

END 2015

International Conference on Education and New Developments

27-29 June ♦ Porto, Portugal

Proceedings

Edited by
Mafalda Carmo



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Edited by:
Mafalda Carmo,
World Institute for Advanced Research and Science (WIARS), Portugal

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FOREWORD

Dear Colleagues,

We are delighted to welcome you to the International Conference on Education and New Developments 2015 - END 2015, taking place in Porto, Portugal, from 27 to 29 of June.

Education, in our contemporary world, is a right since we are born. Every experience has a formative effect on the constitution of the human being, in the way one thinks, feels and acts. One of the most important contributions resides in what and how we learn through the improvement of educational processes, both in formal and informal settings. Our International Conference seeks to provide some answers and explore the processes, actions, challenges and outcomes of learning, teaching and human development. Our goal is to offer a worldwide connection between teachers, students, researchers and lecturers, from a wide range of academic fields, interested in exploring and giving their contribution in educational issues. We take pride in having been able to connect and bring together academics, scholars, practitioners and others interested in a field that is fertile in new perspectives, ideas and knowledge. We counted on an extensive variety of contributors and presenters, which can supplement our view of the human essence and behavior, showing the impact of their different personal, academic and cultural experiences. This is, certainly, one of the reasons we have many nationalities and cultures represented, inspiring multi-disciplinary collaborative links, fomenting intellectual encounter and development.

END 2015 received 528 submissions, from 63 different countries, reviewed by a double-blind process. Submissions were prepared to take form as Oral Presentations, Posters, Virtual Presentations and Workshops. It was accepted for presentation in the conference, 176 submissions (33% acceptance rate). The conference also includes a keynote presentation from an internationally distinguished researcher, Professor Dr. Martin Braund, Adjunct Professor at Cape Peninsula University of Technology in Cape Town, South Africa and Honorary Fellow in the Department of Education at the University of York, UK, to whom we express our most gratitude.

This volume is composed by the proceedings of the International Conference on Education and New Developments (END 2015), organized by the World Institute for Advanced Research and Science (W.I.A.R.S.) and had the help of our respected media partners that we reference in the dedicated page. This conference addressed different categories inside the Education area and papers are expected to fit broadly into one of the named themes and sub-themes. To develop the conference program we have chosen four main broad-ranging categories, which also cover different interest areas:

- In **TEACHERS AND STUDENTS**: Teachers and Staff training and education; Educational quality and standards; *Curriculum* and Pedagogy; Vocational education and Counseling; Ubiquitous and lifelong learning; Training programs and professional guidance; Teaching and learning relationship; Student affairs (learning, experiences and diversity); Extra-curricular activities; Assessment and measurements in Education.
- In **PROJECTS AND TRENDS**: Pedagogic innovations; Challenges and transformations in Education; Technology in teaching and learning; Distance Education and eLearning; Global and sustainable developments for Education; New learning and teaching models; Multicultural and (inter)cultural communications; Inclusive and Special Education; Rural and indigenous Education; Educational projects.

- In **TEACHING AND LEARNING**: Educational foundations; Research and development methodologies; Early childhood and Primary Education; Secondary Education; Higher Education; Science and technology Education; Literacy, languages and Linguistics (TESL/TEFL); Health Education; Religious Education; Sports Education.
- In **ORGANIZATIONAL ISSUES**: Educational policy and leadership; Human Resources development; Educational environment; Business, Administration, and Management in Education; Economics in Education; Institutional accreditations and rankings; International Education and Exchange programs; Equity, social justice and social change; Ethics and values; Organizational learning and change.

The proceedings contain the results of the research and developments conducted by authors who focused on what they are passionate about: to promote growth in research methods intimately related to teaching, learning and applications in Education nowadays. It includes an extensive variety of contributors and presenters, who will extend our view in exploring and giving their contribution in educational issues, by sharing with us their different personal, academic and cultural experiences.

Authors will be invited for inclusion of their extended works for inScience Press book *“Education Applications & Developments II”*.

We would like to express thanks to all the authors and participants, the members of the academic scientific committee, our media partners and, of course, to our organizing and administration team for making and putting this conference together.

Hoping to continue the collaboration in the future,

Respectfully,

Mafalda Carmo

World Institute for Advanced Research and Science (WIARS), Portugal
Conference and Program Chair

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KEYNOTE LECTURE

“A NEW STEAM AGE: TOWARDS ONE CULTURE FOR LEARNING”

Professor Dr. Martin Braund

*Adjunct Professor at Cape Peninsula University of Technology in Cape Town (South Africa) and
Honorary Fellow in the Department of Education at the University of York (United Kingdom)*

Abstract

In many cultures learning has been organised around subject disciplines broadly conceived as the Arts, Humanities and Sciences. Subject disciplines of the curriculum have evolved structures and characteristics creating boundaries between them that are counter to the experiences of many adolescents, who rarely meet such borders in their daily lives. Disciplinary borders favour a utilitarian view of knowledge and creativity, often under-valuing some disciplines, including the creative and performing arts, not directly associated with primary means of economic production. The borders between self-reinforcing disciplinary structures result in inadequate attention paid to the potential of working across, between and beyond disciplines. In this keynote I examine how this schism between the ‘Arts’ and ‘Sciences’ has come about and the potential harm it continues to do. An example from the history of science, the case of Darwin’s changing relationship with the two cultures, is used to promote the benefits of more creative approaches to teaching science in a new project, ‘Darwin Inspired Learning’. The benefits to learning science using one of the Arts, drama, are shown. The argument is made for ‘**STEAM**’, showing how education in the 21st Century is moving away from a restricted notion of STEM (Science, Technology, Engineering and Mathematics) to one that encompasses the Arts (Science, Technology, Engineering, **ARTS** and Mathematics). **STEAM** promotes economic development, encouraging people to work creatively to generate and communicate ground breaking new ideas.

Brief Biography

Martin Braund is Adjunct Professor at Cape Peninsula University of Technology in Cape Town, South Africa and Honorary Fellow in the Department of Education at the University of York.

After graduating in Zoology and Geology from Exeter University he taught science in secondary schools in Cardiff, York and Boroughbridge for 18 years. In 1989-1991 he completed a Masters in Science Education while working as a Research Fellow for the Assessment of Performance Unit in Science at the University of Leeds. He holds a PhD from the University of York focused on research in transition from primary to secondary school.

Much of his work is connected with innovative approaches to teaching science and biology. His wife is an actress and he has a great interest in the history and philosophy of the theatre. Martin has published over seventy journal articles and his books and chapters in books are internationally known in the fields of transition, informal learning outside the classroom (with Michael Reiss), argumentation, teacher education and drama in science. His most recent book, *Performing Science* (Bloomsbury, 2012), was shortlisted for education resource of the year.

Martin is a member of several international research organisations and editorial boards of leading journals and is editor of *Science Teacher Education*. He has worked as consultant, adviser and keynote speaker in over 20 countries of Europe, Australasia and Africa.

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Oral Presentations



ADOLESCENTS' HEALTH LITERACY AS A BUFFER IN A CRISES CONTEXT OF A LEGIONELLA OUTBREAK IN PORTUGAL (CRADLISA PROJECT HLS-EU-PT)

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Abstract

Health literacy (HL), is considered to play a relevant role in disease prevention and health promotion. This research focus HL influence in a public health crises context of a legionella outbreak in the last quarter of 2014 in a region north of Lisbon (VFX), Portugal. With 375 affected and 12 death (one of the worst outbreaks in Europe in recent years) public health measures to counter act the influence of social stress and disease impact were activated. A quantitative and qualitative explanatory cross-correlated study based on a sample of 215 adolescents was collected in a school setting, after ethical procedures were followed. Measurement of adolescents HL (CrAdLiSa project) was implemented with the HLS-EU-PT survey, the Portuguese version of the European Health Literacy Survey instrument (www.literacia-saude.info). HL seems to play a buffer role in a crises situation.

Keywords: *Health Literacy, HLS-EU-PT, Adolescent Health, Legionella Outbreak.*

1. Introduction

Health literacy as a concept and a tool to increment a person's ability to navigate throughout his or her life course is today deeply incrustrated in discussions that focus health promotion and health care. Not only practitioners but also educators, are sensitive to this area of knowledge. Increase investment in HL is dominating research agendas. There is a connection between HL and public health interest in increasing populations wellbeing. HL has direct impact over health behaviors (Sanders et al., 2009). In line with this, educators and the education settings can play a major role in promoting HL as a direct outcome (Paakkari and Paakkari, 2012). Consequently the discussion on how to increase and promote HL is also focused on creating room to introduce HL in the curriculum, making it a school topic/subject. New perspectives are being opened (Institute of Medicine (IOM), 2004) like the question if HL, can be considered as a buffer variable at early ages (e.g. adolescence). Newly developed approaches have been used to study adults populations' HL, but the question has not been addressed on how this could be adapted and applied to earlier ages groups (like adolescents) (Manganello, 2008). The HLS-EU (Sorensen et al., 2014) project has emphasized the dimensions of health care, health prevention and health promotion covering a wide range of perspectives in an integrated approach. With the present research, for the first time to our knowledge, HL is assessed with an adapted version of the HLS-EU instrument, (the HLS-EU-PT, see annex 1) in a school setting (Saboga-Nunes, 2014). This was done in the context of a public health crises. In the last quarter of 2014 in a region north of Lisbon (VFX), Portugal, a legionella outbreak increased social stress, with 375 affected and 12 death (one of the worst outbreaks in Europe in recent years). Our research question was focused on how health literacy helped cope with the legionella outbreak in an adolescent population.

2. Objectives

The purpose of this research is to evaluate how health literacy could be an allied and a buffer to counteract social stress. It is considered a school setting from the affected area of the legionella outbreak.

3. Methods

Study population:

It was conducted a multi-region study based on data from the study CrAdLiSa "saúde e bem-estar em tempos de crise" 2015, including six regions in Portugal. This is a population study where students older than 12 years of age are invited to participate in a CAWI process of data collection. A web address is provided to all of those students who have been authorized by their parents to participate. Only these are integrated in the study and this restriction results in a total sample of 215 students from the school of Vila Franca de Xira, selected for the research, after ethical procedures were followed.

Measures:

Health Literacy (HL). Information on HL was assessed with the 47 items of the European Health Literacy Survey (HLS-EU) that has been validated to Portuguese and adapted to this population of adolescents (Annex 1). Measurement of adolescents HL (CrAdLiSa project) was implemented with the HLS-EU-PT survey, the Portuguese version of the HLS-EU Survey instrument (www.literacia-saude.info). Using the authors criteria, participants were classified into four categories of HL: 1) inadequate (< 25 score); 2) problematic (between 25 and 33); 3) sufficient (between 32 and 42); 4) excellent (>42)

Demographic characteristics:

Using reported birth dates, ages were calculated and participants were categorized into seven age groups, 12, 13, 14, 15, 16, 17, 18. The CrAdLiSa data provides variables of educational attainment: the recoded variable that focuses on levels of education.

Data analysis:

For the entire sample, for all variables, descriptive statistics were calculated (e.g. means, standard deviation and percentages). Student t-test and ANOVA were performed to assess sex, age and education level differences for the levels of HL. Bivariate relationships between HL (satisfactory HL vs. compromised HL), and sex, age and educational level were tested by chi-square test and Mann-Whitney test. To test associations between HL, and sex, age and education level a logistic regression analyses was conducted. Pearson's correlations were also computed. All statistical analysis was performed using IBM SPSS Statistics 22. The significance level was set at $p < 0.05$.

4. Results

Reliability analysis of HLS-EU-PT dimensions show an internal consistence (Cronbach's alpha coefficient) of 0.946 (Health Care), 0.947 (Disease Prevention) and 0.958 (Health Promotion), while the global instrument presents a value of 0.98. Inadequate HL (4.2%) and problematic HL (21.7%) show that about 25% of respondents have limited HL.

A Pearson product-moment correlation coefficient was computed to assess the relationship between HL and the 10 legionella outbreak perceptions. There was a positive correlation between HL and five of these items: the higher was HL, the less doubts concerning the legionella outbreak ($r = 0.299$, $n = 125$, $p = 0.01$) were expressed, the more adolescents tend to interact and communicate with their parents ($r = 0.405$, $n = 128$, $p = 0.01$), friends ($r = 0.338$, $n = 130$, $p = 0.01$), searched for information regarding it ($r = 0.265$, $n = 118$, $p = 0.01$) and have taken measures to deal with the crisis situation ($r = 0.250$, $n = 127$, $p = 0.01$)

5. Conclusions

The results enhance the reliability, validity, internal validity, statistical validity longitudinal and linguistic validity, as land marks of the translation and validation process to Portuguese of the HLS-EU survey and applied to evaluate adolescents HL. HL seems to play a buffer role in a crises situation.

HL is associated with the perception of having resources to deal with a public health crises of a legionella outbreak. Those with higher HL have better assimilated public health messages by health authorities in social media to deal with the current crises, and, deal better with precautionary measures about the outbreak.

Of the 10 items assessment instrument concerning the legionella outbreak, five had a positive statistical association with HL. Further research must investigate HL potential at this age range and how it should be developed in the school curricula.

Table 1. Sample characteristics

| | N (%) |
|------------------------------|-------------|
| <i>Sex</i> | |
| Male | 92 (43.40) |
| Female | 120 (56.60) |
| <i>Age (%)</i> | |
| 12 | 15 (7,1) |
| 13 | 48 (22,6) |
| 14 | 65 (30,7) |
| 15 | 46 (21,7) |
| 16 | 24 (11,3) |
| 17 | 10 (4,7) |
| 18 | 4 (1,9) |
| <i>Education level</i> | |
| 7th gde | 57 (26,9) |
| 8th gde | 72 (34,0) |
| 9th gde | 80 (37,7) |
| 10th gde | 1 (0,5) |
| 12th gde | 2 (0,9) |
| <i>Health Literacy level</i> | |
| inadequate | 9 (4,2) |
| problematic | 46 (21,7) |
| sufficient | 85 (40,1) |
| excellent | 72 (34,0) |

Table 2. Estimated prevalence of HL by selected characteristics.

| Sample characteristics | HL mean (min-max) |
|------------------------|-------------------|
| <i>Sex</i> | |
| Male | 39.27 (17-67) |
| Female | 38.83 (23-67) |
| <i>Age (%)</i> | |
| 12 | 40.47 (26-67) |
| 13 | 39.45 (24-67) |
| 14 | 40.41 (23-67) |
| 15 | 37.41 (25-59) |
| 16 | 36.89 (17-67) |
| 17 | 36.52 (23-49) |
| 18 | 43.44 (33-50) |
| <i>Education level</i> | |
| 7th gde | 38.71 (23-67) |
| 8th gde | 42.02 (24-67) |
| 9th gde | 36.76 (17-67) |
| 10th gde | 31.56 (32-32) |
| 12th gde | 34.40 (32-37) |

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Annex 1: HLS-EU-PT©

Portuguese version (for adolescents) of the European Health Literacy Survey instrument HLS-EU-PT© the CrAdLiSa project - incrementando nas CRianças e ADolescentes a Literacia para a SAÚDE.

- 1 "... encontrar informações sobre sintomas de doenças que te dizem respeito ou causam preocupação? "
- 2 "... encontrar informações sobre tratamentos de doenças que te dizem respeito ou causam preocupação? "
- 3 "... descobrir o que fazer em caso de uma emergência médica? "
- 4 "... descobrir onde obter ajuda especializada quando estás doente? (por ex. junto de um médico, farmacêutico, psicólogo) "
- 5 "... compreender o que teu médico te diz? "
- 6 "... compreender a bula (os folhetos) que acompanham o teu medicamento? "
- 7 "... compreender o que fazer numa emergência médica? " 8 "... compreender instruções do teu médico ou farmacêutico sobre o modo de tomar um medicamento receitado
- 9 "... avaliar como é que a informação oriunda do teu médico se aplica ao teu caso? "
- 10 "... avaliar vantagens e desvantagens de diferentes opções de tratamento? "
- 11 "... avaliar quando podes necessitar de uma segunda opinião de outro médico? "
- 12 "... avaliar, se a informação sobre a doença nos meios de comunicação é de confiança? " (por ex. TV, Internet ou outros meios de comunicação)
- 13 "... usar informações que o teu médico te dá para tomar decisões sobre a tua doença? "
- 14 "... seguir instruções sobre medicação? "
- 15 "... chamar uma ambulância em caso de emergência? "
- 16 "... seguir as instruções do teu médico ou farmacêutico? "
- 17 "... encontrar informações para gerir comportamentos que afetam a tua saúde tais como fumar, atividade física insuficiente e beber álcool em demasia? "
- 18 "... encontrar informações para gerir problemas de saúde mental, tais como stresse ou depressão? "
- 19 "... encontrar informações sobre vacinas e exames de saúde que devias fazer? " (por ex. teste de açúcar no sangue, pressão arterial)
- 20 "... encontrar informações sobre como prevenir ou controlar condições tais como o excesso de peso, pressão arterial alta ou colesterol alto? "
- 21 "... compreender advertências relativas à saúde e comportamentos tais como fumar, atividade física insuficiente e beber álcool em demasia? "
- 22 "... entender porque precisas de vacinas? "
- 23 "... entender porque precisas de exames de saúde? (por ex. teste de açúcar no sangue, pressão sanguínea) "
- 24 "... avaliar quão seguras são as advertências envolvendo a saúde, tais como fumar, atividade física insuficiente e beber álcool em demasia? "
- 25 "... avaliar quando precisas de ir a um médico para um check-up ou exame geral de saúde? "
- 26 "... avaliar quais são as vacinas de que podes precisar? "
- 27 "... avaliar que exames de saúde precisas de fazer? (por ex. teste de açúcar no sangue, pressão sanguínea) "
- 28 "... avaliar, se as informações sobre os riscos de saúde nos média são de confiança? (por ex. TV, Internet ou outros meios de comunicação) "
- 29 "... decidir se deves fazer a vacina contra a gripe? "
- 30 "... decidir como te podes proteger da doença com base nos conselhos da família e amigos? "

- 31 "... decidir como podes proteger-te da doença com base em informações com origem nos meios de comunicação? (por ex. Jornais, folhetos, internet ou outros meios de comunicação) "
- 32 "... encontrar informações sobre atividades saudáveis tais como atividade física, alimentação saudável e nutrição? "
- 33 "... saber mais sobre as atividades que são boas para o teu bem-estar mental? (por ex. meditação, exercício, caminhada, pilates, etc) "
- 34 "... encontrar informações que indiquem como é que o teu bairro poderia ser mais amigo da saúde? (por ex. redução de ruído e poluição, a criação de espaços verdes, de lazer)"
- 35 "... saber mais sobre as mudanças políticas que possam afetar a saúde? (por ex. legislação, programas de rastreio de saúde, novas mudanças de governo, de reestruturação de serviços de saúde, etc)"
- 36 "... saber mais sobre os esforços para promover a tua saúde em meio escolar? "
- 37 "... compreender conselhos sobre saúde que te chegam dos familiares ou amigos? "
- 38 "... compreender informação contida nas embalagens dos alimentos? "
- 39 "... compreender a informação com origem nos meios de comunicação sobre a forma de te tornares mais saudável? " (por ex. Internet, jornais, revistas) "
- 40 "... compreender a informação que visa manter a mente saudável? "
- 41 "... avaliar como o local onde vives, afeta a tua saúde e bem-estar? " (por ex. a tua comunidade, teu bairro)
- 42 "... avaliar como as tuas condições de habitação te ajudam a permanecer saudável? "
- 43 "... avaliar que comportamento diário está relacionado com a tua saúde? (por ex. beber álcool, hábitos alimentares, exercício, etc) "
- 44 "... tomar decisões para melhorar a tua saúde? "
- 45 "... entrar num clube de desporto ou aulas num ginásio se desejares?
- 46 "... influenciar as condições da tua vida que afetam a tua saúde e bem-estar? (por ex. ingestão de álcool, hábitos alimentares, exercício etc) "
- 47 "... tomar parte das atividades que melhoram a saúde e o bem-estar na tua comunidade

Portuguese version (for adolescents) of the European Health Literacy Survey instrument HLS-EU-PT©
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Workshops



CHILDREN AT RISK FOR MENTAL DISORDERS AND THE IMPACT OF TEACHERS ON CHILD MENTAL HEALTH PROMOTION

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Abstract

Purpose: The workshop aims to highlight the potential contribution of teachers to promote child mental health in schools. We will figure out the current practices in schools by questioning how professionals deal with children at risk for mental disorders. The diagnostic perspective will be complemented with an outline of strategies to promote child mental health in schools. *Background:* Up to one in five children and teens suffer from mental health problems, and the number is growing making mental disorders by 2020 one of the five leading causes of childhood illness, disability and death. Psychosocial and socio-structural strains significantly contribute to the emergence of mental disorders what, in turn, offers opportunities to target children at risk with primary preventive and health promoting measures. The different burden patterns and attempts at coping often become manifest in children's school lives. While some children react with withdrawal and drop in achievement, others become aggressive or display behavioural problems. The coping strategies expose the children to a higher risk of experiencing a "school handicap" and being excluded from regular schools once a special need of support has been diagnosed. It is obvious that such loading factors increase the probability of having a problematic educational biography. We will discuss the opportunities and strategies for child health promotion in the school setting. The discussions will be exemplified with three teacher training programmes (addressing health promotion of children of mentally-ill parents, suicide prevention, and prevention of sexual abuse in primary schools). *Key points:* (a) Outline of the concept of mental health literacy. (b) Awareness rising of the impact of schools and educational professionals on child mental health promotion. (c) Recommendations for actions in teacher training and school development to promote child mental health. *Description of the participants:* The intended audience covers all people professionally involved in school teaching and development (e.g. teachers, health educators, health professionals, decision- and policymakers). The maximum number of participants is 40.

Keywords: School health promotion, mental health disorders, mental health literacy, child health promotion, primary prevention.

1. Purpose

One very important setting for the promotion of a young person's mental health and well-being is the school. Mental health can be prerequisite as well as outcome of school life and learning. There is, however, need for clarifying the characteristics of systems and programmes to promote mental health and well-being and to build resilience in both staff and students to help prepare them to cope with a range of life events. The involvement of outside agencies and mental health professionals has also to be addressed when it is aimed to implement a continuum of support that focuses on the needs of all students including those with special educational needs. Moreover with the financial downgrade of certain southern economies in Europe, children are highly exposed to these critical conditions. Societies have a hard time to cope and implement buffer strategies to help children cope with parent's longer hours of work, changes in schools structures (e.g. fewer teachers, higher numbers of students/per class).

The workshop aims to highlight the potential contribution of teachers to promote child mental health in schools. We will figure out current practices in schools by questioning how professionals deal with children at risk for mental disorders. This "diagnostic" perspective will be complemented with an outline of strategies to promote child mental health in schools. This will be exemplified by three teacher training programmes. The programmes will then be discussed and contrasted with the participants' perspectives in order to outline recommendations for future work.

2. Background

2.1. Children at risk for mental disorders

Mental and behavioural disorders increasingly impact on population health worldwide and are among the leading conditions that contribute across all cultures to the overall burden of disease [Murray et al. 2012]. Data on the burden of mental disorders has recently also become available for young people [e.g. Hölling et al. 2008] and shows that up to one in five children and teens suffer from mental health problems. The trends are increasing making mental disorders by 2020 one of the five leading causes of childhood illness, disability and death. The mechanisms of the trans-generational transmission of mental disorders are currently best explained with diathesis–stress models suggesting that all people have some level of predispositional vulnerability towards certain mental disorders [Ingram & Luxton, 2005]. The transmission and onset of a mental disorder result then from interactions between genetic, biological, psychological and social risk factors [e.g. England & Sim 2009; Hammen et al 2012].

The severity and impact of psychological and social stress factors on children at risk show high variability and result from the burdens that the children are faced with in everyday living. Disorientation, feelings of guilt, taboo, stigmatization, isolation, care deficits and additional burdens such as taking care of household chores are particularly prevalent. In addition, children also may assume parental tasks of providing care (parentification) and are urged into inverted role relationships when e.g. the parents are affected by mental disorders in assuming the parenting roles. Parent–child interactions, parenting styles and adverse life events are key triggers for the transmission of mental disorders from the parents to the offspring. Interestingly, many children and families who are at increased risk (e.g. children of mentally-ill parents) cope well with these problems [Hammen 1991]. Children of e.g. depressed parents coped well when they had individual, family and community resources to accomplish developmental tasks, engage in relationships, and understand their and their family's situation [Beardslee & Podorefsky 1988].

2.2. Schools, teachers, and child mental health promotion

The different burden patterns and attempts at coping with mental health stressors also become manifest in children's school lives. While some children react with withdrawal and a drop in achievement, others become aggressive or display behavioural problems. Lack of sleep, poor concentration, learning lags, and absence from school may impair their school life and academic achievements. Family arrangements that are appraised as a deviating from typical family norms may cause social isolation, anxiety, and shame. Developmental problems that already emerge in childhood are also particular sources of school-related problems [Gripenstroh & Schmuhl, 2010]. This specific risk dimension resulting from e.g. a parental mental disorder includes a higher risk of experiencing a "school handicap", and results in being excluded from regular schools once a special need of support is observed [Powell 2007]. It is evident that these loading factors increase the probability of having a problematic educational biography.

Schools can therefore have an important protective function, but can also create risk potentials. In the school setting, however, there is often an at best informal awareness of mental health problems: teachers are usually not trained and equipped with skills to adequately respond to particularly burdened life situations, yet. They are rarely skilled to decode such phenomena as symptoms of a special risk situation and seldom dispose of the means to provide adequate individual support [Wagner et al. 2009]. It is evident that such a practice of support is insufficient for children in special life situations. To address the mental health literacy of teachers in order to foster the primary preventive and health promoting potentials of children is an unusual but innovative and promising approach. To target the adults' mental health literacy with respect to issues of child mental health is novel in the debate on school health promotion and can help to fill important gaps.

2.3. Strategies exemplified by three teacher training programmes

The analysis of the role and the impact of teachers and schools on child mental health promotion will be exemplified by the following three teacher training programmes: *Promoting the teacher's mental health literacy to promote the health of children of mentally ill parents*: Children of mentally-ill parents are a population at high risk for the development of mental disorders (about a quarter of the students in Germany). Mental health literacy encompasses according to Jorm [Jorm 2000] the knowledge and beliefs about mental disorders which aid their recognition, management or prevention. By use of this framework, a six-hour teacher training programme was developed to meet three major objectives: Awareness rising, increasing knowledge, and promoting of the teachers' and educators' capacity to act. Teaching materials were produced by a multidisciplinary team and a range of didactic methods were used to design a total of three teaching sessions. The programme is evaluated at the end by the participants. *Mental health promotion and suicide prevention: Teacher training in MOOC environment*: Mental health promotion and prevention of suicidal behaviours in the context of schools is an issue with still scarce scientific data.

This translates into a lack of evaluated teacher training programs in mental health promotion and suicide prevention. This Portuguese project aims, therefore, to develop, implement and evaluate a training program for teachers from preschool to high school in MOOC (Massive Open Online Courses) environment in order to increase the teacher's literacy about the mental health of their students. It is anticipated that there will be need for structures and integrated projects that favour the students' monitoring throughout their school career, greater knowledge and personal/social skills development. A training programme in mental health promotion and suicide prevention offered in MOOC environment is considered to work as an asset in teachers' initial formation. *Primary prevention of sexual abuse in primary schools. The German "Igel" project*: The project resulted in the development, implementation and evaluation of a primary preventive concept in educational settings. The programme consists of two modules addressing (1) the knowledge and capacity to act of the high-risk group of students aged 10-12 years and (2) the awareness and training of the teaching staff. Results from formative and summative evaluation highlight low-threshold implementation and effectiveness of the programme.

3. Key points

The paper of schools and teachers in dealing with health-related and health promoting issues is poorly outlined and there is need for approaches that benefit the professionals and finally the students. Teachers are usually not trained in health-related issues but are increasingly exposed to situations where health-related knowledge and options for action are demanded. Such a mismatch can result in insufficient support and use of opportunities for children at risk. It is obvious that teachers are not to assume any clinical tasks from the medical field. Defining the teacher's role in health-related issues can rather take several options into account that will be discussed during the workshop: (a) familiarizing with the diverse living conditions of the children, (b) developing a "culture of taking notice" that facilitates the recognition of children's special needs and particular need for advice, and (c) probably most important knowing as much as possible and making mistakes as few as possible. The last point refers to some problematic aspects such as teachers' feeling too potent to diagnose, disclosure of students at risk, the lack of networking of services, or the inability to act when the teachers want to offer support.

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