PSYCHOMOTRICITY, HEALTH AND WELL-BEING IN CHILDHOOD EDUCATION

Cró, M.L.¹; Andreucci, L.²; Pereira, A.²; Pinho, A.M.³

¹Instituto Politécnico de Coimbra/Universidade de Aveiro (PORTUGAL)
²Universidade de Aveiro (PORTUGAL)
³Universidade de Coimbra (PORTUGAL)
mlurdescro@gmail.com, landreucci@ua.pt, anabelapereira@ua.pt, anacastropinho@hotmail.com

Abstract

Aggressiveness, emotional barriers, anxiety, fear, insecurity, anger, surprise and sadness live with us daily, from infancy to adulthood.

The aim of this paper is to study the importance of psychomotricity in kindergarten and its impact in health and well-being, and how we can strengthen psychomotricity and resilience in kids, that faces personal and social adverse factors, that are able to reduce or destroy the possibilities of a positive answer from the child in face of diary adversities and interferes in self-esteem and corporal image, and can result in scholar failure and in a bad sociability.

A Project with poor Brazilian kids is presented, quantitative and qualitative methodologies, following programs were used: Strong Start – to reinforce resilience and also psychomotors activities. In face of the results we will suggest changes at learning-teaching process and also at its evaluations and educational interventions to get health, well-being and success at school.

Keywords: Resilience, psychomotricity, learning and teaching, emotional barriers.

1 INTRODUCTION

The World Health Organization (WHO) considers health to be a daily life resource, which is no longer the mere absence of disease but the state of physical, psychological and social welfare of the human being (Hensius, 2010).

Gaspar (2006) refers to the fact that the United Nations Convention recognized the rights of the child (Newell, 1993) to the highest level of health, leisure and education, in addition to a life style appropriate to their physical, mental, spiritual, moral and social development, which are components of quality of life.

In the past, the world was apparently less violent; there was no Internet, no chat rooms, video games were less aggressive, and the media did not invade our space with so many messages of unhealthy behaviour. Children did not have tasks scheduled for every day of the week, from morning till evening, including weekends. At present, the opportunities for negative behaviour are on the increase.

We are faced with news about wars, natural disasters, deaths, separations, domestic violence, injustices between the rich and the poor, unemployment, drugs, sexual abuse, paedophilia, world leaders or icons who are arrested for anti-ethical or illegal conduct, and all of this on a daily basis.

Anxiety, fear, insecurity, aggressiveness, emotional barriers, bullying, anger, joy, surprise and sorrow are all part of our daily lives from infancy to adulthood. It is crucial that we learn how to cope with our emotions.

Do these circumstances and emotions interfere in the lives of socio-culturally and economically underprivileged children and have a negative impact not only on their academic, social and emotional development but also on their well-being and health, according to the WHO’s definition?

What may be done to reduce such interference and enable a healthier and more successful life both at school and personal level?
The great challenge for the 21st century

A number of studies demonstrate that since the very early years of our lives we may learn how to cope with our emotions and those of others and with adversity, while looking at the world from various viewpoints. This will help us have a better quality of life, health, and personal and professional achievement.

Zins, Walberg, & Weissberg (2004) believe that important social and emotional capabilities and knowledge may be trained (learned/taught) and combined with academic development, and suggest social and emotional learning programmes to develop those skills for school achievement throughout life. The positive results of these programmes are body health, more responsible citizenship, fewer unsuccessful relationships, less interpersonal violence, drug abuse, and unhappiness (Elias et al., 1997; Zins, Weissberg et al., 2004).

Barbosa (2002) says that psychomotricity is directly linked with health, well-being and education, as they are united in the search for the full equilibrium of human beings, and aims to promote their complete development. Our idea was to develop an Intervention Programme in which psychomotricity and resilience might be combined for the complete development of these underprivileged children, while promoting their social inclusion.

Psychomotricity, Well-Being, and Education

Children’s right to play was enshrined in Article 31 of the Convention on the Rights of the Child at the UN, in 1989 (ratified by Portugal on 21 September 1990 and by Brazil on 24 September in the same year), and guarantees that children have the right to rest, free time, and participation in games and recreation activities appropriate to their age and to freely enjoy cultural and artistic life (Cohen, Faria & Magnan, 2010).

Through play children develop their psychomotricity and relate to the world around them, through the action of their bodies they situate themselves in time and space, and improve their quality of life and well-being. Moreover, they prepare and resolve anxiety-generating situations which are part of their daily lives. On interacting with adults (in previously planned and duly recorded activities), children learn how to speak and internalize values, concepts, social roles, and the cultural repertoire, while empowering themselves and asserting their existence as social beings.

While seeking to develop multi-social relations, psychomotricity is closely associated with health, social well-being and education, in the search for the full equilibrium of human beings and their complete fulfilment. To Heinsius (2010, 2008), psychomotricity stimulates the bonds created by children with other people and objects through their actions.

The period between 3 and 8 years of age is of vital importance as it spans the phase of essential learning and progressive integration in the social world, in a universe where the subject is one, differentiated from the other, but constantly being shaped by the relationships it creates with others and through which it builds its own image based on those family, cultural and social relations.

According to Vergara (2011), the well-being of a child is dependent on the quality of the education provided during the childhood years. A quality education must focus on the child, its level of development, its potential, and needs.

Education centred on the child is one of the assumptions of the Psychological Development Activation Model, which proposes that a child may and should develop its potential through an intervention and a methodology which take into consideration its environmental and individual specificities. This model, whose roots go back to the Active School movement, based on Piaget, Vygotsky, Bruner and key concepts such as cognitive, socio-cognitive conflict, and counter-argumentation, enables the subject to build its autonomy in the following aspects of development: psychomotor, cognitive, and emotional, while stressing verbal language (Cró, 2008).

Moreover, the full development of the individual entails not only cognitive, physical, emotional, and social development, but also knowing how to cope with adversities. Changes are an integral part of living and demand a constant effort of adaptation.
Resilience and development of competences

In Pereira’s view (2001), resilience, coping with difficult situations, is developed and acquired throughout the different stages of the life cycle and based on the relationships which the child establishes with its environment.

To Hensius (2010), resilience is a non-fixed quality which changes according to the period of life and the circumstances, the type of trauma and how the individual experiences it, and also according to historical-cultural factors. It is a dynamic process in a social context, the result of the interaction of various microsystems (family, school, and friends) and macrosystems (community, beliefs, ideologies, values and customs, the media, the economic situations, and the educational system), in the perspective of Bronfenbrenner’s (1998) bioecological development model, and leads to a metamorphosis of the individual, in which he learns from experience and draws conclusions from life and for life.

At an education level, a number of programmes have been implemented which aim to promote resilience and psychomotricity, the indicators of a healthy life in its various stages, from infancy to adulthood. This study highlights a programme involving resilience and psychomotricity in children socially, culturally, and economically underprivileged in the town of Botucatu, Brazil, at the pre-school stage, in which the Strong Start Programme (Strong Kids Website, ORP, 2008) and the Psychological Development Activation Model (PDA) (Cró, 2008) were used. This programme is underpinned by psychomotricity, previously described, and aims to promote the acquiring of personal, social, and emotional competences.

Since 2000 the project to Educate and Include underprivileged children has been in place in the town of Botucatu, at the Joanna De Angelis Centre. Its aim is to empower families and increase the children’s possibilities to evolve, so that they may become part of life in society.

In order to materialize this project, and in cooperation with our doctoral student Lívia Andreucci, we implemented a programme based on the Psychological Development Activation Model, in which the educational activities might influence their cognitive and psychological development with a view to reducing their future school underachievement (Andreucci, 2004) to enable the global and homogeneous development of the personality of these children, deemed to have special education needs, according to the State Undersecretary for Education of the State of S. Paulo.

Through A. Pereira, at the University of Aveiro, we launched in 2008 a programme which aimed to promote the development of self-esteem, well-being, and health, focusing on the personal and social fulfilment of the children who were the subject of this Programme.

A research plan was then drawn up and included the areas of psychomotricity and resilience, in the perspective of the Psychological Development Activation model and the Pre-K Strong Start Programme (2008).

The study focused on 151 Brazilian children divided into an experimental group and a control group, males and females, aged between 3 and 5 years old.

2 METHODOLOGY

The present study aims to promote resilience and psychomotricity and resilience in children through the application of the Strong Start Programme (2008) and the Activation of Psychological Development Model, as well as assess the effectiveness of these programmes.

The study is longitudinal, quasi-experimental, with an experimental group (subject to Strong Start Pre K Programme for assessing resilience) and a control group (not subject to the Programme), with pre and post tests given to both groups. These groups were assessed before (pre-test) and after (post-test) the manipulation of the independent variable. As for psychomotricity, the children from the experimental group had psychomotor activities in a preset programme and the control group did not. This area won’t be evaluated in this study.

Sample characterisation

The study took place between July and August 2008 and included 151 Brazilian children from disadvantaged families who were exposed to adverse social and personal factors with impoverished stimulation and domestic environments that presents difficulties in learning.
The most represented age was 5 years old with 45.7% and the least represented age was the 3 year old group with 19.2%. The majority of boys and girls were 5 years old with 42.5% and 50%, respectively.

The minimum age of the sample constituents is 3 years old and the maximum is five years old, accounting for an average of 4.26 years old (SD = 0.763).

For males, the average age is 4.44 years old (SD = 0.735) and for females the average age is 4.11 years old (SD = 0.758). Boy’s average media is higher than the girl’s average.

**Experimental and Control Groups**

In the experimental group, the most representative are the 4 and 5 year old children, with 39% each, with the 3 year old group being less representative (22.1%). In the control group the most representative age is five years old (45.7%), with 3 year olds being the least representative (19.2%).

In the experimental group, the average is 4.17 years old (SD = 0.768), there are 42 girls (54.55%) and 35 boys (45.45%). In the control group, the average age is 4.36 years old (SD = 0.751) and there are 39 girls (52.7%) and 35 boys (47.3%).

**Instruments**

**A. Resilience**

**Strong Start Pre K Programme**

The Strong Start Pre K programme (2008), which includes children from 3 to 5 years of age- It was developed at the University of Oregon (United States), by the Department of Special Education and Clinical Sciences, headed by Kenneth Merell (Strong Kids Website, ORP, 2008). It is concise and presents a set of practical contents applied to the social-emotional learning curriculum for children at a preschool age (Merrell, 2008) and it is designed to pre scholar children. This programme allows the child to establish healthy emotional bonds early on, acquire personal and social skills appropriate to the age and to promote resilience and reinforce what the child has and increase coping strategies in kids.

The programme’s curriculum structure consists of 10 sessions of approximately 25 to 40 minutes each, and is headed by a teacher or mental health professional.

The ten sessions in the manual have the following topics and objectives:

- **Session No. 1**: “The feelings/emotions exercise group”, where the objective is to introduce the STRONG START PRE – K curriculum to students;
- **Session No. 2**: “Understanding your feelings/emotions 1”, with the objective of teaching students to identify basic feelings/emotions;
- **Session No., 3**: “Understanding your feelings/emotions 2”, with the objective of reviewing the six basic feelings/emotions (happiness, sadness, rage, fear, surprise and disgust) and teaching students appropriate ways of expressing their feelings and emotions.
- **Session No. 4**: “When you are angry or enraged”, teaching how to manage rage and ways that help to deal with rage and anger;
- **Session No. 5**: “When you are happy”, teaching student how to feel happy and how to self-comfort when sad;
- **Session No. 6**: “When you are worried (nervous)”, teaching students to manage anxiety, worry and fear;
- **Session No. 7**: “Understanding the feelings/emotions of others”, training students to identify the feelings/emotions of others;
- **Session No. 8**: “Being a good friend”, teaching students basic communication and ability to make friends;
- **Session No. 9**: “Solving people’s problems”, aims to teach students to solve problems with others;
Session No. 10: “Conclusion”, students review the main concepts and skills of the STRONG START PRE - K Curriculum.

In addition to the basic 10 sessions, the STRONG START programme includes two extra sessions in order to help reinforce the curriculum concepts and teachings weeks after the completion of the last session. The STRONG START manuals are complex and detailed and include all of the necessary material for the sessions.

Test Webest (Well-Being Screaning Toll) - Assessment Test

This test was also developed at the University of Oregon in the United States by the Department of Special Education and Clinical Sciences and subsequently translated and then a request to the author was submitted requesting that it be adapted by Andreucci (2008) for Brazilian children.

It measures negative affection symptoms, emotional and social problems and resilience in kindergarten children. It was applied individually and directly by the researchers, before and after the implementation of the programme Strong Start Pre-K, to the children in the experimental and control groups.

The test consists of 22 closed questions with 3 options each (No; More or less and Yes), scored using the Likert method. Each answer is given a score of 0 to 2, obtaining a maximum score of 44 and a minimum score of 0. This is a negative placement test, therefore the higher the score when summing the answers, the less the capacity of resilience and vice-versa.

B. Psychomotor activation programme used in Brazil

The main objective of the programme was to activate the cognitive, socio-emotional, symbolic, psycholinguistic and motor development which is essential to the maturation and learning process through integrated and organised recreational activities which lasted for 30 minutes, in two periods, where the children were stimulated to observe and describe their movements. It included standardised and easily reproducible exercises, based on various authors, namely Lambert (1972), that aim at stimulating the concept of body image, laterality, spatial and temporal orientation as well as language.

Procedures

Following the authorisation being given by the governing agencies upon our request, permission forms were given to parents and/or guardians so that the students could participate in this study.

The programmes were implemented during the second semester in 2008.

Data was gathered through the use of the previously described instruments, through a Pre-test (before applying the Strong Start Pre K programme) and a post-test (after the application of the Programme), in the field of resilience to all children in the sample individually.

The statistical programme SPSS, version 16.0, was used in order to carry out the statistic analysis of the data gathered.

The Wilcoxon test was used to assess the resilience between the Pre-test and the Post-test in the group.

3 RESULTS AND DISCUSSION

Resilience in the experimental and control groups

With regards to the Pre-test, the minimum score observed was 1 and the maximum score was 25, with an average of 10.536 (DP= 5.244). In the Post-test, the minimum score observed was 0 and the maximum score was 36, with an average of 9.77 (DP= 6.495).

In the experimental group (submitted to the resilience programme), with regards to the Pre-test, the minimum score observed was 1 and the maximum score was 24, the average being 10.12 (DP= 4.896). In the group's Post-test, the minimum score observed was 0 and the maximum score was 16, with an average of 5.79 (DP= 3.446).
In the control group’s Pre-test, the minimum score observed was 1 and the maximum score was 25, the average being 10.97 (DP=5.584). In the group’s Post-test, the minimum score observed was 4 and the maximum score was 36, with an average of 13.92 (DP=6,339).

Except for the studies in progress in the America, there are no points of comparison which serve as a reference or help facilitate a more detailed discussion.

In the area of resilience there were no significant differences between scores in the control groups were found. In the experimental groups, the post-test scores are higher than the pre-test scores in both groups. The probability value is statistically significant which indicates that the intervention programme had a positive effect on Brazilian children (p = 0.00).

These results indicate that there was an evolution in resilience among the children in the group that participated in the Strong Start Pre K programme, as the values are indicators that the children improved their resilience capacity, especially in terms of controlling emotions and dealing with problems, their emotions and the emotions of others in addition to empathy.

The results in the area of Psychomotricity, which are not described in this paper, show that the children who participated in the Psychomotor Activation Programme presented positive results and developed their personal and social skills, while significantly improving their quality of life and well-being in addition to making academic progress.

This research, exploratory in nature, had limitations inherent to this type of study. It involved an intervention programme briefly and synthetically described here in the areas of resilience and psychomotricity.

The overall results of this direct intervention with children stress the importance of the principles, objectives and the appropriateness of the methods used as well as suggesting the continuation of these intervention programmes in schools with children in preschool.

4 CONCLUSION AND FUTURE RESEARCH DIRECTIONS

It is one of the aims of this study to provide the results of implementing the Activation of Psychological Development Programme in the area of psychomotricity and of the Strong Start Pre K Programme to promote resilience in disadvantaged Brazilian kids.

As studies in this area are limited, this pioneer study intends on serving as an incentive for Education and Health professionals in making them sensitive to the promotion of the development of resilience and psychomotricity.

Despite the gratifying results, these data should be analysed with some caution. Further studies are necessary in order to reinforce this argument.

Finally, we recommend that the initial and continual training of professionals who work in education and health includes the promotion of resilience in their curriculum, as well as the implementation of psychomotricity and the study of emotions and feelings in order to better deal with the adversities in life and thus develop their emotional, social and professional skills so as to become more responsible, active and participative citizens and to better understand the kids that they care.

REFERENCES


Strong Kids Website, ORP, University of Oregon, consultado em 10 de Setembro de 2008 http://strongkids.uoregon.edu/
