools where a positive school climate and good pedagogical practices do not seem to be effective in limiting teachers' fatigue. Finally, the role of relatedness between members of the school, a factor significantly related with both dimensions studied, should be underlined in the prevention of teachers' burnout.

The present study presents certain limitations that reduce its generalizability. Firstly, its methodological approach is correlational by nature. In consequence, the relationships

observed between the variables cannot be appreciated in terms of causality and we must remain cautious in their interpretation. Secondly, schools located in low SES surroundings are largely over represented in our sample. In these conditions, it remains unclear if our results would be the same in other socio-economic environments and settings. Finally, our results are based on the participants' perceptions and not on objective reality.

More research is thus needed to understand better the role of secondary schools' context and processes on teachers' occupational burnout.

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RESOURCES OF THE TERRITORY AND SOCIAL SUPPORT AS PROTECTIVE FACTORS OF TEACHERS BURNOUT

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Introduction

School is traditionally considered to be an elective setting for the "promotion of health" (Vecchio, Miglioretti, &Velasco, 2013), but the hypermodern school is more and more often defined as a "special infirm" (Ancona, 2004) affected by the widespread social "malaise" (Kaës, 2012) which too often hinders the mental and physical health of young people and adults: keep in mind the studies about the burnout of teachers and students (Fiorilli et al., 2014) and the ones on the many forms of early school leaving (Affuso, Pisani, & Rinaldi, 2012) and discomfort connected to the crisis of the symbolic value of the school (Pietropolli Charmet, 2008). To deal with this situation, the non-profit Association Maestri di Strada (MdS) has worked for 8 years, in formal partnership with Department of Humanities, University of Naples Federico II, in and outside schools of the Neapolitan suburbs, to promote well-being and social inclusion and to hinder early school leaving. This is done through complex educational projects which employ active citizenship workshops, art workshops, focus groups and circle times aimed at young people; activities of co-planning, meetings of reflection and support to teaching aimed at the professionals of education (Parrello & Moreno, 2015).

Among the careers which are mostly at risk of burnout, we can find specifically that of teachers (Lodolo D'Oria, 2010). They live stressful situations due to the management of more and more complex educational situations, that entail a massive emotional burden which can translate into a "strain of teaching" (Pedditzi, 2005). There are many elements taken into account which seem to make teaching this "strenuous": the educational role becoming vaster and more complex; the stress of responsibility; the institutional and extra-institutional charge; the social devaluation (Petrillo & Donizzetti, 2013). It is therefore clear that the scholastic burnout seems to be connected to relational and contextual factors which entail a systemic reading of the phenomenon.

Among protective factors, *social support* was specifically examined, observing how perception of support predicts subjective well-being and how much it is a factor of

protection from the burnout syndrome (Hobfoll, 2001; Gabola, 2011). The research developed tools specific to the scholastic situations (Doudin & Cuchord, 2009) considering at the same time an "external support" (with respect to the school) – friends, family – and an "internal support" – colleagues, counsellors, managers. This distinction appears to be important because it implies that the two sources have different functions: in fact, the extra-scholastic one has a mostly emotional role (emotional support) because it complies with the needs of the individual; the support internal to the school, by contrast, appears to be compliant with the solution of the working problem (instrument support), and points to the research of better strategies to apply to the specific situation (Halbesleben, 2006).

Of the protective factors from scholastic burnout, as stated previously, the contextual ones also appear to be fundamental, even though they have been less investigated in literature (Petrillo & Donizzetti, 2013). The studies that record the effect of the perception of the resources of the territory on the burnout of the teachers are quite interesting: a particularly favourable environment to the burnout was located in schools which not only have decrepit structures, poor equipment and a complicated bureaucratic management, but that are also located in troubled areas with scarce social services (Farber, 1983).

Aim of the research, objectives and hypotheses

This study is part of a broader research which refers to systematic projects of educational intervention realised in marginal backgrounds of the city of Naples. The objective of the research is to explore the complexity of the phenomenon of malaise in schools in order to improve the offer of the interventions that the Association MdS plans with Department of Humanities. The research has two distinct phases: a qualitative one, which is still underway (interviews to teachers, observations in scholastic contexts, observations of meetings of reflexivity) and a quantitative phase on which we will focus in this paper.

The hypothesis is that the malaise of teachers can be read in terms of burnout by widening the perspective and inserting school in a system of micro and macro-contexts. That is why the aim was to investigate the joined impact on the burnout phenomenon of protection factors, both contextual and relational: in particular, the perception that teachers have of the resources of the territory and the perception of the social support available in and outside their school.

Methodology, tools and sample

Participants

270 teachers of the region Campania have been contacted; 35.6% of them teach in middle school, 64.4% in high school. They are predominantly female (74.7%) and are mostly between 41 and 60 years old (74.3%); 87.7% of them have been tenured teachers for 14.3 years (SD = 10.0), while 12.3% of them have been temporary employees for 7.10 years (SD = 5.89). Moreover, 89.7% carry out curricular activities, while 10.3% are special needs teaching assistants.

Tools

The study used a self-report questionnaire composed of a form for socio-demographic data collection (gender, age, years of tenured teaching, years of temporary job, kind of school etc.) and other tools, briefly illustrated below:

- the Maslach Burnout Inventory (Maslach & Jackson, 1986; Taddei, 1988), teacher version, composed of 22 items evaluated on a 7-point scale (from 0 = never to 6 = every day). The items aim to examine the 3 dimensions of burnout, which are: emotional exhaustion, depersonalization and personal accomplishment;
- the Scale of Perception of Resources of the Territory (Petrillo & Donizzetti, 2008), composed by 15 items evaluated on a 4-point scale (from 1 = strongly disagree to 4 = strongly agree) with the objective of examining the perception of teachers with respect to the environmental, cultural and social resources of the local community where the school is situated;
- the Social Support Questionnaire (Doudin, Cuchord, 2009; Albanese et. Al, 2010), composed of 18 questions which propose different situations of stress/recognition inside the school. The subject must specify the main sources of support (max. 8) that he or she uses in every given situation. The sources of support were then categorised in: "internal support" (to the scholastic context - ex: colleague, manager, student, etc.), "external support" (ex: friend, husband, wife, etc.), "mixed support" (ex: friend and colleague) and "no support".

Analyses and results

Descriptive analysis and analysis of variance

From the analysis of the average scores we can deduce that there are low levels of overall Burnout (M = 1.32; SD = 0.75) and medium levels of Perception of the resources of the Territory (M = 2.60; SD = 0.53). With respect to the Support received in the 18 proposed situations, the predominant role of the Internal Support (M = 7.48; SD = 4.12) and of Mixed Support (M = 4.12; SD = 3.79) emerged.

Distinguishing those who are younger than 50 (adults; N = 139) from those who are older than 50 (mature adults; N = 130) it was possible, through analysis of variance, to verify the existence of differences due to age. From the analysis conducted it emerged that the adults have more Mixed Support than the mature adults, whereas the latter ones possess a greater emotional exhaustion and do not receive any form of Social Support.

An analysis of variance based on school typology was also conducted, from which emerged that the teachers who work in technical/professional schools receive more External Support, endure stronger Depersonalization and have more Perception of the resources of the local community. Furthermore, those who work in high school receive more Internal Support and experience more Personal Accomplishment.

Correlational analysis and analysis of regression

From the analyses of correlation emerged that the overall Burnout is negatively correlated to Mixed Support and the Perception of the resources of the territory, while it is positively correlated to lack of support.

From the analysis of regression, considering the total Burnout as a dependent variable and the many kinds of support, as well as the Perception of the resources of the Territory as independent variables, emerged that the latter and Mixed Support are negative predictors of Burnout.

Discussion

The first results seem to indicate on the one hand that the teachers from Campania that we contacted did not show a particular condition in comparison to the National average of the examined dimensions, but on the other they showed the importance of the contextual and relational factors for their well-being or malaise, also underlining the importance of their age. If more aged teachers actually appear to be more fragile (greater emotional exhaustion) and feel they can count on fewer relational resources both internal and external to the school (greater Absence of support), it is necessary to question ourselves both about the demanding effects of the profession and how much the personal phase of the cycle of life can affect a job that has the inter-generational relationship as its core, especially in an age of great changes in this area (Parrello, 2014). The data which refers to the difference between the kinds of schools, which is peculiar of our Country compared with others, is just as important. In line with the hypotheses, it emerged that a Support coming both from inside and outside the school and a positive Perception of the resources of the territory where one works are factors of protection against the onset of burnout. The projects of support to the well-being of teachers must therefore consider these variables and above all be network interventions and add value to all resources of the territory.

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TEACHER BURNOUT AND PROFESSIONAL IDENTITY

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Introduction

Schaufeli and Enzmann (1998) defined the burnout as "a persistent, negative, work-related state of mind in "normal" individuals that is primarily characterized by exhaustion, which is accompanied by distress, a sense of reduced accomplishment, decreased motivation and the development of dysfunctional attitudes and behaviours at work" (p. 36). Numerous studies confirm the difficulties of the teaching profession, which increase the risk of burnout (Brunsting, Sreckovic, & Lane, 2014). Since burnout is considered complex, multi-causal involving various factors at different levels, there is not a general and comprehensive theory that explains this phenomenon (Schaufeli, 2003). Both teacher and school characteristics appear as interesting variables to better understand teacher burnout process (Byrne, 1991; Sadeghi & Khezrlou, 2014). For instance, research investigating gender differences in teacher burnout have yielded contradictory findings (e.g., Byrne, 1991; Grayson & Alvarez, 2008). Moreover, some studies have focused on physical education (PE) teachers' burnout, taking into account the specificity of teaching physical education only (Bartholomew, Ntoumanis, Cuevas, & Lonsdale, 2014; Van den Berghe et al., 2014) without comparing to teachers of other school subjects. Finally, the comparison of the teachers' burnout in countries with different school organisation seems necessary to better understand the effect of contextual variables on teachers' burnout.

Teachers' professional identity (TPI) seems to be a critical predictor of teachers' professional well-being, efficacy and professional development (Beijaard, Meijer, & Verloop, 2004; Canrinus, Helms-Lorenz, Beijaard, Buitink, & Hofman, 2012; Hong, 2010). Even though the concept of teachers' professional identity (TPI) has gained considerable attention these last years, it is still a poorly defined concept and it remains difficult to build a solid theoretical framework around TPI concept (Beijaard et al., 2004; Beijaard, Verloop, & Vermunt, 2000). In line with Beijaard et al. (2004), we argue for a better conceptual clarity of TPI and we define it with a personal expertise

perspective: "it is a complex and dynamic equilibrium where professional self-image is balanced with a variety of roles teachers feel that have to play" (Beijaard et al., 2004, p. 113). Teaching is multifaceted, complex and researchers did not yet agree on the different types of teacher knowledge in practice or domains of teacher expertise. Nevertheless, three domains of knowledge are often taken into account in previous research: subject matter, pedagogical, and didactical expertise (e.g., Beijaard et al., 2000; Kansanen, & Meri, 1999).

Research question and objectives

As underlined by Hong (2010), "teachers' professional identity is an important factor in understanding their professional lives and career decision making" (p. 1531). Nevertheless, previous studies have failed to show clear links between TPI and teacher burnout for two main reasons: previous studies on TPI are mostly qualitative, and there is a lack of validated questionnaires on TPI. To date, only one questionnaire on the perceived professional identity among teachers was developed in Dutch language in an exploratory study by Beijaard et al. (2000), but with limitations in its construct validity. The purpose of this study was to estimate the relationships between TPI profiles and teacher burnout, controlling the effects of the teacher gender, the school subject taught (PE vs. others school subjects) and the country of teaching (Switzerland vs. France). To reach this purpose, a questionnaire about the perceived TPI (the QIPPE) was developed and validated (Lentillon-Kaestner, Descas-Guillet, Cécé, & Martinent, 2017).

Methodology and methods

Four hundred and seventy-six secondary school teachers (184 males vs. 292 females; 233 PE teachers vs. 243 other school subjects' teachers; 319 French vs. 157 Swiss) (Mage = 42.21, SD = 9.59) participated in this study and completed a questionnaire including the QIPPE (Lentillon-Kaestner, Descas-Guillet, Cécé, & Martinent, 2017) and the French version of Shirom-Melamed Burnout Measure (SMBM) (Sassi & Neveu, 2010). These questionnaires were fulfilled online during the first semester of the school year 2016-2017 (October-November). The items QIPPE were developed referring to the three domains of teaching expertise (i.e., subject matter, didactical and pedagogical expertise) (Beijaard et al., 2000). Two domains of teacher expertise were retained in the final version of the QIPPE (11 items): perceived pedagogical expertise (5 items) and didactical-subject matter expertise (6 items), labelled didactical expertise (Lentillon-Kaestner, et al., 2017). Participants answer on a 5-point Likert scale, graded from 1 ("Never") to 5 ("Always"). The 2-factor structure of the QIPPE is not surprising, didactical expertise being closely related to subject matter (Kansanen & Meri, 1999). The SMBM is composed of 14 items measuring three dimensions: physical fatigue (6 items), emotional exhaustion (3 items) and cognitive weariness (5 items), and participants answer on a 7-point Likert scale, graded from 1 ("Never") to 7 ("Always").

Analyses and results

First, different TPI profiles were estimated thanks to a cluster analysis. Second, a MANOVA was performed to examine the main and interaction effects of the TPI profile, the teacher gender, the school subject taught (PE vs. other school subject), and the country of teaching (Switzerland vs. France) on the three burnout dimensions.

The cluster analysis allowed us to distinguish three TPI profiles: teachers with "high perceived pedagogical and didactical expertise" (Cluster 2, 41.6% of teachers), teachers with "high perceived pedagogical expertise only" (Cluster 1, 30.7% of teachers), and teachers with "weak perceived pedagogical and didactical expertise" (Cluster 3, 27.7% of teachers).

Then, the Manova results showed significant main effects of the TPI profile, of the teacher gender, of the school subject taught, and of the country of teaching on the burnout dimensions (Pillaï Trace = .34, $F(3,450)$ = 1166.57, $p < .001$, $\eta2$ = .886). More specifically, the three burnout dimensions' scores (i.e., physical fatigue, cognitive weariness and emotional exhaustion) were significantly higher among teachers with "weak perceived pedagogical and didactical expertise" than among the teachers of the two other TPI profiles. Similarly, burnout dimensions' scores were higher among teachers in France and those in other school subjects than PE, compared respectively to Swiss and PE teachers. Finally, female teachers experienced significantly more physical fatigue than male teachers did. In addition, an interaction effect between the TPI profile, the teaching country and the school subject taught was also observed on the three-burnout dimensions.

Discussion

This study underlined a significant main effect of TPI profile on teacher burnout dimensions, but also of the teacher gender, the subject school taught, and the teaching country. An interaction effect between the TPI profile, the teaching country and the school subject taught was also highlighted. Being physical activity promoters, PE teachers seems to be less at risk of burnout than teachers of other school subjects are. In addition, despite similar culture values, teaching conditions in Switzerland (state of Vaud) and France present several key divergences in school systems (e.g., two different school subjects taught for Swiss teachers, the lower number of students per class in Switzerland, differences in teaching hours per week). The teaching conditions in Switzerland seem thus to be more protective against teachers' burnout than the one in France. Finally, the women seem to be more physically affected by the teaching conditions than men are. Nevertheless, the TPI profiles appear to have higher effects on teacher burnout dimensions than other personal (e.g., gender) or contextual variables (e.g., country, subject taught). The lack of perceived pedagogical expertise and didactical expertise increases the risk of teacher's burnout. The development of quality in teachers' pedagogical and didactical formation could prevent teacher burnout.

This study is the first proof of significant relationships between teacher burnout and TPI. Nevertheless, this study presents some limitations and future researches are needed. First, this study focused on secondary schools only and it seems necessary to lead

this study in primary and university schools too. Second, this study is cross-sectional. Nevertheless, teacher professional identity, such as teacher burnout are ongoing process and it would be useful to carry out a longitudinal study to estimate the development of burnout, of TPI during a period (e.g., teaching career, school year) or to demonstrate the causal and reciprocal effects of these two variables. Finally, other factors should be taking into account to better understand the teacher burnout among secondary teachers, such as perceived school and classroom contexts.

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HOW DO VET TEACHERS FEEL? A SWISS STUDY ON RESILIENCE IN VOCATIONAL EDUCATION AND TRAINING (VET)

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Introduction

There is a general consensus regarding the stressful nature of the teaching profession that can expose teachers to a progressive loss of motivation, satisfaction and sense of competence, even to the extent of burnout (Howard & Johnson 2004; Brown, Ralph, & Brember, 2002). International surveys have shown that between 30% and 40% of teachers fall into burnout conditions, with many of them quitting the profession as a result (Beltman, Mansfield, & Price, 2011; OECD, 2005). From this perspective, supporting teachers' well-being is likely to become a priority in the political agenda of various nations. At the scientific level, teachers' stress and burnout have been widely examined for decades (Khan, Yusoff, & Khan, 2014; Ghanizadeh & Jahedizadeh, 2015). However, there is a growing interest in investigating those teachers who succeed in facing professional challenges and staying motivated and engaged despite adversity. These teachers are called 'resilient' (Day & Gu, 2013).

Several studies have been conducted on teachers' resilience in order to identify the resources needed to support teachers' positive adaptation to adverse professional conditions (Beltman, Mansfield, & Price, 2011). However, the question of how to empirically identify 'resilient teachers' remains a challenge in the resilience literature, and the methodology that is most suited to achieve this goal is a subject of debate.

Moreover, various categories of teachers have been examined in the literature, including primary and secondary school teachers and special education teachers. However, very few studies have focused on vocational school teachers.

This study is part of a large quali-quantitative research project aiming at advancing the understanding of teachers' resilience in Vocational Education and Training (VET).

Research questions and aims

The following research questions oriented the study here presented:

1. Are there different types of VET teachers on the basis of their exposure to adversity and positive adaptation?

2. Is a resilient type empirically identifiable?
3. Is there an association between teachers' profiles and intention to quit the profession?
4. What socio-demographic and biographical elements are associated with the different profiles?
5. What resources are related to the different profiles?

Methodology and methods

Data was collected in 2017 via an anonymous electronic survey submitted to the entire VET teacher population in various Swiss Cantons (Bern, Basel-Stadt, Genève, Schwyz, Ticino and Zürich). A total of 2163 teachers (30% response rate) completed the questionnaire (49.5%=female; average age=47 years old; average teaching experience=14 years).

The questionnaire was developed based on the qualitative findings of a preliminary interview study conducted in Ticino and a literature review concerning teachers' resilience. A preliminary data collection was conducted in order to validate the questionnaire in the three languages (German, French and Italian). The following variables were considered in this study:

1. Perceived professional adversity: We asked teachers to report how often they perceived being faced with threatening challenges in their profession (using a 5-point scale from 1=never to 5=always).
2. Positive adaptation: This construct was examined by considering the following components: job satisfaction, motivation towards the job, sense of effectiveness as a teacher and sense of confidence in facing professional challenges. Four single-item for each component were adopted (using a 7-point scale ranging from 'extremely disagree' to 'totally agree').
3. Perceived resources: A set of 26 resources were investigated. Based on factorial analysis procedures questions were grouped into five scales (motivational resources, resiliency attitude, conflict managing skills, school-related supports and teaching-related personal resources; alpha Cronbach>0.70) and three single items (attendance at teacher training activities, extra school supports and opportunity to have free time). Respondents were asked to indicate how much they were supported by each resource (using a 5-point scale from 1=not at all to 5=extremely).
4. Intention to quit the profession: respondents were asked to indicate how often they have considered to quit the profession by choosing among the following answers: "never", "sometimes, just in critical moments" "very often".

In addition, socio-demographic and biographical data were collected dealing with respondents' gender, years of teaching and the Canton where they teach.

Results

To answer research question 1, we performed a two-stage cluster analysis of the standardised scores for perceived adversity and positive adaptation. First, a hierarchical cluster analysis was carried out to identify the optimal number of classes. Second, initial

cluster centres of the best retained class solution were used as non-random starting points in an iterative k-means clustering that yielded the final classification. We used a double-split cross-validation procedure to validate the cluster solution. Moreover, the relationship between teachers' profiles and socio-demographic and biographical elements (research question 3) was investigated using a cross-tabulation analysis. Finally, we answered research question 4 by performing a one-way Analysis of Variance (ANOVA) to examine if the perceived resources varied among the different identified clusters.

Preliminary findings showed that Swiss VET teachers felt well. They reported high values of job satisfaction (M=5.61, sd=1.19), professional motivation (M=5.73, sd=1.14) sense of effectiveness (M=5.79, sd=.96) and sense of confidence in facing professional challenges (M=5.75, sd=1.02). In addition, exposure to adversities is not particularly high (M=2.48, sd=.73). By combining variables on positive adaptation and exposure to adversities, five profiles of teachers were found. 1) The first cluster comprises the "enthusiastic teachers" (34% of the sample), i.e. those who reported a high level of positive adaptation (.57 above the mean) and a low level of perceived adversity (.57 below the mean). 2) The second group comprises "teachers who stay quite well" (20% of the sample), who perceived a medium level of positive adaptation (.31 below the mean) and a low level of perceived adversity (.55 below the mean). 3) The third group corresponds to "teachers at risk" (10% of the sample), who indicated a very low level of positive adaptation (1.6 below the mean) and a high level of exposure to professional adversity (.5 above the mean). 4) The fourth cluster represents "weak teachers" (16% of the sample), who showed high level of perceived adversity (.72 above the mean) combined with a medium-low levels of positive adaptation (.59 below the mean). 5) Finally, we identified a group of 'resilient teachers' (19% of the sample), who showed a positive adaptation (.35 above the mean) despite a high perceived exposure to professional challenges (.72 above the mean). The majoriy among "at risk" and "weak" teachers reported to have very frequently considered to quit the profession, whereas "resilient teachers" took it into consideration just in some critical moments. On the contrary, a high percentage of "enthusiastic teachers" declared to have never considered quittingthe profession (Chi-square=510.059; df=8; p<.001). The "at risk" and "weak" profiles are more represented within the female population (Chi-square=56.114; df=4; p<.001) and people at the early stage of the career (Chi-square=41.912; df=12; p<.001). Teachers working in Canton of Genève appeared particularly associated with the "at risk" profile (Chi-square=70-838; df=20; p<.001). Finally, resilient teachers are supported by multiple resources. Compared with "weak" and "at risk" teachers, the resilient group reported the highest values on all the investigated resources (16.404<F< 106.406, p<.001). However, motivational resources and teaching-related individual resources seemed to particularly contribute to differentiate resilient teachers from the two most critical profiles (R2=.77).

The study contributes to a better understanding of who the resilient teachers are and what resources support them in keeping a positive adaptation despite professional adversity. Moreover, it illustrates the use of a person-centered technique (i.e. cluster analysis) to empirically identify 'resilient teachers', a methodology that is applied in very few studies. The findings suggest key resources that should be promoted at the contextual and individual level in order to sustain VET teachers in the different phases of their

careers. Additional findings will be presented at the conference. The implications for teacher training will be outlined and discussed.

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WELL-BEING PROMOTION IN SCHOOLS

CAN INTERDISCIPLINARITY BENEFIT THE WELL-BEING OF STUDENTS, TEACHERS AND SCHOLASTIC INSTITUTIONS? IDEAS FOR REFLECTION ON COLLABORATION WITH OCCUPATIONAL THERAPISTS

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Introduction to the topic

The wellbeing of a student at school is linked to three factors: factors related to the person (sensory, motor, cognitive, and relational skills), factors related to occupation (self-care, productivity at school, leisure), and factors related to a relational and physical context. The interaction of these three factors determines whether it is possible for the students to participate, actively and satisfactorily, in the different school activities, and to therefore be included in the classroom and in the school. Children and adolescents with sensory, motor, cognitive, social or learning difficulties are often faced with difficulties related to inclusion and participation (Causton & Theoharis, 2014).

The wellbeing of teachers in school is influenced, among other things, by their sense of self-efficacy (Vaz et al., 2015); this may be conditioned, in turn, by the success and the inclusion of students in school.

Finally, the wellbeing of the institution depends upon the challenge of creating a place (physical, social and cultural) in which every person can experience a sense of belonging: students, teachers and families. The wellbeing of the institution cannot, therefore, disregard students' and teachers' wellbeing.

Inclusion is currently a central element of the school system: an inclusive school aims to provide each student, whatever his or her potential, with the best educational opportunities. The need to include different levels of potential in a single educational system poses, in the medium term, the need to safeguard and promote the wellbeing, not only of the student, but of the whole student-teacher-institution trio. One of the factors that most influences the inclusion process is the inter-professional collaboration (Villeneuve & Hutchinson, 2012). The international literature supports the effectiveness of multi-disciplinary interventions, among which is also included the figure of the professional occupational therapist (Kennedy & Stewart, 2011), who, in many countries, is included in the educational team.

Even in Ticino (see for example, Santinelli & Andreazzi, 2011) and in Switzerland, during the last decade, contacts between schools and occupational therapists have intensified. In fact, the occupational therapist, despite not being included in the scholastic organization, can intervene directly or indirectly with students, teachers and/or within the environment, influencing the participation and wellbeing of individuals as well as the system.

Question

What are the opportunities for collaboration and development between occupational therapists and schools, under the perspective of inclusive education?

Objectives

– Based on the Response To Intervention model (RTI – Burns & Gibbons, 2008), discussions will be held on the possibilities to intervene with children/adolescents, and with groups of at-risk students, in class and in school.
– The principles of collaboration between occupational therapists and teachers will be reflected upon in depth, through the presentation of some local projects and interventions, and through the presentation of the national work group called "Occupational therapy in school".
– Possible developments for interdisciplinary collaboration will be identified.
– Some examples of collaboration with different approaches will be illustrated with concrete cases.

Analysis and results

The intervention of occupational therapy tied to difficulties in a scholastic environment has a solid theoretical basis (Frolek Clark & Chandler, 2013). In many countries, such as, for example, the United States, Australia, and New Zealand, it also has a long historic and legal tradition. In other countries, such as in central Europe (Germany, Austria, Slovenia, Switzerland), occupational therapy in schools is expanding, mainly thanks to social and legal developments tied to inclusion and to scholastic policies (European Agency for Special Needs and Inclusive Education, 2014), to epidemiological changes and to the development of the profession.

During the last decade, in Ticino, there has been an intensification of contacts between schools and occupational therapists. First of all, requests for individual interventions in occupational therapy have increased, due to problems related to difficulties arising in school (for example: problems with graphomotor skills, with attention/hyperactivity, with social skills, and with organization). Secondly, requests for indirect interventions have increased (supervisions, coaching) and some projects for the promotion of health have emerged (e.g. "Movement and Learning"). Finally, based on teacher requests, since 2010 an offer for continuing education has also been created, which is

linked to in-class management and help for students with non-specific learning disorders (attention disorders, motor coordination disorders, graphomotor disorders). In 2018, a Certificate of Advanced Studies will be launched, within which teachers and occupational therapists will work jointly on inclusion and on accompanying students with a profile inclined toward specific learning and development disorders, created jointly by both the Department of Business Economics, Health and Social Care (DEASS) and the Department of Education and Learning (DFA) of SUPSI.

International evidence and literature, in addition to local experience, show that teachers and occupational therapists collaborate more and more, and are effective in carrying out the following:

- Encouraging the inclusion of students, promoting their wellbeing and that of their families.
- Assisting educational and pedagogical staff in various ways: through direct intervention, consultation, counselling, supervision, evaluations, etc.
- Promoting wellbeing within the school, through interventions for promoting health, prevention, and early detection (in particular for "at-risk" students) (Frolek Clark & Chandler, 2013).

Discussion

The inclusion of all children is a complex challenge that is common to many professions. For example, it implies a differentiation in educational and pedagogical choices, modifications of the program and/or of the environment, in order to deal with a wide range of difficulties (from mild to moderate), the introduction of compensation methods and strategies, etc. This requires specific skills, resources and time.

While teachers who are dealing with children with severe disabilities may benefit from the support of specialized instructors (for example, Inclusive Pedagogical Operators), the daily management of students with mild to moderate difficulties is the job of the main teacher. Despite an adherence to the inclusive project, the teacher may feel powerless, or ineffective, in providing day-to-day help and strategies that would help the children in concrete learning activities (Rouse, 2007).

The lack of knowledge in helping students with difficulties can have an impact on the feeling of self-efficacy of the teachers, described by various authors as an indicative predictor of students' scholastic inclusion (Malinen, Savolainen, & Xu, 2012). In parallel, teachers' confidence in their abilities affects their attitudes with respect to the integration of students with special needs (Sharma, Loreman, & Forlin, 2012). Furthermore, interventions of occupational therapy are preferable when conducted in collaboration and within the child's environment.

The following example, related to the graphomotor difficulties encountered in school, describes the experience and the areas of collaboration between the teacher and the occupational therapist.

A first level of collaboration concerns students with special needs. If the child has a specific handwriting disorder (diagnosed through standardized tests), the occupational therapist may:

– Propose a specific re-education of the functions involved in gestures related to manual writing (posture, fine motor skills, pencil holding).
– Train the child in a specific manner directly on graphomotor tasks proposed by the teacher.
– Evaluate, along with the teacher, possible changes to the sitting position in class that may influence writing (chair, desk, etc.), or changes in the environment.
– Evaluate the introduction of, and the possibility of using, compensation instruments (with the child and the teacher).
– Adapting the delivery and the tools (paper, notebooks, pencils, etc.) so as to help the child with understanding and with carrying out activities – or collaborating with the teacher in identifying adaptation possibilities.
– Sharing one's own understanding of difficulties, resources and interventions, fostering effectiveness in the interdisciplinary team.

A second level of collaboration concerns at-risk students. Around 6% of children display dysgraphia, but around 30% of children have graphomotor disorders (poor handwriting) (Albaret, Kaiser, & Soppelsa, 2013). For these children, factors tied to teaching (time dedicated to graphomotor activities, teaching methods) in early school grades are crucial in making sure that these problems don't become disorders that would require specific attention in later school grades (Asher, 2006; Donica, Larson, & Zinn, 2012). In this situation, the occupational therapist has the ability to act in different ways:

– Providing the teacher with the knowledge necessary for identifying and helping the at-risk children early. According to research by Marr and Cermak (2002), children who present graphomotor difficulties during preschool, are the same that, when faced with having to learn how to write, find that these difficulties are sustained, and sometimes worsened. The goal of helping the child in preschool classes so as to avoid an impact on writing in primary school is carried out through continuing education and coaching for the teachers.
– Proposing specific training for a group of at-risk children, so that they can develop the specific skills needed for avoiding any possible evolution toward the disorder.

The following levels of collaboration refer to the entire class, to the school and to the community. Recalling the above, the role of the occupational therapist may be to perform the following:

– Provide teachers and support staff with concepts for facilitating manual writing learning. These concepts are useful for all children and are easy to use in the classroom. The continuing education courses currently offered by SUPSI DFA are a step in this direction.
– Offer projects for prevention and promotion that are developed and managed in an interdisciplinary manner. For example, the MoFis project (SUPSI DFA), which will begin in September 2017.

The creation of interdisciplinary networks allows for the integration of different specific skills and for the availability of more resources, promoting a differentiated, individualized, shared and sustainable approach for professionals. Different collaboration models between educators and social-sanitary staff have been developed in recent de-

cades (Villeneuve, 2009), as well as specific models in occupational therapy that support scholastic and social inclusion (Missiuna et al., 2012).

By integrating their bio-medical knowledge and analyzing their repercussions on the development of daily and scholastic activities, occupational therapists can contribute to the development of student wellbeing, to the achievement of goals set by the Harmos agreement (https://swisseducation.educa.ch/en/harmos) and by family expectations, to the effectiveness of interventions and, last but not least, to the feeling of self-efficacy of all members of the interdisciplinary team.

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PROMOTING WELL-BEING IN SCHOOL: AN OPPORTUNITY FOR ALL? TEACHERS' VOICE

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Introduction to the topic

The results from PISA's 2012 surveys highlight one key point: the quality of the existing relationship between teachers and students contributes to the sense of belonging to the school by the students, reinforcing consequently the levels of participation in school activities. The higher is the level of well-being, the more students show a greater persistence in the proposed tasks, reaching higher learning standards (Polito, 2016). Among the factors which contribute to the achievement of well-being, the classroom climate certainly plays a relevant role. Classroom climate is considered as a construct that includes the teacher-student relationship and the relationship among students. Some studies (Comoglio, 1998; Caprara et al., 2014; Johnson et al., 2015) indeed show that promoting a collaborative classroom climate and offering everyone the opportunity to have adequate support, let students often activate prosocial behaviours. Moreover social disadvantage is less likely to take place (Di Norcia & Pastorelli, 2008).

Nevertheless, the promotion of classroom well-being doesn't always get systematic attention from the teachers since the educational system assigns the first place to the promotion of individual cognitive abilities at the expense of social and prosocial abilities (Travaglini & Bocci, 2017). The emphasis is consequently given to the learning of the subjects – in particular the Italian and Maths – whose students' achievement is considered as school quality standard: a sort of Gross Domestic Product of the school system functioning which doesn't consider the Wellness GDP.

In this perspective, there are two kinds of risk: 1) the assessment of students only based on cognitive profile; 2) the marginalization of students with learning disabilities, in particular those with intellectual impairment, as they are mistakenly considered unable to significantly contribute to the improvement of school's reality which they belong to. Overall, this puts into crisis the current inclusive vocation of the Italian school (Medeghini, D'Alessio, Marra, Vadalà & Valtellina, 2013; Bocci, 2015a) which seems to distance itself from what emerges from the international literature (Booth & Ainscow,

2014; Ferri, 2015; Goodley, 2016). Nevertheless, the biomedical individual model continues to prevail, as evidenced by the recent choice of using the SEN category in which students become cases (D'Alessio, 2011; Dovigo, 2014; Bocci et al., 2016; Morganti & Bocci, 2017) as well as happens with the students certified as disabled. The role of teachers is certainly crucial to determine the possibility to contrast this reductive vision of inclusion, which is still oriented to allow some category of students to be included in regular contexts. Indeed – as emerged also by our research – the presence of students with difficulty is often perceived as an interference with the building of a positive climate in the classroom, especially when this is oriented towards the performance rather than the relationship.

Research question and objectives

According to these premises, the research group decided to conduct an investigation in order to detect the perception of teachers in service and teachers in training (currently university students) about the meaning of well-being in school. The research questions are the following:

- – How is the well-being's concept defined by the teachers?
- – Can well-being be considered as the result of intentional practices and teachers' choices?
- – Which are the elements that in teachers' perception contribute to the achievement of well-being in the classroom and later in the school?
- – Is a student with SEN a barrier for the achievement of well-being?

The purposes of the survey are: 1) analyzing the descriptive modalities used by teachers in relation to the concept of well-being; 2) identifying the variety of tools/techniques/strategies/actions considered effective for the promotion of well-being; 3) detecting whether and how the concept of well-being is linked to the learning disabilities.

Methodology, tools and sample

The research is oriented by a quali-quantitative methodology and uses a semi-structured questionnaire addressed to teachers (in service and in training).

Specifically, the questionnaire consists of 13 items designed to investigate the following areas:

- a) definition of well-being;
- b) identification of indicators that qualify the level of well-being;
- c) identification of strategies/actions/procedures/activities deemed effective for the achievement of well-being;
- d) the possible use of these strategies/actions/procedures/activities with students identified as learning disabled;
- e) explanation of the well-being's level perceived by the teacher in relation to different fields (relationship with students and colleagues, relationship with their institution, profession, etc.);
- f) relationship between well-being and inclusion.

In particular, the quantitative phase was aimed to: a) analyze the main features of the sample considered from the point of view of the variables concerning gender, school's level, typology of role (common vs supporting teacher); b) classify and identify the strategies/actions/procedures/activities used to promote well-being; c) identify the indicators deemed relevant, or not, to the achievement of a diffused sense of well-being in the classroom.

The qualitative phase was instead aimed to detect the ways in which teachers describe what is meant by well-being in the classroom, as well as to motivate whether and how the provided explanations can also be applied in school situations characterized by the presence of a disabled student in the classroom.

Researchers' sample is composed by 61 teachers at all levels and 51 teachers in training.

Analysis and results

The collected data have been analyzed using the SPSS software (quantitative dimension) and the Nvivo 10 software (qualitative dimension).

The results show that the factors considered to be particularly relevant for the achievement of classroom well-being are due to five aspects: a) the relationship among teachers; b) the collaboration with families; c) the opportunity to promote collaboration, empathy, and communication of emotions among each member of the classroom; d) the mastery of effective learning strategies; e) the opportunity to benefit from the human and material resources of the school environment, the first of which is recognized as an important role.

In relation to the possibility that the elements identified by the teachers can be applied in presence of students with learning disabilities, the answers tend to be positive (yes, always), even if there are some criticalities.

These data can also be found in the students' group, with even more pessimistic notes.

Discussion

The theme of well-being is generally perceived by teachers as a significant standard for the quality of school life both for students and teachers themselves. In particular, it seems to be insufficient having a set of technical tools (like school Kit) or technical knowledge capable of answering only to the skills related to the learning areas in order to create inclusive contexts. It is instead necessary to create a holistic approach capable of determining a widespread well-being among all actors. In this regard, the collaboration between teachers as well as between students (in the perspective of collaborative and cooperative approach) seems to be decisive in responding to the educational challenges of today's society.

This entails a systematic redefinition of the educational contexts and the need to overcome any form of categorization and discrimination. Well-being is well-being only if it is for everyone. Otherwise it is not well-being.

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SCHOOL ERGONOMICS: APPLICATIVE TOOLS TOWARD WELL-BEING

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Background

Children are involved worldwide many hours in the school environment, so there's the requirement to set it suitably to promote the development of the students: in fact, regarding the time-course of the adaptations, we have to consider ergonomics difficulties as risk factors for chronic diseases.

Let's not forget children to be on developmental stage, thus any alteration might turn into cause of chronically ill adults.

There's the need to plan optimal upcoming strategies, follow scientific literature and recommendations: Brittin and colleagues (2015) suggest a ten-domains design practice perspective, based on: school siting and community connectivity, building massing and programming, smart fitness facilities, active classrooms, outdoor learning areas, active play and leisure areas, active navigation areas, signage and wayfinding, furniture specifications, mobile technologies and virtual designed environments.

Considering the school environment as such as a work one, we should recognize the risk factors, specifying the identifications of the sentry events, the content factors and the context factors: this proceeding is common for homogeneous-risk exposed workers, thus why not for scholars? A comprehensive supporting strategy could be defined on the following topics: healthy air flow, healthy posture, reducing static, promotion of an active life and perceived well-being.

Healthy air flow

It's a very neglected topic, but in school environment often there's air pollution, with foul microclimate, cause of inattention and discomfort.

Comforting climate is optimal with the following characteristics:
- temperature: 18 to 20 degrees
- humidity: about 50%

– air flow velocity: 10 to 20 cm/s
– air volume: not less than 30 cubic meters each hour each person

We should provide good ventilation and should monitor periodically, even with flow controllers and climate micro-stations for the determination of particulate atmospheric matter, physico-chemical qualities and ambient VOCs (Volatile Organic Compounds).

An applicative tool is to take advantage of open-air activities as much as we can, especially in the field of physical education, with several environments.

In the definition of these environments, as well as of leisure sites, we should avoid those ones in the direction of wind from the pollutant sources (Wang et al., 2016).

Healthy posture

Standing desks improve the outcome of a sedentary behaviour (Minges et al., 2016).

The current common furnitures, fixed and anthropometrically wrong, are cause of pain and disease (Panagiotopoulou, Christoulas, Papanckolaou & Mandroukas, 2004), thus we need to change them.

The use of tech devices, by the time widespread, should be set with providing a good sitting posture and making provisions for recurring eyes rest (Straker et al., 2008).

Moreover, we can plan posturological screening, together with the better development of suitable tools and specific index values (Gijon-Nogueron G et al., 2016); the evaluation of some structured interventions (Brzek & Plinta, 2016) could define better the effects and providing us the right way forward.

Concerning the scholastic gear, the use of backpack, for its less time of exposition, isn't the main pathogenic factor in back diseases, but, considering the reported back pain associated with heavy bags (Al-Saleem et al., 2016), we can suggest to wear those ones not heavier than 10% of own body's weight (Walicka-Cupryś, Skalska-Izdebska, Rachwał & Truszczyńska, 2015).

Reducing static

Scientific References point to prolonged static kyphotic sitting being detrimental (Geldhof, De Clercq, De Bourdeaudhuij & Cardon, 2007): an excess of stationary position reduces lower limbs blood flow and increases boredom and restlessness.

In particular, horizontal desks and too high chairs force children in a high-pressure gluteal zone posture, together with the loss of multiple blended back: remaining every day some hours in this condition could alter the right development of musculo-skeletal static and dynamic patterns.

Hence we must avoid the strict obligations about the right good-mannered position and we must provide frequent transitions between sitting and standing up; swivel seats, with variable height adjustment and fitted with castors and glides allow the need to move frequently and represent the most comfortable solution.

Regarding the recesses, we need to plan micro-pauses during intra-lessons, together with those ones inter-lessons and the main ones; this could be a simple and useful tool to reduce static-related diseases and to allow the re-calibration of cognitive skills.

Promoting an active life

We have to promote the perception of motor competence (Khodaverdi et al., 2016), with stimulating feedbacks and self-evaluation; about the planning of physical education courses, we need to improve both usefulness and effectiveness, including fantastic setting, goal-oriented tasks, sport literacy, adapted activities, cognitive and social tasks, in regard of both the age and the individuality.

Create a high-level physical literacy is the cornerstone to promote a further psycho-physical optimal development; we can choose among several tests to evaluate it, like MABC-2 (Movement Assessment Battery for Children - Second Edition), FMS (Fundamental Movement Skill) and CAPL (Canadian Assessment of Physical Literacy), permitting also to direct required additional supports (Blanchard et al., 2017; Rudd et al., 2015; Longmuir et al., 2015).

In order to acquire the basis for a further serene vitality, we must create an adequate structured context, in which educators can stimulate enthusiasm and inquisitiveness, encouraging motivation and respect thanks to a positive empathic framework.

Thanks to previous results, I suggest to strengthen the positive feedbacks from educators, to support an amazing and stimulating context, to link motor activities with socio-relational and emotional elements, to promote an early conception of the importance of healthy behaviors (Bondi, 2017).

We should provide also sport start-up, involving local sport associations to explain and demonstrate their activities; organizing one or more events in which students can try different disciplines is a good and amazing possibility to accelerate a wide awareness of the sporting landscape.

Thanks to some practical experiences of these events, I suggest to set a multiple-stations activity in spring, in which each group has rotating involvements and some rest times, with a final gadget to better remind the day.

Perceived well-being

We should include periodically scheduled surveys or questionnaires to investigate subjective well-being of students: the adoption of evidence-based curricula could improve future scholastic and social achievements (Bird & Markle, 2012).

This tool must be designed on the basis of age, allowing students free to express their feelings without psycho-social pressure, asking for social confidence, comfort in breathing, activity-related pain, comprehension of physical activity and wishes to a better scholastic environment.

Conclusions

We have to consider the need of movement, really high in childhood: remaining too much time in a static position is absolutely stressful, reduces the circulatory flow and impairs attention.

Equally as important, there are nowadays several possibilities to equip the classrooms with not-fixed furniture, reducing consequently the vertebral load and enhancing the good posture during the writing and tech devices use tasks.

We should improve the awareness of the air flow for the thermal wellness.

We know the setting of a stimulating environment and the perceived motor competence to be fundamental for the construction of a further physically active life.

A posturological screening, periodically scheduled, could help us to recognize early many health risks and to monitore longitudinal developments.

At the same time we can monitor perceived well-being to adopt further adequate strategies.

Last but not least, strategic communication might be used to enhance related knowledge, with informative and formative interventions dedicated to educators, administrative workers and families, together with the organization of exciting events to promote wellness culture for the scholars.

Finally, we have to set up school environments as best as we can; let's support the development of new generations!

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PROMOTING WELL-BEING IN A HIGH ACHIEVING SCHOOL: A WORD FROM THE FRONT LINE

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Brief background

Positive psychology, the scientific study of strengths that enable humans to flourish (Seligman, 2011) is making inroads into schools via the framework of positive education (Seligman, Ernst, Gilham, Reivich & Linkins, 2009; White & Murray, 2015). White and Murray (2015) distinguish Great Institutions, as those that implement organizational policies and goals, as well as positive education programs and curricula designed to improve student well-being. For schools, Seligman (N.E. interview with David Levin) advocates for an invisible hand approach – "teach educators what matters (PERMA) – and then let bright, creative teachers, tailor their lessons and interventions to promote student and well-being." Such an approach would foster teacher agency - an increasingly valued construct in education (Biesta, Priestly & Robinson, 2015; Priestley, Edwards, Priestley & Miller, 2012).

Our tripartite model

Our practice in developing effective approaches for student well-being in a high performing public school district suggests a tripartite model comprised of: (1) Knowledge (educating staff) (2) Organizational Commitment (organizational policies), (3) Culture (an institutional culture that values and cultivates professional growth, staff input and teacher agency in the development of lessons and programs).

The current paper shares a high performing middle school's ongoing experience with a three- prong model to promote well-being at the classroom and school level. By merging efforts to build knowledge, organizational commitment to goals and policy, and a nurturing environment that cultivates teacher agency, we are working toward the actualization our goal to become a Great Institution that fosters student well-being together with academic excellence.

Prong #1

Knowledge (teach teachers what matters)

Consistent with the first part of Seligman's invisible hand thesis, it is agreed that educating teachers in positive education and well-being theory (and how to measure it) is crucial. At Scarsdale Middle School (SMS), information and seeds for positive education thought have been sown via course offering in the district's teacher institute and other learning opportunities such as conferences, readings, self-study opportunities, speakers and staff meetings focused on educating staff about well-being. Information is foundational in the development of curricula and programs to foster student well-being.

Coursework

The Scarsdale Teachers Institute (STI) offers professional education opportunities on a range of topics geared to enhance the art and science of teaching and learning. The district, in cooperation with the Board of Education, encourages professional development opportunities by further incentivizing staff via credits and stipends. Aware of the importance of positive education, the STI is increasingly offering courses geared toward enhancement of student well-being. Many staff have availed themselves of a variety of STI courses that further knowledge of a range of positive education and well-being topics, including Positive Psychology, Noncognitive Skills for Success, Resilience, Wellness, Advisory, Mindfulness, Challenge Course. An upcoming course, Summit on Positive Education, will offer teachers the opportunity to share various lesson and program initiatives on the topic that have been developed and applied across the district.

Self-study projects

A self-directed professional performance review (Option A) is the district's alternative form of evaluation in which tenured teachers design a plan of study that develops and assesses an aspect of professional growth. Many staff have chosen to study growth mindset, character education, positive psychology, mindfulness, advisory programming and wellness. Often, lessons and other programmatic applications grow out of the self-study work. The current author is currently engaged in an Option A study, which will create a survey to further assess the practice of positive education across the district.

Conferences

Many staff have attended conferences and other outside learning opportunities that have enhanced their knowledge of positive education. Staff are encouraged to participate in professional growth opportunities, which the district facilitates through the provision of conference funding and the granting of professional development leave days. Often, staff report back on key elements learned in conferences.

Principal's book initiative

In keeping with the philosophy of providing teachers with opportunities to learn about well-being and character strengths, the middle school principal purchased copies of Carol

Dweck's Mindset (2006) book and invited staff to pick up a free copy from the school office. Enough books were ordered for the entire staff; nearly all were taken and read.

Collaboration with field leaders/speakers

Middle school leadership sought out consultation with researchers and field leaders in order to better understand the state of the art in and to help shape our focus and commitment to positive education. The initial collaboration often led to further work with staff at in-house meetings and conference days dedicated to positive education. SMS was privileged to host several of these individuals for conference days and staff meeting presentations. Often, meetings led to breakout discussions or workshops where staff worked together to design and develop applications of the discussed material.

Prong #2: Organizational commitment (goals and policies)

Schoolwide vision/mission

The District-wide Leadership Team has affirmed student wellness and education of the whole child as prominent features of the district's vision and schoolwide mission statement (Scarsdale 2.0). Furthermore, all schools in the district have incorporated this overarching vision into their individual school goals. Annually, all staff write-up personal goals that tie into school-wide, department and/or district-wide goals. A culture that values and cultivates student wellness and a whole child approach has been a fertile breeding ground for positive education initiatives that build PERMA and character strengths.

A demonstration of our deep commitment to positive education and student well-being, the district recently chose the topic, High Academic Expectations and Student Wellness as the focus for peer consultancy review by a visiting team from the Tri-State Consortium this school year. The report (due out soon) will be the basis for our application for accreditation by the Middle School States Association of Colleges and Schools. In preparation for the consultancy, the middle school played a central role in the creation of the district's self-study, documenting our progress to date.

Prong #3: Culture

Scarsdale's culture values professional growth, staff input and teacher agency in the development of lessons, programs and school-wide goals. Teacher agency and autonomy enables staff to use their ingenuity to develop positive education approaches that uniquely meet the needs of their classrooms. District leadership and the Board of Education have established a variety of mechanisms to promote teacher agency. For example, staffs are invited to participate in the strategic planning of the district's goals and mission, thereby increasing teacher agency deep in the fabric of the school culture. Other mechanisms that promote teacher agency include grants that fund professional development and pilot projects of the teacher's choosing. Administrators encourage creativity and are supportive of novel initiatives. As an example, a 2016 Summer Development Grant,

"Using Positive Psychology to Improve Well-Being" enabled this author to research the field of positive education with an eye toward assessing current use and potential for further application in the district. The project led to recommendations for next steps including the formation of a district wellness committee, which was accepted by the school administration. Grants have led to programs and lessons in the areas of character education, growth mindset, mindfulness, SEL, peer mentoring and advisory.

Outcome

Our effort to build teacher knowledge of positive education in a committed organization that cultivates teacher agency has created a flourish of interventions, programs and lessons that promote student well-being. Organized below according to individual PERMA character categories is a brief description of a few of many initiatives at SMS.

Positive Emotions

Several mindfulness initiatives have been developed and applied by individual teachers and teaching teams across classrooms throughout the middle school. One project, Butler 6 Mindfulness Program involved hiring outside experts to train staff and students, after-which teachers led students in mindfulness exercises in their classrooms. Eventually, a digital mindfulness toolbox was also developed and provided to students. Pre and post surveys of the mindfulness initiative suggest some promise for efficacy. Other activities to build positive emotions have included student gratitude letters and student developed guides to help younger students.

Engagement

Various projects have centered on helping students to increase their engagement. In one such project, Passion with a Purpose. 7th grade students work on a project that builds engagement by having Thursday homework time replaced with pursuit of an individual project of interest, such as the study of art, technology, literature, baking etc. Students choose and immerse themselves in an area of interest, which they then share with teachers and peers via presentations or journals. This year another dimension was added wherein students identified character strengths and were encouraged to use their key character strengths while pursuing their area of work/study.

Relationships

Strategies for fostering relationships and social skills are focused upon across many classroom and programmatic interventions as well as in the cultural fabric of the institution. One program is the STOP Advisory, a monthly pilot initiative (in lieu of social studies class) that helps students build relationships, growth mindsets, mindfulness and problem solving strategies. Students learn how to reach out and communicate with peers and staff and to build a sense of community and trust.

Meaning/purpose

Teachers have implemented numerous programs with students that are focused upon strengthening a sense of meaning and purpose in their lives. Aware of the value of the purposeful life for well-being (Seligman 2011), teachers inspire student involvement in helping others in school-wide programs (e.g. Human Rights Day), house-wide programs (e.g. Pajamas Bus Project for Needy Children, Halloween Candy Drive for Hospitalized Children; Connecting with Neighborhood Seniors), and individual classroom initiatives (e.g. Upstanders to Combat Bullying.).

Accomplishment

Several accomplishment programs have been initiated. Programs centered on the accomplishment of goals. For example, Oettingen and Gollwitzer's WOOP mental contrasting technique (Oettingen, 2014) *has been taught to the entire staff, many of whom have gone on to teach it to students in their classrooms.*

Character strengths

Educating students about character strengths is central to many of the initiatives to build well-being. In one project, an eighth grade team dedicated two instructional days where students (a) identified their character strengths (VIA survey), (b) participated in teacher conferences to strategize applications in academic work, (c) used VIA survey results to create slideshows about use of their five character strengths, (d) learned the WOOP mental contrasting technique, (e) wrote individual advice letters on how to be successful in each academic class, to be shared with next year's class.

Challenges and next steps

In an interdepartmental system that encourages multiple and simultaneous staff initiatives to enhance well-being it is difficult to attribute the specific variables of change. It is easier to evaluate the efficacy for the gestalt of our efforts than individual strategies. In such a system, anecdotal reports and surveys of staff, students and parents are of significant importance. In the next stages of our work, partnerships with researchers to establish best methods for measurement would help in our mission of becoming a Great Institution.

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WELL-BEING IN CANTON TICINO MIDDLE SCHOOL THROUGH THE ANALYSIS OF THE PRINCIPAL'S ACTIVITY

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One of the duties of management should be to promote well-being on site, help to create collective, organizational and institutional conditions that will enhance teachers' opportunities of acting and taking initiative, foster collective work and draw up regulations based on the difficulties faced by the teachers. (Ducros, 2014, p. 217)

In order to do so, it is necessary for the management to know the teachers' job well – what their struggles are, what their strategies are, what works well and what doesn't, which rules are made up to handle difficulties. One of the responsibilities of the manager is to support these dynamics, and, in order to get to know them well, it is essential to listen to, have dialogues with and be trusted by the teachers. A position inspired by the ergonomic approach to activities as described by Hubault (2013), which suggests analyzing managerial work as a set of activities and relationships rather than identifying the characteristic of leadership (behaviors, profiles, etc.).

In Switzerland, some research work has been carried out – the recent survey conducted in three cantons of French-speaking Switzerland by the CADRE research group (Gather-Thurler, Kolly Hottiger, Losego & Maulini, 2016), which analyzes schools and health and social services managements; contributions from Prof. Yvon's researches at the University of Geneva about the implications of changes in the work of school management in a perspective of organizational development. All these works, along with the research conducted in Quebec by Prof. Poirel, were presented at a seminar organized by CLACESO, an association of compulsory school managements in French-speaking Switzerland and Ticino.

In addition to analyzing how the work is actually performed, and how its contents have changed over time, various studies reveal the need to address the dimension of emotional burden. Political decisions that entail major changes do not generally take into account possible collective or individual risks, and school management find themselves invested with the responsibility of applying them while trying to cope with a destabilized base. Another problem that emerges from the research is time management.

In addition to laws, regulations and other official documents, middle school must respond to different and new needs dictated by the political world, by the social and

territorial reality or even by technological evolution. Today, more than ever, the "beneficiary" of school breaks into the teacher's work, and therefore new cooperation skills must be developed, as these people are not subject to the same directions as the director or the teacher.

In Ticino, various measures were taken in 2013, as a result of the DECS project "Sostegno ai docent in difficoltà", which is part of the LINEA umbrella project. The final report highlights the lack of data on teachers' malaise. The report states that school is inevitably influenced by social, cultural and institutional changes. "The central institution, in turn, seeks to respond to current trends through initiatives that sometimes have a great impact on the professional practice of teachers, particularly in terms of workload and stress." (DECS, 2012, p. 2) The issue of health at work is an important aspect to be addressed.

Research question and goals

The research wants to question the contents of the prescription in the managerial work, by starting with the analysis of the actual work, in order to identify possible improvement axes in the organization of the work of managing an institute and thus benefiting the other participants in the school premises as well. By identifying the problematic nodes we can grasp the complexity of the activity and we can also highlight what is being done to "hold together" a heterogeneous series of different kinds of logic, needs and demands, which are sometimes in conflict with one another.

What tensions arise at management level, to what extent are teachers involved? What kind of recognition, organization, support is currently in place? How can such situations be dealt with, so that people will not carry the load individually? Can current regulations and resources meet the needs emerging from the analysis of the activity of managements? How should the organization of the work be adapted?

Approach, methodology, tools

This research is the final work of GEFO's USI-SUPSI-IUFFP training (Managing Training for Managers of Educational Institutes), a project in which I have a particular role as a director and researcher.

The approach is inspired by francophone style ergonomics and I was able to benefit from the company of Christine Villaret, an ergotherapist and ergonomist of the activity, who was trained in France and is active in Italian-speaking Switzerland. The analysis of professional activity investigates the gap between the prescribed work and the actual work. Prescription is defined by ergonomics of activity as the set of work-related needs, which may be both formal and informal.

Activity is a system that determines relationships between prescriptions, tools, rules of the game, values, interlocutors, etc. Teachers set up an organization that is necessarily formed by collective, which - depending on the venue - act as the link between prescribed work and real work, and they also act as a source of self-prescription, they build tools, bear personal involvement, and so on. (Amigues, 2003, p.11)

In order to take into account the emotional dimension, the responsibilities, the concerns and the peculiarities of every situation, I have favored the gathering of qualitative material. An action-oriented research involving a group of six teachers from my office and six colleagues of mine that are middle school directors.

The teachers enrolled on a voluntary basis after my presentation of the research during a Plenum. First, the group met to have an exchange and to agree on the log (it would be updated daily, for one week). Later, the group met again for return and re-launching on some details that had come up, in order to conduct a semi-structured discussion for self-assessment. This was continued during a further meeting, conducted by Mrs Villaret in my absence. The collected material (logs, discussions, remarks) will be returned at a final meeting.

The directors also enrolled on a voluntary basis. I conducted individual interviews with six colleagues of mine, and joint return and debate meeting will follow. Semi-structured interviews were aimed at channeling testimonies as little as possible and yet addressing some of the major common themes: their own representation of the functions and the role of the director, real daily routine and the strategies put in place to address troubles, health, private life and working life.

Thanks to workgroups it is possible to have an exchange of views, to analyze the problem collectively and possibly to generalize individual results. Starting from the log helped teachers identify and explain the gap between prescribed and real work, investigate the reasons for the gap, the working logic and the skills involved. Individual interviews with directors provide a private space for having access to subjective experiences. Discussion on work analysis allows us to clarify real-life working strategies, and relate them to the elements that were analyzed previously.

Due to my particular position, this research is meant to function as a project, thus making it possible to draw up a fair agreement among the people involved.

Analysis of the first results

From the testimonies that have been gathered so far, at least three areas of tension emerge which are connected to one another and have contrasting aspects that call for proper handling.

First contrast: always more and more is required from school and yet at the same time it is left institutionally weakened.

The analysis of working context highlights that, on the one hand, more and more educational tasks are delegated to school and, on the other hand, the role of teachers as well as that of school in general are being deprived of their legitimacy. This tension can manifest itself in many different episodes, which make an office daily routine and which are perceived through a strong emotional burden by teachers and several managements. These are the matters you "take home". How can they be identified, how can their underlying causes be analyzed, which practical strategies do managements and teachers develop in order to deal with them?

Second contrast: a context that requires stability is increasingly characterized by urgent and unprecedented needs.

Especially at management level, the problematic issue emerges of emergencies and unforeseen events that mostly derive from the mutations of context as they have just been described (phone calls, talks, various events). Emergencies are caused by new sources of prescription, made necessary by what happens at the very moment the various components of school or external players interact with one another. What lies behind the issue of "emergencies"? Over time, the nature of work, teaching and leadership has changed. While in the past the "routine" dimension was dominant, over time, other aspects have become predominant. There is an increase in prescriptions that originate from demands which by their very nature cannot be anticipated. The presence of different kinds of problems poses difficulties that are not to be interpreted as "it is my fault" or "it is clear that I do not know how to handle it." The fact that most respondents today express it in terms of personal issues highlights the need to address these changes on another level, a professional and collective one. It is necessary to recognize them in the organization of work and to address them without leaving the individual alone (neither the teacher nor the director). How can we integrate and reconcile unprecedented issues into a context that needs stability?

Third contrast: from a professionalism based on individual skills to the need for synergies among people with complementary skills.

Data show that teachers and management receive requests and are faced with increasingly diverse and complex issues that go beyond their sphere of professional skills and cannot be solved with a 1-day training session or a consultation on the phone. For teachers, this can result in destabilization, feelings of personal incapacity and - understandably - delegation to management, which feed the issue of "emergencies and unforeseen problems". It is therefore necessary to look for ways of enhancing different kinds of cooperation between professional, building together a vision of the specific situation and finding the best solution, in the sense that when faced with unprecedented relational prescriptions, the know-how for the action is not available yet, but must be built on an ad hoc basis with everyone's professional expertise. And, therefore, the scope of responsibility of school (and teachers) is also to be redefined.

Research is currently underway and will be completed in October 2017.

Discussion

While it is premature to proceed with a discussion of the results, it is possible to mention possible tracks to be further discussed later.

It would be very interesting to conduct such a survey on a wider scale. Making the unprecedented emerge, and helping to explain it to those who live the school, implies recognizing the value of work and its collective dimension, and allows to identify the existing resolving potentialities. In order to be solved, unprecedented situations need creativity, intelligence and motivation on the part of those who work. How can they be fed?

In this perspective, better understanding of the work of teachers and their difficulties helps to identify the part of managerial work that is responsible for responding to the requirements that emerge from the faculty, what goes up (bottom-up) is related to what

the teachers cannot deal with personally through their activity, thus forming part of the management work (questions and requests for help, support, advice, problem solving).

Which regulations should be put in place in order to take into account the unprecedented part of the job? Interrogating the single professional logic is indispensable for conceiving a new organization of work, which has to be more pertinent and effective.

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"SCHOOL SERVED MEALS" VERSUS "EATING AT HOME": A SOCIOLOGICAL STUDY ON THE PHYCO-PHYSICAL CONDITIONS OF ITALIAN STUDENTS IN PRIMARY SCHOOLS

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The lunch time is considered one of the most important element identifying the well-being of student in school. This paper analyzes the impact of "school served meals" versus "eating at home" on the chance of being overweight in Italian students aged 6-9. The dependent variable "overweight" is considered a visible outcome of the more complex psycho-physic condition of the student and, in general, of his/her family. Family's and student's characteristics as the mean BMI of the family, the level of education of the families, the territorial area, the gender of students are analyzed. Furthermore psycho-physic characteristics such as the cultural and physical activities of the students and the future's expectation of wellbeing of the family are considered.

Only recently, national and over national organizations recognize that school meals should have an important role in beating children's poverty and, definitely, overweight and obesity (Committee on World Food Security, 2000; US Agency for International Development 2010; UNICEF, 2012; WHO, 2003). The Italian Ministry of Health, according to one of the nine EU target to reach by 2025, planned since 2007 many actions in order to halt the rise in childhood overweight and obesity. The European Community suggests to operate on the following areas: support a healthy start in life, promote healthier environments, encourage physical activity, labeling and taxation of foods, reduce marketing, inform and empower families (EU Action Plan on Childhood Obesity 2014-202). The "Italian National Guidelines for School Catering Services" released in 2010 (Italian Ministry of Health, 2010) provide indications to improve the nutritional quality of lunch eaten at school, to deal with organizational and management aspects of food service and educational aspects in the promotion of healthy eating habits in children. According to this, the 21 Italian regions improved their own prevention plans declining them on specific peculiar context's characteristics: schools represent a specific prevention setting (Okkio alla Salute, 2016). In Italy, the first school served meals in canteens were in the 1970s: since their first, school canteens where perceived by educators, teachers, families, stakeholders as a crucial way to transmit social value and behaviors as well as proper nutrition and health practices, surely not only as a commer-

cial service (Sonnino, 2009). As in the most part of the Mediterranean society, also in Italy the lunch and the dinner time are considered crucial moments of socialization with parents, other components of families, friends or pairs (Montanari, 2010). The food is considered a tool to transmit values and rules, to create relationship, to communicate messages, to know themselves and their pair, local tradition and different cultural differences (Zecca, 2016).

The new configuration of the families' life style such as cooking less at home, female full-employment, lower number of components in each family takes to an increasing number of parents choosing the school canteens. The school served meals are organized by most of the eight thousand (8.000) Municipalities present in Italy. Since the 70s the role of Municipalities in the school canteens organization anticipates and contributes to the regional autonomy approach development (Law 57/1997), the decentralization of competencies on local institutions (D.L.112/1998) and the school federalism (Constitutional Law. n. 3/2001). The strong connection between Municipalities and schools opened to school autonomy as territorial self-government, project initiative, assumption of responsibility toward a participative school community for all the actors (Janssen & Ehren 2016). The Municipalities manage the school canteens' service according to different levels of control: from the direct control of the Municipality administration with their own personnel and structure to the external caterers. The main part of the Municipalities - 74% according to Bio Bank (2013) - opts for a tender contract with catering firm service, only 15% for a direct organization and about 10% for a mixed formula. Even if the service is mainly given to some external caterers, the nutritional experts following the processes belong mainly to the public administration (26,4% from municipality and 52,3% from local health organizations) and only the 34,7% from catering firm service (Okkio alla salute, 2016): this is coherent with the peculiar and crucial educational role entrusting this figure. Promoting an inclusive approach to nutrition in schools, as said, is one action involving all the community members and in particular the families and the local actors (Galli et al., 2014). Alongside the nutritional experts, Italian school canteen system is based on the school "Canteen Committee": it is a representative organism composed by parents, teachers, personnel of municipality: they all aim to have surveillance and suggestions about school served meal service. This organism is not mandatory by law but warmly suggested since by the first national and regional guidelines of 2003 (even if in many schools the School Canteen Committees are active since a decade before).

On the basis of the literature reviews, the evaluation of the effect relative to "school served meals" versus "eating at home" is a very important political and social issue in order to analyze the well-being of children. The eating habits of the Italian children and their parents have not however been extensively investigated. We know that obesity runs in families, with children of obese parents at greater risk of developing obesity than children of thin parents. The relevance of physical activity in preventing overweight and obesity has been widely confirmed by literature, but a little few has been investigated about cultural stimuli and how that could affect overweight and obesity. On one side, cultural stimuli positively affect the cognitive skills but what about the chance in being overweight and obese given that many cultural stimuli such as reading a book, going

to the cinema or to theater take to have few moving in doing that? Children who more frequently have sport are also those who have the greater number of cultural stimuli? Furthermore how this features are declined between those who have served meals (and spend more time in school) and those who are eating at home? How much nutritional and cultural socio-economic families' characteristics have an impact on the chance of being overweight or obese for students? Eating in school canteens increases or decreases the chance of being overweight, net of all others variables?

The main objective of this study is to describe the characteristics of students and their families choosing to have school served meals. Secondly, this contribution aims to understand the chance in being overweight or obese according to having lunch or not having lunch in the school canteens. Finally, the analysis aims to clarify if students spending more time in schools have or have not a higher number of cultural stimuli and how much this are tied to the chance of being overweight or obese.

The design and methods imply a retrospective population study with data from the 2015 face-to-face multi-purpose survey by ISTAT (Italian National Statistics Institute). This survey focused on collecting data about eating habits and nutritional aspects, and was conducted through face-to-face guided interviews with a pre-defined questionnaire. The survey aimed at Italian families; each family was extracted with random criterion by the municipal registry lists, according to a statistically representative sample of the population residing in Italy. All members of the family were interviewed. Among 45.336 interviewees (19.158 families) of all ages, we will focus on 6-9 years old children (2.125 interviewees) and their parents.

Descriptive and variance analysis combined with binary regression model describe students having school served meals compared to students having lunch at home. Integrating different data source (Health Ministry data, Education, University and Research Ministry data and ISTAT data), the main results show that the variability in the type of food at lunch is higher between the different territorial area (in particular for those eating at home) than between home and school within the same territorial area (Morgan & Sonnino 2008). Between and within the territorial areas, the analysis highlight that having school served meals, net of all variables considered, takes to lower chance in being overweight. Increasing values in cultural and physical indicators take to lower chance in being overweight or obese and the same is if families are optimistic toward the future. We highlighted as taking part at the canteen lunch is considered something more than consuming food: it is a formative experience summing up the transmission of the values on rules and ability in having good relationships. However, the protection of the cultural tradition takes to a very high attention on the kind and the quality of consumed food: such attention should take to refuse school meals served in presence of high stake of qualities from the families. It has to be said that, even if the difference in the kind of food consumed is analyzed, very little is known about the differences in the quality of food consumed in the canteens. In Italy, a unique school menu for all students in the school is submitted, under the criss-cross surveillance of parents, nutritional experts, teachers and school staff, representatives of the catering company, head of the cooking center and an expert in food hygiene as representative of the local health authority converging on the Canteen Committee. This last should be a kind of

quality assurance but further analysis is needed. Recently, after the court judgment, the Italian Ministry of Education deliberates the possibility for students to take the lunch from home and to consume it at school (MIUR note n.348/2017). Actually, families refusing school meals in a declared way are probably few and these specific cases have mainly the media attention. Not surprisingly, the canteens' service is more requested in the great urban center where the ties with cultural tradition are weaker, the rate of female full-employment is higher and families' propensity in delegating schools is stronger even when the quality of food should not be high. When both the trust of families in the school is lower and attention on food is high, individualistic families choices should prevail on the collective benefits of school communities' participation and, consequently, on the collective responsibility (Ashe & Sonnino, 2013).

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IMPROVING THE LEARNING ENVIRONMENT IN SECONDARY SCHOOLS: A CHALLENGE FOR THE SOCIETIES OF TOMORROW

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Introduction

In the last fifteen years, the scientific and professional debates in educational psychology have emphasized the importance of creating favorable conditions in the classrooms for students to feel active in, and co-responsible for, their educational pathways (Carpenter & Pease, 2013; Fisher & Frey, 2008; Helker & Wosnitza, 2016). This vision of a school able to prepare students for adult life, however, is contrasted by the evidence that in contemporary classrooms students are still expected to be basically compliant, receptive and ready to follow teacher directions (Renshaw, 2016).

In the current study, we implemented a school-based intervention for helping teachers to improve the learning environment by positioning students as active participants, and for encouraging students to be co-actors in classroom discourse and practices. At the core of our perspective are the constructs of agency, responsibility, and classroom justice.

In the educational psychology literature, the concept of agency is rooted in the students' assumption of an active role in classroom life. Generally speaking, agency reflects the people's will and skill to act upon activities and circumstances in their lives (Lipponen & Kumpulainen, 2011). In classrooms, students are considered to act agentically when they intervene on and transform situated educational practices with their actions or words (Mäkitalo, 2016).

The adoption of an agentic role in educational processes and paths is complementary to the assumption of responsibility for one's own learning (Carpenter & Pease, 2013; Rajala, Martin, & Kumpulainen, 2016). Over a decade ago, student responsibility was proposed by the American Psychological Association as one of the main goals for education in the 21st Century (Sternberg, 2002). The same position was updated in the CASE report on Key Competences in Europe, stating that "individuals need to be able to take responsibility for managing their own lives, situate their lives in the broader social context and act autonomously" (Gordon et al., 2009, p. 40). This assumption has been recently relaunched by Helker & Wosnitza (2016) who argued that students are not

only the target of responsible actions taken by adults, but should be encouraged to take on a responsible role in self-regulating learning paths. However, most of the existing research on educational responsibility focused on teachers (Lauermann & Karabenick, 2011) while students' perceptions are still scarcely explored.

The students' subjective experience of justice, that is, of being treated fairly by teachers, is an additional important aspect of a positive learning environment. In classroom, most students are highly sensitive to just or unjust interpersonal behaviors and react when they feel that the principles of equality and equity are not respected (Dalbert & Stoeber, 2006). In this field, several studies have indeed shown that the degree of fairness students attribute to the teacher's interpersonal behavior is associated to motivation and group cooperation skills (Chory-Assad, 2002; Oluwatayo, Aderonmu, & Aduwo, 2015). On the contrary, the feeling of injustice in teacher-student interactions leads to negative outcomes, such as a decline in learning commitment and a psychological disengagement from school life (Molinari, Speltini, & Passini, 2013).

Research question and objectives

In the present research, we developed a school-based intervention with the aim to improve the learning environment in an Italian middle school. The intervention took place in four phases. In Phase 1 (training), we trained teachers to encourage students' agency and responsibility and to be aware of the various aspects of classroom justice (equality and equity). In Phase 2 (first wave) we administered to all teachers and students in the school a self-report questionnaire on the learning environment. Participants were asked to answer making reference to a typical school day. In Phase 3 (intervention), all teachers and students participated in a two-day intervention of school laboratories (teachers proposed the lessons' topics and students were asked to choose their own schedule). In Phase 4 (second wave), all teachers and students were administered the same questionnaire on the learning environment, answering in reference to the school laboratories.

Method, measures and participants

The sample of teachers included 26 participants, 3 males and 23 females, in the first wave of data collection and 24 participants (2 males and 22 females) in the second wave. Teachers averaged 49.01 years of age (range 34-63) and 18.81 years of experience (range 3-34). The student participants were 383 (188 males and 194 females) in the first wave of data collection and 397 (194 males and 201 females) in the second wave. Their age varied from 11 to 14 years (Mean age = 12.15).

The questionnaires administered to students and teachers comprised the same measures, with different formulations: students were asked to think about their own classroom behavior, teachers were asked to think about the way they facilitate students' classroom behavior. The measures, evaluated on a 5-point Likert scale of agreement, were translated and adapted from some of the scales of the Constructivist-Oriented Learning Environment Survey (COLES; Aldridge et al., 2012) and consisted in the following:

– Agentic participation. This scale comprised 6 items assessing the degree and quality of students' active participation in classroom activities (item sample for students and teachers respectively: I give my opinions during class discussions / I ask students to give their opinions during class discussions).

– Responsibility. This scale comprised 7 items measuring the degree to which teachers give students responsibility and treat them as young adults (item sample: I am encouraged to take control of my learning / I encourage students to take control of their learning).

– Justice. This scale is composed by 6 items evaluating the degree to which students perceive to be treated fairly by teachers, or to which teachers perceive to be fair with their students (item sample: I get the same opportunity to contribute in class discussions as other students / I give to each of my students the same opportunity to contribute in class discussions).

Cronbach's alphas for these scales ranged from .76 to .79 for the student sample, and from .82 to .87 for the teacher sample.

Results

The effectiveness of the planned intervention in improving the quality of the learning environment was tested by inspecting the presence of statistically significant differences between the first and the second waves of data, separately for students and teachers. As regards the students, the findings of a series of Analysis of Variance (ANOVA) revealed a significant increment of Responsibility (Mean first wave =3.35; Mean second wave =3.47; F=4.04; p<.05) and Justice (Mean first wave =3.76; Mean second wave =3.92; F=30.58; p<.001) scores, while no differences were found for Agentic participation (Mean first wave =2.97; Mean second wave =2.98; F=0.30; p=.86).

As regards the teachers, the non-parametric test of Mann Whitney did not indicate significant differences on the considered dimensions (whose mean values were all higher than 4.00) before and after the intervention.

In order to compare students' and teachers' perceptions of the learning environment separately for the two waves, Mann Whitney U Tests were used for each of our measures. Overall, results indicated the presence of significant discrepancies, with teachers overestimating the considered dimensions with respect to students. More in detail, teachers obtained higher scores on students' Agentic participation (p<.001) and Responsibility (p<.001) in both the first and the second waves of data, while they had a higher value on Justice (p<.05) only for the time before the intervention.

Discussion

The purpose of this study was to improve the learning environment through a school-based intervention aimed at favoring students' agency, responsibility and subjective experience of justice. Overall, the results showed that the teacher training and the school laboratories we proposed were only partially effective in transforming everyday instructional activities.

Our results induce to suppose that the increased teachers' sensitivity to the topics dealt with during the training, together with the qualities of the school laboratories, have been positively valued by students as an improvement of the learning environment. In particular, students evaluated their learning environment as more just and more oriented to sustain their own responsibility in the co-construction of the unfolding activities. Nevertheless, the fact that no variation was registered by students in terms of their agentic participation – in both waves evaluated with mean scores under the midpoint of the scale – revealed how difficult it is for teachers to encourage (and recognize) a truly proactive and transformative student role.

This difficulty might also be because teachers perceived the quality of the learning environment as much higher than their students did. In fact, the teachers' average values of the three considered dimensions – already high before the intervention – did not show any variation after it. This result raises worries concerning the way school adults perceive and evaluate everyday classroom practices. In the face of a scientific debate that increasingly calls for fostering students' responsibility and active engagement (Carpenter & Pease, 2013; Fisher & Frey, 2008), our data seem to reveal that teachers do not "see" this need because they consider these educational principles as already achieved. Unfortunately, in a learning environment already perceived as optimal (even when it is not), little space remains for change and improvement.

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"CLOSE OR DISTANT?": HOW CLASSROOM SPATIAL ORGANIZATION AFFECTS CHILDREN'S COGNITIVE PROCESSES IN PRIMARY SCHOOL

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Introduction

Environmental psychology is an interdisciplinary science investigating the interplay between the cognitive, affective, and behavioral processes exhibited by human beings, and the environment, both natural and artificial (e.g., Clayton, 2012; Gifford, 2007). A subset of research within environmental psychology focused on the impact of learning environments, namely schools-related structural and organizational dimensions, on students' achievement, engagement, affective state, attendance and well-being (Higgins, Hall, Wall, Woolner, & McCaughey, 2005). Evidence from this field showed that the physical environment of schools and classrooms has an important influence on students' comfort, on learning processes and on social interactions between teachers and their pupils and among peers (Marx, Fuhrer, & Hartig, 1999; Sanoff, & Walden, 2012). Despite these results, there is a relative paucity of research on spatial organization of learning environments (Higgins et al., 2005), particularly considering the direct effects on cognitive processes in developmental age.

Spatial organization within the classroom is linked, on one side, to the possibility of interactions and movement, and on the other to the interpersonal distance between individuals. For example, the classical rows and columns seating arrangement puts students relatively far from each other and from the teacher, compared to the cluster or 'horseshoe' arrangements. Interpersonal distance is a classical issue in social psychology (e.g., Felipe & Sommer, 1966; Sundstrum & Altman, 1976), and it is known to influence not only relational but also cognitive processes (Amit, Wakslak, & Trope, 2012). These influences are connected to specific variables, such as personality characteristics (e.g., some individuals perceive proximity as an invasion of personal space; Kaitz, Bar-Haim, Lehrer, & Grossman, 2004) and the existing relationships among individuals (Mehrabian, 1968).

Research question and objectives

Based on the aforementioned literature, it is possible to hypothesize that cognitive processes can be directly influenced by the interpersonal distance deriving from classroom

seating arrangement: these processes could be improved or impaired, also depending on specific individual variables and task characteristics. To date, despite the large debate regarding the best seating arrangement in classrooms, no empirical studies examined this issue. Thus, the present experiment aims at investigating the effects of interpersonal distance with classmates –manipulated modifying the classroom seating arrangement– on children's cognitive and learning processes. Moreover, the influence of individual variables (e.g. popularity, relational self-esteem) was explored.

Methods

Participants

Seventy-nine 4th-5th graders (56% females; age range = 8-11 years, Mage = 9.58, SD = .66) from five classes of a primary school in Northern Italy were involved in the study.

Instruments and procedures:

The tasks were administered over three sessions. During the first (T0) phase, a questionnaire was collectively administered in the children's classroom during a 1-h session, investigating the following variables:

- relational self-esteem: participants completed the Social subscale from the Italian adaptation of the Multidimensional Self-Concept Scale (TMA; Bracken, 2003). The Social subscale includes 25 items and responses on a 4-point Likert scale are requested;
- peer ratings: children were asked to rate each classmate from 0 (not at all) to 3 (very much) in relation to four different situations investigating popularity, shyness, solitude and bothersome;
- physiological reactions to proximity: children completed a scale adapted from the Brief Social Phobia Scale (Davidson et al., 1991), asking on a 5-point Likert scale (1 = never, 5 = always) how frequently they experience some physiological reactions (e.g., blushing, sweating) during interpersonal proximity.

Then, approximately two weeks later, the first experimental manipulation (T1) was administered within each classroom: for 3 randomly selected classes desks were arranged in clusters, and for the remaining 2 classes desks were arranged in rows and columns. Maintaining this arrangement, children were asked to carry out cognitive tasks. One week later, a beta-version of the same tasks were administered after organizing the classroom with the alternative seating arrangement (T2). The tasks were the following:

- sustained attention: in the Sustained Auditory Attention test from the Italian Battery for ADHD (Marzocchi, Re & Cornoldi, 2010);
- calculation: children were presented with 30 written calculation and asked to solve as many as possible of them in 8 minutes;
- logical reasoning: a selection of 15 items from the K-BIT 2 Matrices subtest (Kaufman & Kaufman, 2004) was presented;
- creativity: the Alternative Uses Task (Guilford, 1967) was administered. Scores of originality were assessed by two blind judges;

  – Theory of Mind (ToM): participants completed the children's version of the Reading the Mind in the Eyes Test (Baron-Cohen, Wheelwright, Spong, Scahill, & Lawson, 2001).

Therefore, a within-participants single factor with two levels (arrangement: clusters vs. rows-columns) experimental design was adopted. The manipulation order (clusters first vs. rows-columns first) was properly balanced.

Analyses and results

The series of within-participants t-tests computed to compare children's performance on the different tasks (i.e., attention, calculation, logical reasoning, creativity, ToM) when their desks were arranged in clusters rather than in rows and columns did not show any difference between the two experimental conditions, $ts(69)<1.43$, $ps>.16$.

Then, in order to explore the moderating role of gender, a series of 2 (arrangement: clusters vs. rows-columns) X 2 (gender: female vs. male) ANOVAs was carried out on the tasks scores. On attention, calculation, logical reasoning and creativity, the analyses did not yield main or interaction effects, $Fs(1,68)<2.59$, $ps>.11$, $\eta p2<.04$. The analysis on the Reading the Mind in the Eyes Test showed a different pattern: the ANOVA did not reveal a main effect of arrangement, $F(1,68)=1.51$, $p=.22$, $\eta p2=.02$, or of gender, $F(1,68)=.01$, $p=.94$, $\eta p2=.00$, but a significant interaction effect between arrangement and gender, $F(1, 68)=4.00$, $p=.04$, $\eta p2=.056$. Whereas males' performance on the ToM test was not affected by the desks arrangement ($p=.60$), females' results were higher ($p=.02$) in rows-columns condition (M=8.67, DS=2.18) than in clusters condition (M=7.59, DS=2.29).

Next, to investigate the moderating role of individual characteristics, a series of moderation models was computed (PROCESS, Model 1, Hayes, 2013; 5000 bootstrap resampling) using the arrangement as dichotomous independent variable (rows-columns=0, clusters=1), the individual variables (relational self-esteem/physiological reaction/peer evaluations) as continuous moderators and the scores on the cognitive tasks as dependent variables. The models did not reveal any effects on attention, creativity, logical reasoning and calculation ($ts <1.15$ $ps> .25$). Again, an interesting pattern arose on the ToM score. Whereas children who obtained low rating of popularity from peers were not influenced by arrangement manipulation (B =-.014, SE=.54, t= -.03, p= .98, CI: LL=-1.08, UL=1.05), popular children performed better on the Reading the Mind in the Eyes Test in rows-and-columns than in cluster arrangement (B=-1.08, SE=.54, t=-2.01, p=.04, CI:LL=-2.16, UL=-.02). Analogously, disturbing children proved to be unaffected by the experimental manipulation (B=.37, SE=.52, t=.70, p=.48, CI:LL=-.67, UL=1.40), whereas children who were peer-rated as more adequate were negatively influenced by the clusters arrangement (B=-1.45, SE=.52, t=-2.76, p=.01, CI:LL=-2.48, UL=-.41).

The results were not affected by the arrangement manipulation order or by the usual arrangement in the classroom.

Discussion

Overall, the results showed that physical proximity/distance from peers does not affect children's performance of cognitive tasks regarding attention, calculation, logic and creativity. However, in specific conditions, the arrangement of the learning environment is likely to influence social skills (ToM). Remarkably, findings revealed that females and more socially competent children made more mistakes in recognizing and attributing emotions in condition of physical proximity (clusters arrangement) than in condition of physical distance (rows-and-columns arrangement).

This counterintuitive result is in line with prior studies on social influence showing that socially included individuals are less attuned to social cues (as emotion expressions) than rejected individuals (e.g. Bernstein, Young, Brown, Sacco, & Claypool, 2008). Thus, as yielded in our experiment, socially competent children could be less prone to mobilize cognitive resources to accomplish an additional social task, in condition of physical closeness with their peers. In such a situation, in fact, their social skills and competence are likely to be already exploited in the actual relation.

These results may have relevant implications for the definition of architecture and design of learning environments.

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