

# PSICOLOGIA

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**Número Temático: Social and Emotional Competences**

Eds. Alexandra Marques Pinto, Celeste Simões, Paula Lebre e Kathy Evans

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## EDITORIAL

### Special Issue on Social and Emotional Competences

Mental health problems are a major cause of disability and morbidity of modern societies, as several epidemiological studies have evidenced. International reports indicate that before the age of 18 at least 20% of children and young people have a mental health problem, which highlights the importance of early intervention in order to promote good mental health.

In this context, in the last two decades scientific research has consistently focused on the role of Social and Emotional competencies as predictors of mental health, well-being and academic success along the life course. Less adjusted social and emotional functioning is associated with various behavioral, personal, social and academic difficulties. The study and promotion of social and emotional competencies in children and young people, as part of their healthy development, is therefore considered as a national priority in many countries.

The importance of social and emotional competences promotion has been reinforced with the acknowledgment of the resilience concept as a crucial process for overcoming successfully the adversities that we face throughout our life. This process draws on a combination of external resources that are available to children and young people, as well as internal assets that encompass social and emotional competences. Promoting resilience in children and adolescents that have had to deal with with adversity has been the focus of many researchers who work in this field. If social and emotional skills are one of the pillars of resilience, the promotion of resilience naturally implies the learning of these skills and how they can be used when we are confronted with challenges or significant life events.

This special issue draws on six articles, arising from a call for papers exploring on Social and Emotional Competences and Resilience, following the 5th ENSEC Conference, hosted by the University of Lisbon, Portugal, in July 2015, and includes national and international contributions on this topic.

The first article, by Diego Gomez-Baya and colleagues, entitled *Emotional basis of gender differences in adolescent self-esteem, explores gender differences in emotional intelligence and self-esteem in Spanish adolescents*. Results showed that girls presented lower overall self-esteem and lower perceived emotional intelligence than boys. Additionally, high-perceived emotional attention was related to lower self-esteem in girls and to higher perceived emotional clarity and repair in boys, which in turn were associated with higher self-esteem. The authors close the article with some important implications for the design of programmes to improve girls' self-esteem through a focus on emotional attention.

Valéria Silva and colleagues study, called the *Preliminary study for validation of questionnaire "CDC - body, dance and community" for teenagers*, describes the validation of a questionnaire for young dance practitioners. This study was developed in dance classes for young people aged between 6 to 12 years old, organized by Art Centers of Rio de Janeiro, Brazil, aiming at looking into the benefits of dance, both in physical (expressiveness and self-perception of emotions), affective (self-confidence and well-being) and social dimensions (interaction and social participation with family, school and community). A questionnaire developed, comprised 105 items in a 5 point Likert scale, demonstrated adequate validity and reliability which allowed the researchers to identify the benefits of dance in two dimensions, the first called affective and social representations of dance and the second designated as personal and social representations of dance.

The article by Anjali Ghosh, entitled *Expressive Differences for Emotions in Hearing Impaired and with Hearing Individuals*, explores difference between hearing impaired and hearing adolescents in an Indian context. Results demonstrated interesting differences between the two groups which have implications for developing work with both groups, and some particular insights relating to how work might be developed in an Indian context.

The article of Paulo Dias and colleagues, entitled *Further evidence for the structure of the resilience scale in Portuguese language countries: an invariance study with Brazilian and Portuguese adolescents*, explores the resilience concept, its associated factors and outcomes, and in particular the measurement issues around this concept. The study presented by the authors aimed to analyze the structural invariance of the Wagnild and Young's Resilience Scale, as one of the most know and widely used resilience measure across the world, in this case with a sample of Portuguese and Brazilian adolescents. In this article two models, namely the original five and two factor solutions, were tested with the full 25 items version scale, as well as an alternative one factor model for the 14-item short version. The results suggested that the short version can be used for cross-cultural studies since the one factor model tested with the short version scale presented a good fit for the Portuguese and Brazilian samples.

Sandra Roberto and colleagues research, *"The place I long to be": Resilience processes in migrants*, aims at understanding the contexts of adversity and resilience resources of migrants in Portugal. This study was conducted to understand the migration process, particularly, the meanings attributed by Cape Verdean migrants to their life in the country of origin, including the decision to migrate, as well as adversities, resources and adjustment. Using biographical narratives two main dimensions of relevance were identified: cultural differences and

interpersonal relationships with the Portuguese concluding that resilience is an ongoing process, changing over time, which includes the annulment of adversity's impact, developing alternative possibilities or overcoming adversities by integrating them into trajectories and life paths.

Finally, the last article, *Resilience and self-concept of competence in institutionalized and non-institutionalized youth*, by Maria Helena Martins and Vanessa Neto, focuses also on resilience, in this case in institutionalized and non-institutionalized youth. Considerations about institutionalization are made by the authors highlighting positive and negative impacts on youth development. Their research explored the relations between resilience and the self-concept of competence in these two groups. Interestingly the results showed no significant differences between the two groups in terms of resilience, but the non-institutionalized sample revealed higher scores on the self-concept of competence, while the correlation between these two variables is stronger in the institutionalized group. The influence of other variables, such as gender, age, school grade, and school retentions is also investigated. Implications for practice are suggested namely the importance of resilience promotion in care institutions.

The Editors,

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## Emotional basis of gender differences in adolescent self-esteem

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**Abstract:** Lower self-esteem in adolescent girls than boys confers greater vulnerability to numerous risks in their development towards social adulthood. This research aimed to study the role of perceived emotional intelligence in self-esteem's gender differences. An anonymous questionnaire was applied to 1791 Spanish adolescents aged between 12 and 17 years old, composed of the Rosenberg self-esteem scale and a reduced version of the Trait Meta-Mood Scale. The results showed that girls presented lower overall self-esteem than boys, as well as lower perceived emotional intelligence. On the one hand, it was found that high perceived emotional attention was related to lower self-esteem in girls; on the other hand, results detected that high perceived emotional attention was linked to higher perceived emotional clarity and repair in boys, which were associated with higher self-esteem. These results suggest the need to design programmes to improve self-esteem in adolescent girls by reducing perceived emotional attention.

**Keywords:** *Trait emotional intelligence; Meta-mood; Self-esteem; Adolescence; Gender.*

**Base emocional das diferenças de género na auto-estima dos adolescentes:** Uma menor auto-estima em raparigas confere uma maior vulnerabilidade a diversos riscos no desenvolvimento e transição para a idade adulta, comparativamente aos rapazes. Este estudo teve como objetivo estudar o papel da inteligência emocional percebida nas diferenças de género na auto-estima. Foi aplicado um questionário anónimo a 1791 adolescentes espanhóis com idade entre 12 e 17 anos, incluindo a escala de auto-estima de Rosenberg e uma versão reduzida da escala Trait Meta-Mood de inteligência emocional percebida. Os resultados mostram que as raparigas apresentam menor auto-estima geral do que rapazes, bem como menor inteligência emocional percebida. Os resultados constatarem que a elevada atenção emocional percebida, nas raparigas, se relaciona com auto-estima mais baixa, enquanto, nos rapazes, se associa a uma maior percepção de clareza emocional e reparação, ambas associadas a uma auto-estima mais elevada. Estes resultados sugerem a necessidade de elaborar programas para melhorar a auto-estima na população feminina, através da redução da atenção emocional percebida.

**Palavras-chave:** *Inteligência emocional percebida; Percepção emocional; Auto-estima; Adolescência; Género.*

Overall self-esteem is an affective self-assessment which expresses a judgement of self-value and self-acceptance (Baumeister, 1998; Harter, 1993). Rosenberg (1965) defined overall self-esteem as a favourable or unfavourable attitude toward the self, so that a high self-esteem means a feeling that one is worthy and has a positive assessment of one's own value as a person. For boys and girls, adolescence, as a stage of transition between childhood and social adulthood, involves coping with some physical, psychological and contextual changes and challenges, which would help them to advance in their abilities as apprentice adults (Steinberg & Morris, 2001). Literature has well documented that self-esteem plays a central role in adolescent psychological adjustment and acts as a driving force for a positive development (Harter, 1999). However, a decrease in self-esteem (Robins et al., 2002) and a greater instability (Birkeland, Melkevik, Holsen, & Wold, 2012) were detected during this transitional life stage. A positive self-esteem was linked to a lower frequency of risky behaviours (Kavas, 2009; McKay, Sumnall, Cole, & Percy, 2012) and better school adjustment (Marsh & O'Mara, 2008). Additionally, some studies observed that high self-esteem was associated with better mental health, i.e. greater satisfaction with life (Proctor, Linley, & Maltby, 2009) and lower level of anxious and depressive symptoms during adolescence (de Jong, Sportel, de Hullu, & Nauta, 2012; Orth, Robins, & Roberts, 2008). Moreover, a low self-esteem during

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adolescence has been found to be prospectively related to more depressive and anxious symptoms (Sowislo & Orth, 2013; Steiger, Allemand, Robins, & Fend, 2014) in adulthood, as well as associated with poor health, criminal behaviour and limited economic prospects (Trzesniewski et al., 2006).

### **Gender differences in adolescent self-esteem**

The presence of possible gender differences in self-esteem during adolescence proves to be particularly relevant, because it might place one of the genders in a position of greater vulnerability, not only in adolescence but also in subsequent adulthood (Birkeland et al., 2012). Most studies to date have found that girls present lower self-esteem than boys (Bachman et al., 2011; Kling, Hyde, Showers, & Buswell, 1999; Major, Barr, Zubeck, & Babey, 1999; Twenge & Campbell, 2001). Recently, Bleidorn et al. (2015) have conducted a cross-cultural study in 48 countries and consistently observed these gender differences in self-esteem. As a consequence, a lower self-esteem in adolescent girls would hinder their ability to cope with challenges to reach social adulthood, and would be a significant risk factor for the development of internalising problems (Lee & Hankin, 2009). Moreover, Moksnes and Espnes (2012) indicated that lower self-esteem was more strongly related to depression in girls than boys, which underlines the more negative consequences of low self-esteem in adolescent girls. Some researchers tried to provide an explanation for these differences, by studying possible mechanisms, such as maturational changes associated with puberty or social-contextual variables (Robins & Trzesniewski, 2005). Polce-Lynch, Myers, Kliewer and Kilmartin (2001) pointed out that girls reported lower self-esteem partly due to greater emotional expression, more media influence and worse body image than boys. However, to our knowledge no study has examined the role of emotional intelligence in these gender differences. The role of emotional intelligence (EI) in psychological adjustment and coping with daily events during adolescence has been documented by literature (Fernández-Berrocal, Alcaide, Extremera, & Pizarro, 2006). A greater EI can facilitate the appropriate acceptance of changes that take place during adolescence, and allow to overcome the personal challenges in the process of becoming socially adult (Zeman, Cassano, Perry-Parrish, & Stegall, 2006). The present study aims to analyze the role of EI in gender differences in self-esteem in adolescence.

### **Perceived emotional intelligence and self-esteem**

In the study of EI, Petrides (2011) differentiated trait EI and ability EI, according to the operationalization of the construct (Petrides, Pita, & Kokkinaki, 2007). Trait EI or trait emotional self-efficacy is measured through self-reports and refers to emotion-related self-perceptions and dispositions in the lower levels of personality hierarchies, whereas ability EI is evaluated via maximum-performance tests and is defined as the actual emotion-related abilities. Trait EI was found to be more related to psychological adjustment than ability EI, as indicated by a recent meta-analysis (Martins, Ramalho, & Morin, 2010). Ciarrochi, Deane and Anderson (2002) indicated that trait EI moderates the relationship between stress and mental health. High trait EI was associated with better psychological adjustment, through an improvement in active coping (Davis & Humphrey, 2012), and presented a protective role by minimizing mood deterioration in stressful situations (Mikolajczak, Petrides, Coumans, & Luminet, 2009). Schutte et al. (2002) concluded that individuals with high trait EI use their ability to adaptively regulate emotions to resist situational threats, which was related to a lower decrease in positive affect and self-esteem after a negative emotional state. Cheung, Cheung and Hue (2015a) have recently pointed out that trait EI determines the level of self-esteem by improving social competence and academic achievement. Consequently, those adolescents with high EI are more likely to perceive a greater sense of their worth (Kong, Zhao, & You, 2012).

Although many instruments have been developed to assess trait EI, the Trait Meta-Mood Scale (TMMS) has received great empirical support and a clear theoretical framework has been provided. Salovey, Mayer, Goldman, Turvey and Palfai (1995) developed this self-report measure to assess individual differences in what they named perceived EI. Perceived EI was conceived as the knowledge that individuals have of their own emotional skills (Salovey and Mayer, 1990). Following the model of Mayer and Salovey (1997), perceived EI is composed of three specific perceived emotional skills: perceived emotional attention, perceived emotional clarity and perceived emotional repair. Considering these three skills in emotion regulation, an adolescent with high perceived EI is characterised by a moderate perceived emotional attention, a high perceived emotional clarity and a high perceived ability to repair negative emotions (Salovey et al., 1995). Moreover, high perceived EI has been associated with a greater psychological adjustment during adolescence (Gómez-Baya, Mendoza, & Paino, 2016; Salovey, Woolery, Stroud & Epel, 2002). Regarding self-esteem, Rey, Extremera and Pena (2011) found that self-esteem was positively associated with perceived emotional clarity and repair, and negatively to perceived emotional attention. Specifically, Flores and Oliva (2015) detected that perceived emotional repair

showed the greater association with self-esteem. Therefore, in the present research, we want to analyze the role of each perceived emotional skill in adolescent self-esteem.

### **Current study**

Paradoxical gender differences have been documented in EI. Whereas girls were found to present higher ability EI than boys (Salguero, Extremera, & Fernandez-Berrocal, 2012; Rivers et al., 2012), girls reported lower perceived EI than boys (Petrides & Furnham, 2000). Specifically, using TMMS, girls reported greater perceived emotional attention than boys, whereas boys indicated greater perceived emotional clarity and repair than girls (Extremera, Duran, & Rey, 2007). Szymanowicz and Furnham (2013) indicated a tendency of boys to have overestimated views of their emotional skills, opposite to females' propensity to under-estimate them. Bandura, Caprara, Barbaranelli, Gerbino and Pastorelli (2003) indicated that this lower emotional self-efficacy in girls was associated with lower psychological adjustment and more depressive and anxiety symptoms in this subsample compared to boys. Moreover, these authors showed that positive self-efficacy to regulate the emotions is accompanied by high efficacy to manage one's academic development, to resist social pressures for antisocial activities, and to engage oneself with empathy in others' emotional experiences. Thus, despite girls present higher ability EI, their underestimation of emotional skills is expected to hinder girls' self-esteem during adolescence. In the present study, the main goal was to advance the explanation of gender differences in self-esteem during adolescence, specifically, by researching more deeply the role of perceived EI skills in these differences. To our knowledge no study has dealt with this issue, and it is relevant given the significance of self-esteem as a driving force for positive development in the adolescent life stage, the consequences of gender differences in self-esteem during this transitional period, and the role of perceived EI in adolescent psychological adjustment.

### **Aims and hypotheses**

This research study has three specific aims: (a) to examine gender differences in adolescent self-esteem and perceived EI, (b) to study the relationships between perceived EI and self-esteem by gender, and (c) to analyze to what extent gender differences in self-esteem are cross-sectionally associated with gender differences in perceived EI. Concerning the first aim, we hypothesize that girls present lower self-esteem than boys, in line with conclusions of the cross-cultural study on gender differences in self-esteem by Bleidorn et al. (2015). Moreover, we expect a lower perceived EI in girls than boys, consistently with the results observed by Extremera et al. (2007), i.e. girls reporting higher perceived emotional attention but lower perceived emotional clarity and repair. Regarding the second aim, greater self-esteem is expected to be associated, in both boys and girls, with lower perceived emotional attention, higher perceived emotional clarity and higher perceived emotional repair, consistently with the results by Rey et al. (2011). Furthermore, concerning the third aim, our hypothesis establishes that gender differences in perceived EI are associated with gender differences in self-esteem in adolescence, so that lower perceived EI in girls is expected to be related to lower self-esteem in this subsample. Although to our knowledge no study has addressed this question, this hypothesis may be established based on the conclusions by Bandura et al. (2003), who indicated that lower emotional self-efficacy in girls was linked with lower psychological adjustment.

## **METHOD**

### **Participants**

A total of 1791 adolescents (51% of girls) aged between 12 and 17 years old ( $M = 14.15$ ,  $SD = 1.34$ ), participated in this study. They were enrolled in a total of 19 high schools in Andalusia, located in the south of Spain. In order to obtain a heterogeneous sample, schools of different ownership (private and public) and habitats (rural, urban, city) took part in the study. Moreover, in each secondary school, participating classes were randomly selected from the four academic years of Compulsory Secondary Education in the Spanish educational system. Thus, one class was randomly selected in each academic year within each secondary school. Concerning the parental level of education, adolescents reported that 13.7% of the fathers and 15.9% of the mothers had primary education, 44.6% of fathers and 46% of mothers had secondary education, whereas 25.6% of fathers and 26% of mothers completed higher education. Moreover, some adolescents indicated that they did not know the paternal (16.2%) or maternal (12.1%) educational level.

### **Study design and data collection procedure**

A cross-sectional design was used. Data were collected by administering a self-report measure to each of the classes selected. In order to check psychometric properties of the instrument, two pilot studies were

previously carried out, in secondary schools with similar characteristics to those evaluated in the definitive fieldwork. The first of these pilot studies was performed in two secondary schools with a sample of 191 adolescents. In the second study, three educational institutions took part with a total sample of 266 adolescents. All the questionnaires showed good psychometric properties.

The instrument was filled in individually and anonymously. Practically all the pupils agreed to take part in the study, and there were very few omissions in their responses. The present study respected all the principles of the Declaration of Helsinki, and the adolescents participated voluntarily, being verbally informed about the characteristics of the survey (also described on the first page of the questionnaire). Informed consent was obtained from all individual participants included in the study and their parents. Finally, we point out that none of the questions and scales included in the instrument generated any kind of discomfort in the adolescents, and did not present any comprehension problem.

### **Instrument and variables**

The instrument was composed of two self-report measures to assess perceived EI and self-esteem, in addition to some demographic questions (gender, age and parental level of education).

#### *Trait Meta-Mood Scale (TMMS; Salovey et al., 1995)*

A 12-item adolescent version of the Spanish validation of TMMS was used (Fernandez-Berrocal, Extremera, & Ramos, 2004; Gómez-Baya, 2014). This version consists of three subscales, each with 4 items, and presents a 5 Likert-type response options from “never” to “very often”. This scale assesses perceived emotional intelligence, differentiating three perceived skills in emotion regulation: perceived emotional attention, which refers to the perception of the level of attention given to one’s own emotional states; perceived emotional clarity, which is the perception of the degree of clear understanding of one’s own emotions; and perceived emotional repair, conceived as the perceived ability to regulate one’s own emotional states, turning negative emotional states into positive ones. The overall score in each subscale consists of the sum of the scores in the respective items. Thus, the scores range from a minimum of 4 up to a maximum of 20 in each subscale. The three subscales presented notable internal consistency reliability, since the perceived emotional attention subscale presented a Cronbach’s Alpha of .91, the perceived emotional clarity subscale showed a Cronbach’s Alpha of .84 and the perceived emotional repair subscale reached a Cronbach’s Alpha of .88.

#### *Rosenberg Self-esteem Scale (Rosenberg, 1965).*

The Spanish version of this scale, developed by Atienza, Balaguer and Moreno (2000), was used in this study. It is composed of 10 Likert-type items with 4 response options, from “completely agree” to “completely disagree”. The overall score in self-esteem is calculated by adding the score in all the indicators. Accordingly, the score ranges from 10 to 40. This scale presented notable internal consistency reliability in this study, as indicated a Cronbach’s Alpha of .82.

### **Data analysis**

Little’s test was performed in order to check that missing values were distributed completely at random. In case of the missing values are distributed completely at random, a maximum likelihood imputation, based on expectation-maximization algorithm, would be performed using SPSS 21.0. Furthermore, Kolmogorov-Smirnov tests with Lilliefors’ correction were conducted in order to check if the variables show a normal or non-parametric distribution. We used an  $\alpha$  level of .05 for all statistical tests.

Regarding the first aim of the study, gender differences were analyzed by comparing the mean scores of boys and girls in overall self-esteem and in each perceived EI skill (i.e. perceived emotional attention, perceived emotional clarity and perceived emotional repair). Concerning the second aim, two analyses were carried out to examine the association between perceived EI and self-esteem. First, bivariate correlations were calculated in order to examine the associations by gender between each perceived EI skill and self-esteem. Second, a stepwise regression analysis was performed to examine the self-esteem’s variance explained by demographics and perceived EI skills. Thus, in the first step of this analysis, demographic variables were included, i.e. gender, age and parental level of education. Moreover, the school in which the adolescent was enrolled was controlled in this first step. In the second step, the three perceived EI dimensions were included. Regarding the third aim, moderation analyses were conducted, based on stepwise regression analyses and following the indications of Baron and Kenny (1986) and Aiken and West (1991). These moderation analyses allow to examine if perceived EI skills and self-esteem are differently associated by gender. In these analyses, each perceived emotional intelligence dimension was considered as an independent variable, self-esteem was the dependent variable, and gender was examined as a moderator. Thus, the moderator can change the relationship between

independent and dependent variable according to its values, so that different self-esteem levels could be observed in boys and girls according to their perceived EI. The moderation of gender in the association between a perceived EI skill and self-esteem is calculated as the effect of the interaction of "gender x perceived EI skill" on self-esteem. Moreover, gender moderations in the associations among perceived EI skills were also analyzed. A macro for SPSS 21.0 called Process was applied in order to perform moderation analyses (Hayes, 2013). Finally, Modgraph-I was used for the graphical display of the moderation analyses, following the procedure described by Jose (2013).

## RESULTS

### Descriptive statistics and gender differences in self-esteem and perceived EI

Little's test showed that missing values were distributed completely at random,  $\chi^2(21, N = 1791) = 25.94$ ,  $p = .209$ . Thus, a maximum likelihood imputation, based on expectation-maximization algorithm, was conducted to deal with missing values. Furthermore, Kolmogorov-Smirnov tests showed a non-parametric distribution of all study variables,  $D(1791) = .07$ ,  $p < .001$ . Consequently, non-parametric statistics were calculated to analyse gender differences (i.e. Mann-Whitney's  $U$ ) and the associations between variables (i.e. Spearman correlations). Descriptive statistics (mean and standard deviation) by gender are presented in Table 1.

The first aim of the study was to analyze gender differences in perceived EI and self-esteem. To achieve this goal, four Mann-Whitney's  $U$ -tests were carried out. Significant gender differences in self-esteem and perceived EI were observed. Results indicated that girls present lower self-esteem than boys ( $U = 323,222.50$ ,  $Z = -7.10$ ,  $p < .001$ ,  $MD = 1.64$ ), as well as lower perceived emotional clarity ( $U = 376,161.50$ ,  $Z = -2.26$ ,  $p = .024$ ,  $MD = .35$ ), lower perceived emotional repair ( $U = 329,596.50$ ,  $Z = -6.53$ ,  $p < .001$ ,  $MD = 1.28$ ) and higher perceived emotional attention ( $U = 472,731.50$ ,  $Z = 6.59$ ,  $p < .001$ ,  $MD = -1.35$ ).

**Table 1.** Descriptive statistics, Spearman correlations among self-esteem and perceived emotional intelligence skills, and reliability (Cronbach's  $\alpha$  in brackets), by gender.

	Sample	1	2	3	4	<i>M</i>	<i>SD</i>
<b>1. Self-esteem</b>	<b>Total</b>	(.82)				30.53	5.07
	Boys	(.81)				31.36	4.97
	Girls	(.82)				29.72	5.04
<b>2. Perceived Emotional attention</b>	<b>Total</b>	-.09*	(.91)			13.29	4.17
	Boys	-.02	(.90)			12.60	4.28
	Girls	-.11*	(.90)			13.95	3.96
<b>3. Perceived Emotional clarity</b>	<b>Total</b>	.32*	.25*	(.84)		13.92	3.62
	Boys	.35*	.35*	(.84)		14.10	3.74
	Girls	.28*	.18*	(.83)		13.75	3.49
<b>4. Perceived Emotional Repair</b>	<b>Total</b>	.41*	.13*	.43*	(.88)	13.42	4.30
	Boys	.39*	.24*	.48*	(.88)	14.07	4.27
	Girls	.41*	.06	.38*	(.87)	12.79	4.23

Note. \*  $p < .001$

### Bivariate correlations and stepwise regression analyses

Regarding the second aim of the study, some analyses were performed to examine the associations between perceived EI and self-esteem by gender. First, Spearman correlational analyses showed that self-esteem was positively related with perceived emotional clarity and perceived emotional repair, in both boys and girls (Table 1). The greater association was observed between self-esteem and perceived emotional repair. Furthermore, self-esteem was negatively related with perceived emotional attention only in girls. Results also detected positive associations between emotional attention and emotional clarity, and between emotional clarity and emotional repair, in both boys and girls. However, emotional attention showed a positive correlation with emotional repair only in the subsample of boys.

Second, three stepwise regression analyses were conducted in order to explain the self-esteem's variance from demographic variables and perceived EI, by gender and following the associations detected in previous correlations. Table 2 describes the results of the stepwise regression analyses in the sample of boys, in the sample of girls and in the total sample. In the first step of the analysis with the total sample, gender and age showed a significant effect on self-esteem. In the second step, perceived EI was introduced in the analysis and only gender effect remained significant. That gender effect underlined the significant gender differences already examined by previous analysis. Furthermore, stepwise regression analysis with the total sample showed that the three dimensions of perceived EI added a percentage of

explained variance of around 20% to demographics in the total sample. The analyses by gender indicated that perceived emotional clarity and repair showed a positive effect on girls' and boys' self-esteem, whereas perceived emotional attention presented a negative effect in girls' subsample. Moreover, the percentage of explained variance in this final step was higher in girls ( $R^2 = .22$ ) than boys ( $R^2 = .17$ ).

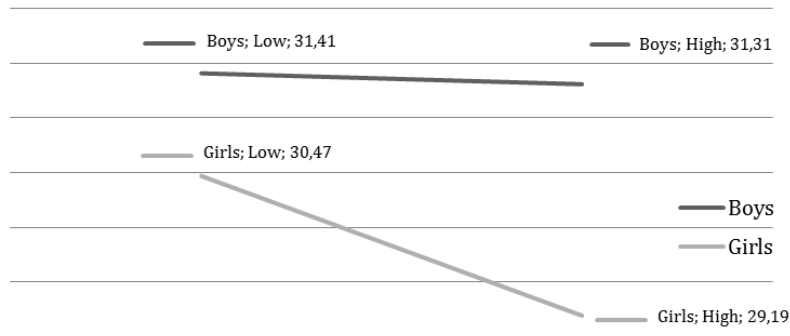
**Table 2.** Stepwise regression analyses of explanatory variables of self-esteem, by gender and in the total sample.

	Boys				Girls				Total			
	<i>F</i>	<i>R</i> <sup>2</sup>	<i>t</i>	$\beta$	<i>F</i>	<i>R</i> <sup>2</sup>	<i>t</i>	$\beta$	<i>F</i>	<i>R</i> <sup>2</sup>	<i>t</i>	$\beta$
Step 1	.48	.00			3.17*	.01			11.05***	.03		
Gender											-6.84	-.16***
Age			.19	.01			-3.00	-.10**			-2.57	-.06*
School			.47	.02			.04	.01			.26	.01
Father's academic level			-.06	-.01			-.06	-.01			.26	.01
Mother's academic level			-1.27	-.05			1.40	.06			.57	.02
Step 2	27.75***	.17			35.18***	.22			66.74***	.23		
Gender											-3.37	-.07**
Age			1.00	.03			1.08	-.03			-.44	-.01
School			1.06	.03			-.09	-.01			.61	.01
Father's academic level			-.41	-.01			.51	.02			1.00	.03
Mother's academic level			-1.71	-.06			.81	.03			.09	.01
Perceived emotional attention							-5.54	-.17***			-7.94	-.18***
Perceived emotional clarity			4.81	.18***			4.65	.15***			8.15	.20***
Perceived emotional repair			8.11	.30***			11.08	.36***			14.59	.34***

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

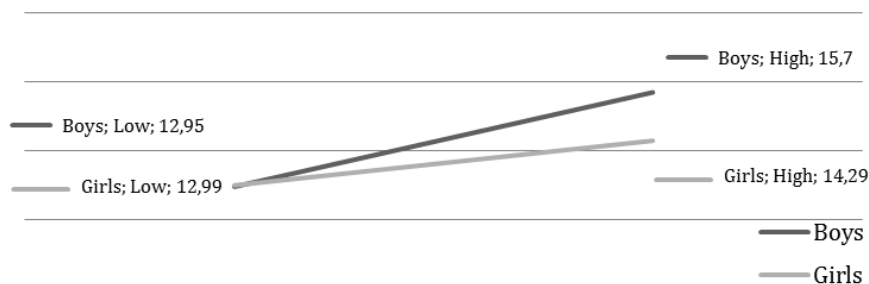
### Moderation analyses

Three moderation analyses, based on stepwise regression analyses, were performed in order to test gender moderation in the association of each perceived EI skill with self-esteem. In the first stepwise regression analysis, gender moderation in the relationship between perceived emotional attention and self-esteem was examined. In the first step, gender ( $\beta = -.15$ ,  $t = -6.40$ ,  $p < .001$ ) and perceived emotional attention ( $\beta = -.07$ ,  $t = -2.78$ ,  $p = .005$ ) presented significant effects on self-esteem,  $F(2, 1788) = 27.94$ ,  $p < .001$ ,  $R^2 = .03$ . In the second step, the interaction of "gender x perceived emotional attention" was introduced in the analysis to test gender moderation. This interaction showed a significant effect on self-esteem ( $\beta = -.18$ ,  $t = -2.46$ ,  $p = .014$ ),  $F(3, 1787) = 20.69$ ,  $p < .001$ ,  $\Delta R^2 = .01$ . Consequently, results indicated that gender moderated the association between perceived emotional attention and self-esteem. Figure 1 shows that girls who paid higher attention to their emotions presented lower self-esteem, whilst no differences were found in the subsample of boys. Therefore, girls who reported high attention to emotions showed lower self-esteem than girls with low emotional attention. The moderation of gender in the association of perceived emotional attention and self-esteem can be explained because of the differential effect of high perceived emotional attention on self-esteem in boys and girls. In the second stepwise regression analyses, gender ( $\beta = -.15$ ,  $t = -6.61$ ,  $p < .001$ ) and perceived emotional clarity ( $\beta = .30$ ,  $t = 13.28$ ,  $p < .001$ ) presented significant effects on self-esteem,  $F(2, 1788) = 114.57$ ,  $p < .001$ ,  $R^2 = .11$ , whereas the interaction of "gender x perceived emotional clarity" did not show a significant effect on self-esteem ( $\beta = -.06$ ,  $t = -.88$ ,  $p = .379$ ). In the third analysis, gender ( $\beta = -.10$ ,  $t = -4.71$ ,  $p < .001$ ) and perceived emotional repair ( $\beta = .40$ ,  $t = 18.67$ ,  $p < .001$ ) also explained self-esteem's scores,  $F(2, 1788) = 203.00$ ,  $p < .001$ ,  $R^2 = .19$ , whereas their interaction did not present a significant effect ( $\beta = .05$ ,  $t = .74$ ,  $p = .460$ ). Thus, gender did not moderate the relationships of both perceived emotional clarity and perceived emotional repair with self-esteem. In both boys and girls, perceived emotional clarity and repair were positively associated with self-esteem.



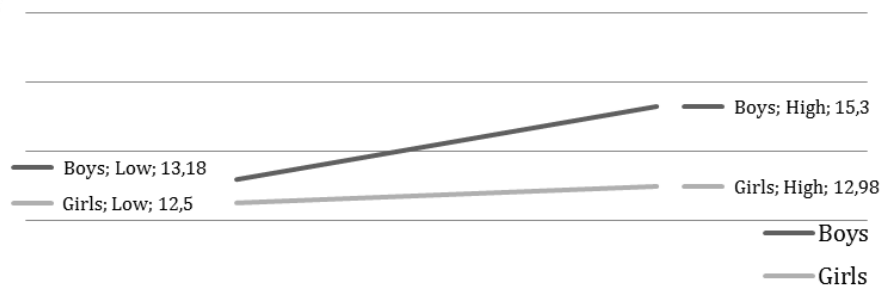
**Figure 1.** Means in self-esteem by gender and levels of perceived emotional attention.

Furthermore, the interaction "gender x perceived emotional attention" was found to explain the scores in perceived emotional clarity and repair. First, results of a moderation analysis to examine the gender moderation in the association between perceived emotional attention and perceived emotional clarity indicated that: in the first step, gender ( $\beta = -.10, t = -4.13, p < .001$ ) and perceived emotional attention ( $\beta = .29, t = 12.46, p < .001$ ) explained the 8.1% of the variance of perceived emotional clarity,  $F(2, 1788) = 79.97, p < .001$ ; and, in the second step, gender interacted with perceived emotional attention ( $\beta = -.31, t = -4.38, p < .001$ ) to explain perceived emotional clarity,  $F(3, 1787) = 60.24, p < .001, \Delta R^2 = .01$ . The gender moderation indicated a stronger association between perceived emotional attention and clarity in the subsample of boys. Figure 2 indicates that the differences in perceived emotional clarity on the basis of the levels of perceived emotional attention were bigger in boys than girls. Moreover, whereas no gender differences in perceived emotional clarity were observed in the groups with low perceived emotional attention, substantial differences were found between boys and girls with high perceived emotional attention. Thus, high perceived emotional attention was related with greater perceived emotional clarity in boys than in girls.



**Figure 2.** Means in perceived emotional clarity by gender and levels of perceived emotional attention.

Other moderation analysis examined the effect of "gender x perceived emotional attention" on the scores in perceived emotional repair. In the first step of this analysis, both gender ( $\beta = -.17, t = -7.45, p < .001$ ) and perceived emotional attention ( $\beta = .16, t = 6.73, p < .001$ ) had significant effects on perceived emotional repair,  $F(2, 1788) = 43.39, p < .001, R^2 = .05$ . In the second step, gender moderated the association between perceived emotional attention and perceived emotional repair ( $\beta = -.30, t = -4.11, p < .001$ ),  $F(3, 1787) = 34.82, p < .001, \Delta R^2 = .01$ . The gender moderation indicated that there were differences in perceived emotional repair by the levels in perceived emotional attention in the subsample of boys, but no substantial differences were detected in girls. Figure 3 shows that gender differences in perceived emotional repair were especially important in adolescents with high perceived emotional attention, so that boys reported greater mean scores than girls. Consequently, high perceived emotional attention was associated with greater perceived emotional repair only in boys.



**Figure 3.** Means in perceived emotional repair by gender and levels of perceived emotional attention.

## DISCUSSION AND CONCLUSIONS

This research had three aims, i.e. to study gender differences in self-esteem and perceived EI in adolescence, to analyze the associations between self-esteem and perceived EI, and to examine whether gender differences in adolescent self-esteem were partly associated with gender differences in perceived EI. Regarding the first aim, girls presented lower self-esteem than boys, in line with previous works with adolescent samples (Bachman et al., 2011; Major et al., 1999; Twenge & Campbell, 2001). Previous research suggested several possible explanations, such as the influence of gender roles, differences in peer relationships, differences in the interaction with teachers in school, the cultural emphasis on women's physical appearance, having suffered some kind of violence, or different levels of sports participation (Kling et al., 1999; Polce-Lynch et al., 2001). Lower self-esteem in girls would hinder their positive development as adolescents and their ability to cope with challenges they face as apprentice adults, and would place them in a risky position for substance abuse and psychological disorders (de Jong et al., 2012; McKay et al., 2012). Furthermore, gender differences were also observed in perceived EI, i.e. girls reported that they perceived their emotions less clearly and presented less ability to repair negative emotional states, than boys indicated. Moreover, girls reported a greater perceived emotional attention than boys, which underlines that girls considered that they pay attention to their emotions more frequently than boys reported. These conclusions are consistent with conclusions reached by Extremera et al. (2007) and Bandura et al. (2003). These gender differences can be due to a different social construction of affective experiences and different emotional expression styles (Bandura et al., 2003), so that perceptions on emotional skills are biased by gender stereotypes and sex roles, which determine the different, appropriate behaviours for boys and girls (Lopez-Zafra & Gartzia, 2014). Moreover, this underestimation of EI in adolescent girls can be explained by gender differences in emotional socialization in the family context, as reported by Schwartz, Sheeber, Dudgeon and Allen (2012). Thus, differences in parental responses to emotions and beliefs about emotional skills by gender can determine the development of emotional self-perceptions during adolescence.

Regarding the second aim, the present research detected that self-esteem was positively related to perceived EI in adolescence. In line with the results by Rey et al. (2011), self-esteem was positively associated with perceived emotional clarity and perceived emotional repair, and negatively with perceived emotional attention. Specifically, the greater relationship was detected between self-esteem and perceived emotional repair, so that the perception of own efficacy to regulate negative emotional states was the stronger determinant of self-esteem, in line with Flores and Oliva (2015). Literature to date has documented that the perception of own emotional skills rather than the actual abilities for emotional processing are related to psychological adjustment (Martins et al., 2010). Self-perceptions of emotional skills were found to moderate the relationship between stress and mental health (Ciarrochi et al., 2002), encouraging an adaptive coping that allows to resist situational threats and maintain a positive self-esteem (Schutte et al., 2002), and preventing mood deterioration in stressful situations (Mikolajczak et al., 2009). Thus, adolescents with higher perceived EI were more likely to perceive a greater self-worth (Kong et al., 2012). As perceived EI has been positively associated with greater psychological well-being during adolescence, gender differences in perceived EI would place teenage girls at a greater vulnerability (Fernandez-Berrocal et al., 2006). If no emphasis is placed on the adequate acquisition of these emotional skills as well as their accurate perception in girls, they would encounter more difficulties in the process of adaptation to developmental changes and challenges during adolescence (Sánchez, Fernández-Berrocal, Montañes, & Latorre, 2008).

Concerning the third aim of the present research, some substantial conclusions can be described. Our results indicated that high perceived emotional attention would hinder girls' self-esteem but improve both perceived emotional clarity and repair in the sample of boys (which in turn are associated with

better self-esteem). This differential role of perceived emotional attention by gender can be explained from gender differences in rumination. Nolen-Hoeksema and Jackson (2001) reported that girls engaged more frequently in a passive focus on one's negative emotions and on their possible causes and consequences. Rumination was found to provide vulnerability to emotional disorders, whereas distraction proved to reduce emotional distress. Furthermore, a meta-analysis conducted by Mor and Winquist (2002) concluded that a heightened self-focused attention was found to be strongly associated with negative affect in female. Thus, girls who report great attention to their emotions are more likely to present lower psychological adjustment, because of its direct negative effect on self-esteem. In contrast, boys who reported high perceived attention did not show worse self-esteem's scores, but they indicated more likely that they perceived clearly their emotions and were able to successfully repair negative emotional states. In turn, a greater perceived EI in boys would provide higher self-esteem in this subsample. Furthermore, some authors have found a tendency of boys to have inflated views of their abilities in contrast to girls' propensity to underestimate their worth (Szymanowicz & Furnham, 2013). Thus, it is expected that girls' tendency to underestimate their emotional skills is associated with the underestimation of their own worth too. The underestimation of emotional skills hinders the possibility for girls to take advantage on their greater ability EI (Rivers et al., 2012) to cope with changes and challenges during adolescence transition, which could lead to lower self-esteem, in line with the conclusions described by Bandura et al. (2003).

Consequently, the present study has shown that gender differences in adolescent self-esteem are partly associated to gender differences in perceived EI and the different way in which these emotional self-perceptions are interrelated with the self-assessment of one's own value. The lower self-esteem presented by adolescent girls in comparison with boys, is partly explained by a lower perceived EI in adolescent girls. Importantly, a greater perceived attention to own emotions presents different correlates by gender. In girls, high perceived attention is associated with lower self-esteem, but in boys it is linked to greater perceived clarity and repair, which are in turn relate to higher self-esteem in boys. Consequently, the results of this study suggest an explanation of gender differences in adolescent self-esteem on the basis of gender differences in emotional self-perceptions.

Despite the importance of this study, we should also describe several limitations. The first limitation comes from the characteristics of the study design. A cross-sectional and descriptive study only allows drawing conclusions based on bidirectional associations between perceived EI and self-esteem, but neither causal relationships nor antecedents/consequents in those relationships can be established. Although previous research has provided strong evidence for the role of perceived EI in self-esteem and psychological adjustment (Mikolajczak et al., 2009; Schutte et al., 2002), some studies have discussed the reciprocal influences between perceived EI and self-esteem. Recently, Cheung, Cheung and Hue (2015b) have detected that self-esteem has a positive effect on perceived EI, whereas the effect of perceived EI on self-esteem is not significant. The affective model of self-esteem postulated by Brown, Dutton and Cook (2001) established that people with high self-esteem are more adept than people with low self-esteem at developing and preserving self-worth's feelings, by claiming to possess socially desirable traits and denying the undesirable ones. Consequently, longitudinal and experimental research is needed in order to explore the directionality and the mechanisms implicated in the association between self-perceptions of EI and self-esteem, as well as providing causal conclusions. Furthermore, a longitudinal design can also provide an assessment of the stability of self-esteem (Kernis, 2005) and the developmental dynamics during adolescence. However, some strengths of this cross-sectional study could be highlighted, such as the size, heterogeneity and partially random selection of the sample, as well as the good psychometric properties of the instruments. The second limitation is the unique assessment of overall self-esteem. Although the assessment of global self-esteem has been well validated in adolescents and young people (Ciarrochi, Chan, & Bajgar, 2001; Quintão, Delgado, & Prieto, 2011), a future research line comes from the need to examine the role of perceived EI in both global self-esteem and domain-specific self-esteem. Gentile et al. (2009) analyzed gender differences in domain-specific self-esteem, indicating that men scores higher on physical appearance, athletic, personal self and self-satisfaction self-esteem, women reported higher scores in behavioural conduct and moral-ethical self-esteem, whereas no differences were observed on academic, social acceptance, family and affect self-esteem. So, more research is also needed to explore the associations of perceived EI skills and each domain of self-esteem, as well as examining gender moderation during adolescence. Other research line can be derived from the analysis of the contingencies of self-worth by gender and perceived EI (Crocker, Brook, Niiya, & Villacorta, 2006).

Finally, the contributions of this research can suggest the need to implement school-based emotional education programmes, together with programmes designed to promote self-esteem (Greenberg et al., 2003). Programmes to develop EI have already demonstrated efficacy, not only in improving emotion regulation skills, but also in contributing to a better psychological adjustment (Ruiz-



Aranda, Fernández-Berrocal, Cabello, & Salguero, 2008). Our results also suggest the need to perform gender-specific interventions in order to reduce differences in self-esteem, combined with the promotion of adaptive EI skills and more adjusted perceptions of EI. Some authors have discussed the possibility of teaching and developing emotional intelligence (Humphrey et al., 2007; Qualter, Gardner, & Whiteley, 2007), and have highlighted the importance of educational policy to promote socio-emotional learning (Mayer & Cobb, 2000). The Collaborative for Academic, Social and Emotional Learning (CASEL) has conducted intervention programmes to promote social and emotional learning (Zins & Elias, 2007). From the perspective of these programmes, a recent meta-analysis of school-based universal interventions has well documented the positive impact of enhancing students' social and emotional learning on self-esteem, attitudes towards others, positive social behaviour, psychological well-being and academic performance (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Zeidner, Roberts and Mathews (2002) proposed several key elements for the development, implementation and evaluation of programmes designed to promote emotional intelligence in schools, such as the need to consider the context in which these programmes will be implemented, the integration of programmes in school curriculum, to ensure that acquired skills are transferable to other contexts, and the training of professionals involved. Thus, our research has provided empirical evidence that suggests other key element to take into account in the design of emotional education programs: the gender differences in self-perceptions of EI skills and their role in adolescent self-esteem.

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## Estudo preliminar: Validação do questionário “CDC – Corpo, Dança e Comunidade” para adolescentes de 12-18 anos

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**Resumo:** Este artigo apresenta um segundo estudo preliminar desenvolvido para construir e validar o questionário CDC (Corpo, Dança e Comunidade) para jovens praticantes de 12 a 18 anos do Núcleo de Arte da Prefeitura do Rio de Janeiro. O referencial teórico foi baseado em estudos relacionados com as dimensões corporal (Figueiredo, 2013; Fuhmann, 2014), afetiva (Damásio, 2013, 2012; Figueiredo, 2011) social (Fuhmann, 2008; Marques, 2010, 2014; Shapiro, 2008) e da adolescência (Lipp, 2010; Matos & Tomé, 2012). O instrumento foi aplicado a 50 jovens com idades compreendidas entre os 12 e 16 anos. Com base nos resultados do estudo, obteve-se a consistência interna do questionário e suas subescalas. Os resultados do estudo apontam valores de consistência interna adequados, bem como benefícios da prática da dança assinalados pelos jovens nas dimensões física, afetiva e social. Na dimensão física assinala-se uma melhor expressividade do corpo e autopercepção das emoções expressas ao dançar; na dimensão afetiva o desenvolvimento de sentimentos de autoconfiança e bem-estar e na dimensão social uma melhor interação e participação social com a família, escola, comunidade e membros do Núcleo de Arte.

**Palavras-chave:** Dança; Adolescência; Autopercepção do corpo; Participação social.

**Preliminary study for validation of questionnaire CDC - Body, Dance and Community for teenagers:** This article presents the second preliminary study designed to develop and validate the questionnaire CDC (Body, Dance and Community) for young dance practitioners from the Art Centers of Rio de Janeiro City Hall. The theoretical framework was based on studies related to the physical dimension (Figueiredo, 2013; Fuhmann, 2014), affective dimension (Damásio, 2014; 2013; Figueiredo, 2011), social dimension (Fuhmann, 2008; Marques, 2010; 2014; Shapiro, 2008) and adolescence (Lipp, 2010; Matos & Thomas, 2012). The instrument was applied to 50 subjects aged from 12 to 16 years old. Based on the results of this study, we obtained the internal consistency of the questionnaire and its subscales. The results from the study point adequate values for the internal consistency of the questionnaire and identify benefits derived from the practice of dance by young people, namely in the physical dimension through a better expressiveness and self-perception of emotions expressed while dancing, as well as in an affective dimension, through the development of feelings of self-confidence and well-being and in a social dimension by the impact of dance on a better interaction and social participation with family, school, community and among members of the art center.

**Keywords:** Dance; Adolescence; Body self-perception; Social participation.

Autores de referência destacam os benefícios da prática da Dança, considerando os seus contributos na dimensão física como o aumento da resistência física, da flexibilidade e a melhoria da postura global (Fuhmann, 2014; Marques, 2011, 2014; Miler, 2012; Stinson, 2015; Vieira, 2011). Na dimensão afetiva, apontam a melhoria da autoestima, autoconfiança, bem-estar e felicidade, assim como a formação de vínculos afetivos entre os pares, transformando-os em pessoas que desejam e valorizam a comunicação, o olhar, o respeito pelo outro e o diálogo aberto (Figueiredo, 2011, 2013; Giguere, 2015; Marques, 2010, 2014). No contexto da dimensão social, pesquisadores esclarecem o facto de a Dança promover uma melhor interação com o mundo social e mais proximidade com a cultura (Fuhmann, 2008; Marques, 2010, 2011; Shapiro, 2008).

O conceito de domínio afetivosocial defendido por Silva (2015), refere-se aos mecanismos que se interrelacionam entre as componentes afetiva (motivação, sensação, emoção e sentimentos) e social

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(interação, participação e transformação social), sugerindo a percepção do indivíduo sobre os benefícios da Dança a nível pessoal e social. Com este enfoque, pretendeu-se compreender à luz da literatura, como a dimensão afetivo-social, enquanto recurso motivacional e de aprimoramento do ser humano, é influenciada pela prática da dança e se torna imprescindível para a constituição do ser social.

Assim, a Dança é concebida no corpo como forma autêntica de expressão e manifestação do domínio afetivo e social dos sujeitos dançantes, elaborados a cada ato de dançar e evidenciados na tríade interação-participação-transformação pessoal e social. Com este entendimento, reforçamos que esta transformação pode resultar de uma práxis reflexiva de capacitação do sujeito ao interagir com o mundo.

Este estudo desenvolveu-se nos Núcleos de Arte da Prefeitura do Rio de Janeiro (NAPRJ)<sup>2</sup>, integrados nos Centros de Pesquisa e Formação em Ensino Escolar de Arte e Esportes, contendo espaços destinados a crianças e jovens matriculados na Rede Pública Municipal de Ensino. Trata-se de um programa municipal que promove oficinas de dança para jovens de contextos socioeconómicos desfavorecidos, implantado pela Secretaria Municipal de Educação do Rio de Janeiro (SMERJ, 2013, 2015), com o propósito de oferecer a aprendizagem da Arte como instrumento para o desenvolvimento das potencialidades e do crescimento humano. São oferecidas oficinas de Dança, Teatro, Música e Artes Plásticas em regime de complemento curricular, por forma a combater o insucesso e o abandono escolar, tendo por objetivos desenvolver e difundir metodologias inovadoras no ensino da Arte e da Educação Física Escolar (SMERJ, 2013, 2015).

Os NAPRJ incluem oito espaços destinados exclusivamente a alunos do Ensino Fundamental (1.º ao 9.º ano de escolaridade), oriundos de zonas desfavorecidas, na faixa etária dos 4 aos 18 anos de idade. As oficinas de Dança têm uma frequência bissemanal com uma duração de 90 minutos por sessão, com uma oferta de aprendizagem de estilos de Dança diversificados, tais como Dança Contemporânea, Jazz-Dance, Ballet Clássico, Dança Moderna, Dança Livre, Sapateado, Street Dance, Hip Hop, Danças Populares e Dança Circense. Estas oficinas são lecionadas por professores especializados na área<sup>3</sup> e pertencentes ao quadro de funcionários efetivos da Rede Municipal.

As oficinas de Dança dos NAPRJ têm ainda como objetivo o estudo do corpo, concedendo aos alunos desenvolver e aprimorar uma trajetória de descoberta do movimento e as potencialidades expressivas e criativas, assim como a formação de plateia (SMERJ, 2013).

Desta forma, o presente estudo visa contribuir para conhecer o impacto da prática da dança nas representações de pertença ao espaço e nas transformações nos domínios pessoais e sociais dos praticantes (Assumpção & Macara, 2013).

Para alcançar este objetivo, uma etapa fundamental prende-se com a validação de um questionário denominado “Corpo, Dança e Comunidade (CDC)” tendo como base um estudo exploratório (Hill & Hill, 2009). Seguindo as recomendações de Hill & Hill (2011), realizaram-se dois estudos exploratórios; o primeiro, intitulado Estudo Preliminar I, visou a identificação das principais variáveis do estudo (Assumpção & Macara, 2013). O segundo estudo visa avançar numa pesquisa mais aprofundada, permitindo identificar o impacto da prática da dança oferecida nas oficinas de Dança dos NAPRJ, por forma a medir as dimensões da Representação Afetivosocial da Dança e da Transformação Pessoal e Social, apontando indicadores de impacto da dança nas suas componentes física, afetiva e social.

## MÉTODO

Seguindo as diretrizes de Hill & Hill (2009) para a execução de estudos preliminares (Assumpção, Macara, & Wachowicz, 2013; Assumpção & Macara, 2013) e de Vega (2009), procedeu-se a uma apreciação por peritagem do questionário “Corpo, Dança e Comunidade (CDC)” e a uma aplicação a jovens das oficinas de dança dos Núcleos de Arte da Prefeitura do Rio de Janeiro (NAPRJ) em dois momentos com intervalo de duas semanas (teste-reteste).

## Amostra

O processo de seleção da amostra ocorreu pela indicação do professor de Dança de jovens que se voluntariaram, considerando como critérios: o nível de maturidade e uma experiência mínima de um ano nas oficinas de dança. A duração total do projecto foi de 18 meses, incluindo os estudos exploratórios, construção do instrumento, realização do pré-teste e reteste e avaliação dos peritos.

A amostra é constituída por 50 jovens pré-adolescentes e adolescentes com idades compreendidas entre os 12 e 16 anos ( $M = 12.8$ ,  $SD = 1.1$ ), pertencentes ao NAPRJ Professor Sebastião de Souza Prata

<sup>2</sup> Este estudo insere-se no curso de Doutoramento em Motricidade Humana, na especialidade de Dança, na Faculdade de Motricidade Humana da Universidade de Lisboa, intitulado *Benefícios Afetivo-sociais da Prática da Dança para Estudantes dos Núcleos de Arte da Prefeitura do Rio de Janeiro (NAPRJ)*.

<sup>3</sup> Refere-se a profissionais que buscam aperfeiçoar a formação na sua área, fazendo cursos de pós-graduação *Latto Sensu* (especialização de um ano) e *Strictu Sensu* (especialização com duração de 2 a 4 anos).

Grande Otelo (Parque Anchieta, RJ) e ao Projeto Casarão dos Prazeres (Morro dos Prazeres/Santa Teresa, RJ), sendo que cerca de metade dos participantes tem 12 anos (56%). O facto da quase totalidade ser do género feminino (94%) pode ser associado à discussão a respeito do género masculino na Dança, que ainda é alvo de preconceitos (Polhemus, 1993; Risner, 2008; Thomas, 1993), por ser frequentemente definida como um ofício socialmente feminino (Neves, 2013). No que respeita o nível de escolaridade, cerca de metade (56%) frequenta o 6.º ano de escolaridade, 22.2% o 9.º ano e os restantes distribuem-se entre o 7.º e o 8.º do Ensino Fundamental da Educação Básica. O local de residência situa-se nas proximidades dos espaços onde decorriam as oficinas, constatando-se que metade reside no bairro de Anchieta e a outra metade no bairro de Santa Teresa, respetivamente bairros da zona norte e zona central do município do Rio de Janeiro. Em relação aos encarregados de educação dos praticantes, mais de metade (59.2%) tem o Ensino Médio, 20.4% o Ensino Fundamental e 20.4% o Ensino Superior.

### **Instrumento e variáveis**

O questionário “Corpo, Dança e comunidade” inclui no total 20 questões e 105 itens de resposta que se organizam em 11 domínios (variáveis). A estrutura geral do questionário engloba quatro blocos: Bloco I – Dados sociodemográficos (7 variáveis e 30 itens de respostas); Bloco II – Atividade praticada (2 variáveis e 11 itens de resposta); Bloco III – Dimensão Transformação Pessoal e Social na Dança (5 variáveis e 27 itens de resposta); Bloco IV – Dimensão Representação Afetivo-social da Dança (6 variáveis e 37 itens de resposta). No que respeita o Bloco III e IV, as variáveis são agrupadas em duas grandes dimensões: a Dimensão Representação Afetivo-social da Dança e a Dimensão Transformação Pessoal e Social na Dança. A Dimensão Representação Afetivo-social da Dança inclui seis domínios com as seguintes variáveis: Motivação na Dança, Sensação na Dança, Perceção de Transformação Corporal, Perceção de Participação Social pela Dança, Representação da Dança e Perspetiva da Carreira Amadora ou Profissional. A Dimensão Transformação Pessoal e Social é constituída por 5 domínios representados pelas variáveis: Perceção de Interação Familiar pela Dança, Perceção de Interação com Colegas do NAPRJ pela Dança, Perceção de Mudança na Escola pela Dança, Perceção de Mudança na Comunidade e Perceção de Realização Pessoal.

Nas questões do questionário, são utilizadas três tipos de escalas de Likert com cinco níveis de resposta: uma escala de concordância (Discordo Totalmente, Discordo Parcialmente, Indeciso, Concordo Parcialmente e Concordo Totalmente), uma escala de frequência (Nunca, Raramente, Às vezes, Muitas Vezes e Sempre) e de probabilidade (Impossível, Pouco Provável, Provável, Muito Provável e Certo), com valores (de 1 a 5), considerando o valor mínimo (1) para Nunca e Impossível e o valor máximo (5) para Sempre e Certo.

### **Procedimentos e aplicação do questionário**

Tendo em vista os procedimentos necessários para a construção e validação de um instrumento, numa primeira etapa prévia a esta investigação foram constituídos grupos focais de jovens, bem como uma equipa de peritagem especializada na matéria para garantir a fiabilidade e reprodutividade do inquérito por questionário, tal como recomendado por Hill & Hill (2009) e Vega (2009). A seleção dos peritos foi realizada por análise de currículo, pesquisa do currículo na Plataforma de Currículo Lattes ([www.lattes.cnpq.br](http://www.lattes.cnpq.br)) e por indicações dos diretores dos NAPRJ. A validade de conteúdo e de construto do instrumento envolveu um grupo de 20 especialistas em Dança: professoras universitárias em Dança no Brasil e Espanha (4), psicólogos e psicopedagogos (4), professores universitários (4) e professores dos NAPRJ (4), assim como pais e responsáveis das oficinas de dança (4), através de uma escala de classificação da adequação dos itens, de 1 a 5 pontos. Seguiu-se uma aplicação a jovens das oficinas de dança dos NAPRJ em formato de pré-teste. Após o pré-teste, foram recolhidas informações dos praticantes e da professora de Dança, a respeito do formato do instrumento, nível de compreensão e clareza, dúvidas e opções de resposta do instrumento. Essas informações foram úteis para ajustar o instrumento para a consecução dos objetivos propostos (Coutinho, 2011).

A fiabilidade foi testada pela análise da reprodutividade e estabilidade temporal, mediante a aplicação em dois momentos com intervalo de duas semanas (teste-reteste). Por fim, a consistência interna foi examinada pelo coeficiente de Cronbach para testar a fiabilidade no que respeita aos blocos III e IV por nestes se incluírem as dimensões em estudo: Dimensão Representação Afetivo-social da Dança e a Dimensão Transformação Pessoal e Social na Dança.

No que respeita à aplicação do questionário ao grupo de jovens, foi inicialmente solicitada a autorização dos responsáveis das oficinas de dança e encarregados de educação dos jovens.

O questionário foi administrado aos adolescentes pela pesquisadora responsável no ano de 2013. O local de aplicação foi cedido pelos responsáveis pelas oficinas de dança que disponibilizaram uma aula. Primeiramente, aplicou-se no turno da manhã a uma turma de 25 alunos, seguidamente no turno da tarde (em outro espaço) a outra turma composta por 25 alunos nas salas de Dança, numa sala fechada sem



interferência de outros frequentadores do espaço. De antemão, foram esclarecidos os objetivos do estudo, a estrutura do instrumento e a forma de preenchimento. Na fase do preenchimento, a pesquisadora leu uma questão de cada vez, esperando o preenchimento de todos para dar prosseguimento à questão seguinte. O tempo de resposta do instrumento foi estipulado inicialmente em 20-30 minutos. Obteve-se este parâmetro no teste piloto, quando se verificou que o tempo máximo de resposta do instrumento não excedia os 30 minutos, verificando-se que quanto maior a idade, menor o tempo de resposta do instrumento. Conforme necessidade, este foi ampliado para 45 minutos de acordo com as necessidades dos participantes.

As análises estatísticas foram obtidas através do SPSS.

## RESULTADOS

No que respeita à validade de conteúdo e de constructo do instrumento, mediante a classificação pelo grupo de 20 especialistas, numa escala de valor crescente (1 a 5) foi obtida uma média final elevada ( $M=4.47$ ), apontando que os todos os itens apresentavam uma adequada relevância e clareza para os peritos envolvidos na avaliação.

A análise da reprodutibilidade/estabilidade do questionário demonstra uma forte concordância entre as respostas obtidas no teste e reteste ( $pc = .965$  e  $r = .882$ ), alcançadas pela concordância dos scores (Lin,  $pc$ ). A comparação estatística desta correlação é significativa ( $p < .001$ ) em todos os 105 itens do questionário.

Relativamente ao Bloco II que visa identificar a atividade praticada, as modalidades mais populares foram a Dança livre (69.1%) e o Hip Hop (23.6%), sendo que cerca de 8% praticam mais do que uma modalidade de Dança. Relativamente ao tempo de prática, a maioria pratica dança há menos de um ano (68%), enquanto apenas 2% há mais de 5 anos (Figura 1).

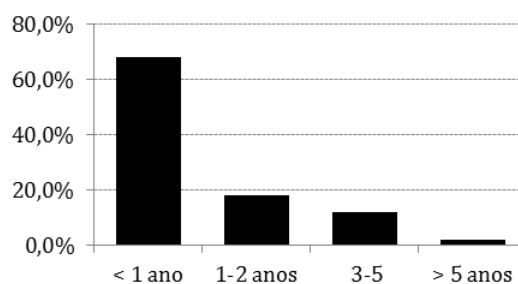


Figura 1. Tempo de prática de Dança

No que respeita aos resultados obtidos nos Blocos III e IV referentes ao somatório total dos itens presentes no questionário, que visam avaliar a Dimensão da Transformação Pessoal e Social na Dança e a Dimensão da Representação Afetivo-social da Dança, nos 11 domínios demonstram uma consistência interna suficiente, com uma boa consistência interna na pontuação total ( $\alpha = .788$ ), sendo a média obtida elevada e uma baixa variabilidade ( $M=3.42$ ,  $SD=.56$ ), assinalando-se assim uma confiabilidade e consistência interna adequada (Tabela 1).

**Tabela 1.** Consistência interna Bloco III – Dimensão Transformação Pessoal e Social na Dança e Bloco IV – Dimensão Representação Afetivo-social da Dança.

	Alfa de Cronbach	Nº de Itens
<b>Bloco III Dimensão Representação Afetivo-social, 5 variáveis - 37 itens</b>		
Motivos que o(a) levaram a praticar a dança	.632	7
Sensações que a dança promove em você ao dançar	.645	8
Transformações que possam ter ocorrido no seu corpo	.677	7
Inclusão Social no programa Núcleo de Arte da Prefeitura do Rio de Janeiro	.616	5
Significado que a dança tem hoje na sua vida	.656	4
A influência da prática da dança na sua futura perspectiva de trabalho na dança	.649	6
<b>Bloco IV Dimensão Transformação Pessoal e Social, 6 variáveis - 27 itens</b>		
Transformações que possam ter ocorrido no seu comportamento em casa	.757	7
Mudanças que possam ter ocorrido na relação entre as colegas	.774	5
Mudanças que possam ter ocorrido na sua convivência na escola	.678	5
Mudanças que possam ter ocorrido com pessoas de sua comunidade	.678	5
Significado que o Núcleo de Arte tem hoje na sua vida	.832	5
<b>Total</b>	<b>.787</b>	<b>64</b>

Segundo Marôco & Garcia-Marques (2006), em alguns cenários de investigação das ciências sociais, um  $\alpha$  de .60 é considerado aceitável desde que os resultados obtidos com esse instrumento sejam interpretados com precaução, embora outros autores refiram como referência um  $\alpha$  de .70. Em todo o caso, resultados inferiores a .60 são considerados inaceitáveis.

No que respeita à consistência interna, relativa ao conjunto de itens relacionados com os *Motivos que o(a) que levaram a praticar a dança*, mostra um valor de .632 do  $\alpha$  de Cronbach. Os motivos com uma maior frequência de respostas são: *Porque gosto de dançar* (24%) e *Por ser uma forma de lazer* (24%). Estes resultados são interpretados com base na motivação intrínseca e pela identificação e estimulação que a Dança pode permitir. Neste sentido, o indivíduo compromete-se com a atividade para experimentar sensações associadas aos seus sentidos e pela busca de autorrealização (Silva, 2011).

O valor de .645 do  $\alpha$  de Cronbach é alcançado nas *Sensações que a dança promove em você ao dançar*. As respostas das sensações mais indicadas pelos alunos ao praticar a Dança são: autoconfiança (34%), liberdade (26%), bem-estar (26%). Assim, as percepções de autoconfiança, liberdade e bem-estar são consideradas relevantes para o desenvolvimento emocional deste público jovem. Em consonância com autores da área (Marques, 2010, 2012; Silva, 2011, 2012; Silva; 2015), a construção da afetividade na Dança evidencia melhoras na relação consigo mesmo pela tríade Interação-Participação-Transformação social.

A consistência interna aponta um aumento no valor de .677 do  $\alpha$  de Cronbach para as *Transformações que possam ter ocorrido no seu corpo*. Em consonância com a Tabela 2, na Percepção de Transformação Corporal na Dança, os itens mais indicados pelos alunos são: *O meu corpo tornou-se mais solto nas situações do dia-a-dia* (36%) e *O meu corpo está mais em forma* (28%), e consideram como Impossível: *O meu corpo não passa emoção enquanto danço* (40%).

**Tabela 2.** Transformação corporal na dança.

		1	2	3	4	5
<b>O meu corpo tornou-se mais solto nas situações do dia-a-dia</b>	Freq.	3	1	4	18	24
	%	6.0	2.0	8.0	36.0	48.0
<b>O meu corpo não mudou com a dança</b>	Freq.	21	10	7	7	5
	%	42.0	20.0	14.0	14.0	10.0
<b>O meu corpo está mais aberto para viver novas experiências</b>	Freq.	1	3	9	7	29
	%	2.0	6.1	18.4	14.3	59.2
<b>O meu corpo não passa emoção quando danço</b>	Freq.	20	13	5	5	7
	%	40.0	26.0	10.0	10.0	14.0
<b>O meu corpo adquiriu novas posturas</b>	Freq.	1	5	6	8	29
	%	2.0	10.0	12.0	16.0	58.0
<b>O meu corpo está mais em forma</b>	Freq.	0	6	8	14	22
	%	0.0	12.0	16.0	28.0	44.0

Nota 1: Valores de 1 e 5 representam a escala Impossível (1), Pouco Provável (2), Provável (3), Muito Provável (4) e Certo (5).

Nota 2: O ponto da escala mais alto apresenta-se em sombreado.

Os efeitos das mudanças corporais ocasionadas pela prática da Dança nos jovens na fase da adolescência são apontados por Silva (2011) e Silva, Medeiros, & Júnior (2012), assinalando que a prática da Dança torna os corpos dos jovens mais flexíveis, coordenados, fortes, soltos, criativos, sensíveis e com melhor postura.

O valor .757 do  $\alpha$  de Cronbach foi obtido na variável *Transformações que possam ter ocorrido no seu comportamento em casa*, observando-se um aumento acentuado nesse valor, porventura por serem questões mais objetivas ou menos idiossincráticas. As respostas mais indicadas como Certo, na variável *Percepção de Interação Familiar* são: *Sinto que estou mais feliz em casa por isso sou carinhosa* (50%) e *Sinto-me mais atento ao que ocorre perto de mim* (52%), e como Impossível em *Não contribuo para melhorar a convivência em casa* (68%) e *Colaboro menos com o meu responsável em casa* (23%).

A interpretação desses resultados favorece elementos para reflexão sobre os reflexos das transformações afetivo-sociais promovidas pela vivência na Dança. Tais mudanças são percebidas, tanto pela alteração do comportamento do jovem com a família como a reação positiva da família face à situação. Assim, a Dança sensibilizou os jovens, tornando-os potencialmente capazes de estabelecerem novos laços afetivosociais com as pessoas mais próximas (familiares, amigos e professores).

A consistência interna apontou um aumento no valor  $\alpha$  de Cronbach para as *Mudanças que possam ter ocorrido na relação entre as colegas*, sendo de .774. Sobre a variável *Percepção de Interação com Colegas dos NAPRJ*, no item Concordo Totalmente, as mais referenciadas foram: *Na dança aprendemos a superar*

*juntos(as) nossas dificuldades* (52%) e *Na dança passamos a respeitar o tempo de aprendizagem um(a) do(a) outro(a)* (40%); e como *Discordo Totalmente*, *Na Dança não consegui conquistar novas amizades* (68%). Este aumento no valor da escala pode representar a relevância social do programa educacional para a formação de novas amizades entre os pares.

Em relação ao valor  $\alpha$  de Cronbach para as *Mudanças que possam ter ocorrido na sua convivência na escola*, ele é de .678. Em referência à variável *Percepção de Mudança na Escola*, no item Certo as mais referidas foram: *Notei que os(as) amigos(as) da escola gostam de me ver dançar as coreografias que aprendo nas aulas* (40%), e como *Impossível*, *Passei a sofrer preconceitos na escola após entrar na dança* (86%). Em complementaridade à discussão, Batalha & Macara (2008), atestam que os benefícios de uma educação artística passam pelo atingir de autonomia, identidade própria, a partilha de sensações, ideias e movimentos, promovendo forte envolvimento pessoal e social.

O valor  $\alpha$  de Cronbach para as *Mudanças que possam ter ocorrido com pessoas de sua comunidade* é de .678, sendo o mesmo do item anterior. Em alusão à variável *Percepção de Mudança na Comunidade*, o maior valor é no item *Impossível: As pessoas da minha comunidade passaram a me discriminar* (96%), Este resultado pode representar o excelente envolvimento da comunidade face ao trabalho desenvolvido nestes espaços.

No que se refere à consistência interna do  $\alpha$  de Cronbach para a *Percepção de Inclusão Social no programa Núcleo de Arte da Prefeitura do Rio de Janeiro*, ela é de .616. Em menção à variável *Percepção de Realização Pessoal*, realçamos na opção de resposta: *Concordo Totalmente*, foi escolhido *Sinto-me necessária ao apresentar as danças que fiz com meus colegas na mostra interna* (58%), e como *Discordo Totalmente*, o item *No núcleo são tomadas péssimas decisões sem consultar os alunos* (70%).

O maior valor obtido  $\alpha$  de Cronbach é de .832 para o *Significado que o Núcleo de Arte tem hoje na sua vida*. Na variável *Percepção de Participação Social*, os aspetos mais valorizados são: *Representação que o NAPRJ tem na vida dos adolescentes* no item *Concordo Totalmente*, *O Núcleo de Arte é um espaço onde tenho experiências que me ajudam* (62%), *O Núcleo de Arte é como minha segunda casa* (52%) e *O Núcleo de Arte não é muito importante na minha vida*, afirmação com a qual mais discordam (66%). Mais uma vez, estas questões parecem ser mais objetivas e menos idiossincráticas.

O valor  $\alpha$  de Cronbach para o *Significado que a dança tem hoje na sua vida* é de .656. Em referência à variável *Representação da Dança*, destacamos: no item de resposta *Concordo Totalmente*, *Hoje a dança é uma forma de estabelecer contato mais próximo com a minha cultura* (70%), *Hoje, dançar significa melhorar minha capacidade de comunicação com o meu corpo* (68%), *Hoje a dança me permite estabelecer conexão com afetos, emoções, atitudes, sensações e sonhos* (64%) e, como *Discordo Totalmente*, *Hoje, dançar representa estar mais distante das pessoas*. Assim, é atribuída à busca pela prática da Dança a promoção de estados emocionais positivos, como estar feliz e sentir bem-estar. Essa tentativa permanente de alcançar um estado de vida equilibrado é uma dimensão profunda e definidora da nossa existência, o *conatus*. Para Damásio (2012, 51), “o *conatus* é o agregado de disposições presentes em circuitos cerebrais que, uma vez ativados por certas condições do ambiente interno e externo, levam à procura da sobrevivência e bem-estar”.

Seguindo essa linha de pensamento, a Dança tem a possibilidade de ser um veículo de descoberta e de transformação pessoal e social para os jovens praticantes dos Núcleos de Arte porque permite inúmeras experiências que ampliam a percepção do próprio corpo, especialmente o florescimento das sensações, sentimentos e emoções prazerosas que concedem, inevitavelmente, a conexão com o *conatus*. Essa ligação promove o equilíbrio do jovem consigo mesmo (âmbito individual) e influencia as relações interpessoais (âmbito coletivo) resultantes da busca existencial do ser humano em sentir bem-estar e felicidade.

Por último, a consistência interna mostra um valor de .649 do  $\alpha$  de Cronbach em relação à variável *Perspetiva da Carreira* (Amadora ou Profissional) com 40%, considerando o desejo de prosseguimento na carreira profissional e 38% sobre o impacto positivo da dança na escolha de um curso superior relacionado com a área da saúde ou atividade física. Com base neste resultado, verifica-se que o desenvolvimento artístico pode ter impacto no prosseguimento na carreira em Dança e também despertar afinidades para áreas afins, pelo melhor cuidado com a saúde física. Para além desses aspetos, ponderamos o prosseguimento na carreira como uma forma de ascensão social, para essa população jovem socialmente desfavorecida.

Foi realizada uma análise das relações entre as variáveis presentes no questionário com a intenção de verificar as suas relações de interinfluência. As variáveis e questões com maior intensidade e com maior frequência de relação serão aquelas que merecem uma atenção mais detalhada por se revelarem mais significativas, influenciando outros processos. Por outras palavras, constituem variáveis mediadoras de outros processos.

Interpretando estes dados e com esta análise, resultou uma organização dos dados em função de três vetores: vetor 1 – *Benefícios da Prática da Dança*, vetor 2 – *Inclusão na Comunidade* e vetor 3 – *Desejo de Prosseguimento na Carreira*.

## DISCUSSÃO

### Vetor 1: Benefícios da prática da Dança

Face aos resultados alcançados, a maioria dos jovens participantes deste estudo perceberam os efeitos da prática da dança na vida pessoal, representado pela Dimensão Representação Afetivo-social da Dança que comporta as variáveis Sensação na Dança, Transformação Corporal na Dança e Representação da Dança. Nesta dimensão, a Dança é considerada um fator de significação do mundo interno, influenciado pelo desenvolvimento das manifestações de afetos, emoções, sentimentos e motivações, despertados pelas experiências sensoriais, motoras e sociais catalogadas pelo corpo, ampliando o entendimento sobre o impacto da Dança na vida pessoal.

A sensação, emoção e sentimentos são domínios despertados no corpo de quem se propõe a dançar (Miller, 2012). Desse modo, ao observarmos os resultados, constatamos que as sensações mais sentidas pelos estudantes ao dançar foram autoconfiança, liberdade e bem-estar. Para Damásio (2013) os sentimentos são percepções da paisagem corporal (estado do corpo e suas modificações), responsável pela regulação básica da vida nos seres humanos. Para o autor, a tomada de consciência das redes de sensações que percorrem o corpo e dos sentimentos gerados, tornam o ser humano capaz de combater e transformar racionalmente sentimentos que não lhe fazem bem"

Neste sentido, consideramos a Dança como fator de equilíbrio do campo afetivo e emocional dos praticantes porque, pela linguagem, cada jovem amplia a sua expressividade pessoal, podendo-se materializar em felicidade, bem-estar e realização, resultantes dos afetos edificados na vida pessoal e social. Assim, a Dança é fonte de *conactus*, despertando a *potência de ação* para ir à busca da realização pessoal.

Neste âmbito, Damásio (2012) reforça que o ser humano na sua essência busca a liberdade e viver a vida de forma equilibrada, representando o esforço do homem para preservar e expandir sua potência de existir. Nesta percepção, a ideia de *conactus* retrata o movimento de naturalização da vida afetiva do ser humano, pelos afetos que visam a afirmação plena e liberdade da vida humana.

Por meio da Dança, estes jovens conseguiram perceber que o corpo passou por um processo de transformação, visto que as mudanças se tornaram evidentes por meio da *soltura* do corpo, da transformação corporal e postural, além da percepção de que o corpo transmite emoção ao dançar.

A representação está relacionada com o processo de construção do conhecimento compreendido (Piaget & Inhelder, 1990) e, nesse entendimento, os significados atribuídos à Dança são produtos das representações individuais e coletivas. A este respeito (Katz, s/d) acrescenta:

O jeito como se dança, a maneira como você faz as suas escolhas do que é que vai ser dançado, isso é um posicionamento, é uma atitude sua face ao mundo. Quando você dança, você manifesta o seu conhecimento sobre o mundo. Um passo de dança nunca é só um passo de dança. Ali tem uma série de compromissos com certos entendimentos (p.1).

Por este viés, a Dança representa uma forma de compreender, de estabelecer contato com a cultura, de melhorar a capacidade de comunicação do corpo, de estabelecer conexão com afetos, emoções, atitudes, sensações e sonhos, significando uma possibilidade de compreender melhor o mundo e estar mais próximo das pessoas.

Finalizando, os principais benefícios da prática da Dança são inerentes à Dimensão Representação Afetivo-social da Dança (*Sensação na Dança*, *Transformação Corporal na Dança* e *Representação da Dança*), dado que a Dança é vista como fator de significação do mundo interno, influenciando o desenvolvimento das competências afetivas (afetos, emoções, sentimentos e motivações), despertado pelas experiências motoras, sensoriais e competências sociais (aprendizagem comportamental e relacional positiva) catalogadas pelo corpo, de forma ampliar o entendimento sobre o impacto físico e afetivo social da Dança na vida pessoal.

### Vetor 2: Inclusão na Comunidade

As repercussões da prática da Dança no processo de reconhecimento, interação e participação social dos jovens dos NAPRJ na comunidade foram evidenciadas na Dimensão Transformação Pessoal e Social pela variável *Percepção de Mudança na Comunidade*. A Dimensão Transformação Pessoal e Social refere-se às mudanças individuais no processo de interação, participação e transformação social que

decorrem em função da experiência na Dança resultando em “*percepção de acolhimentos ou de exclusões*” (Bauman, 2003).

Sobre a percepção de mudanças ocorridas na comunidade, verificou-se que os alunos passaram a ser reconhecidos como bailarinos dos NAPRJ, significando que a Dança pode representar uma forma de desenvolvimento das competências sociais desses jovens pela mudança comportamental e relacional positiva (pela tríade interação-participação-transformação social) entre os membros da comunidade (escola, família e comunidade local).

Para além desse fator, notamos que a prática da Dança nos NAPRJ, para estes jovens pode ser vista como um fator de reconhecimento social da família, integrantes da escola e comunidade local. A este respeito, Godoy (2013, 32) alerta que produções artísticas no âmbito escolar podem facilitar o acesso ao conhecimento sobre a matéria e a formação de plateia: “A produção de trabalhos artísticos e sua apreciação significa também conhecer, apreciar e refletir sobre as formas da natureza, sobre as produções artísticas individuais e coletivas de diferentes culturas e épocas”.

Esses determinantes contribuem para novas trajetórias de vida e possíveis estratégias de intervenção dos programas educacionais em interação com a comunidade, considerando que a Dança pode possibilitar novas leituras e de interação com o mundo, aproximando as pessoas.

Um corpo da literatura ilustra que, na fase da adolescência, o jovem apresenta alterações no comportamento psicossocial observados pela mudança comportamental nas relações interpessoais, no desenvolvimento das competências afetivas e sociais e pelas novas interações estabelecidas entre os pares (Loureiro, Ferreira & Santos, 2013; Matos & Tomé, 2012; Matos & Sampaio, 2009).

A Dança possibilita a produção de novas percepções de si próprio, dos outros e do contexto social. Conforme aponta Marques (2010), a leitura da Arte pelo mundo torna-nos responsáveis (coautores) da construção de tempos e espaços das dinâmicas sociais que são difundidas em cada sociedade.

### **Vetor 3: Desejo de Prosseguimento na Carreira**

As reverberações da prática da Dança foram constatadas na Dimensão Representação Afetivo-social da Dança pelas variáveis *Motivação na Dança* e *Perspetiva da Carreira* (Amadora e Profissional), assim como na Dimensão Transformação Pessoal e Social, pela variável *Percepção de Interação Familiar*.

A *Motivação na Dança* pelos jovens estudantes é indicada pelo gosto em dançar e por ser uma forma de lazer. *Por ser uma forma de lazer*, é um dos motivos referenciados, traduzindo a motivação dos jovens em experienciar a dimensão lúdica na Dança (Tschoke, Tardivo, Rechia, 2011) e ocupar o tempo livre, visto que o horário da escola brasileira ainda não é integral, deixando o jovem com tempo ocioso. O desejo de prosseguimento na carreira como bailarino profissional - ou em áreas afins -, é apontado pelos praticantes dos NAPRJ, despertando ambições de vida em jovens socialmente desfavorecidos.

A predisposição para a prática da Dança pode ser influenciada pelos familiares que apresentam uma vida cultural diversificada, fazendo com que a criança ou jovem fique estimulada a dançar (Furhmann, 2008). A este fenómeno, Bourdieu (2011) chama de *capital cultural incorporado* das gerações anteriores, como exemplo da cultura realizada em modelos familiares, permitindo que o recém-chegado inicie a aquisição dos elementos fundamentais da cultura legítima. Neste contexto, atribuímos o *habitus* da prática da Dança pelo prazer em dançar e pela influência da família. Segundo Bourdieu (2011, 82), o *habitus* “é um sistema de disposições duráveis e transponíveis que exprime, sob a forma de preferência sistemática, as necessidades objetivas das quais ele é produto”. A percepção de interação familiar é marcada pela mudança comportamental do jovem em casa, por estar mais feliz e afetuoso com os parentes.

### **LIMITAÇÕES DO ESTUDO**

Salientam-se como limitações do estudo, a dificuldade na aplicação do instrumento com jovens de 10 a 12 anos, sendo necessário mais tempo na aplicação (leitura do instrumento acompanhado a resposta automática dos estudantes). Em função da análise, verificou-se que os alunos com idades superiores (14-16 anos) respondiam às questões e com mais rapidez.

Outra limitação tem a ver com valores baixos, embora aceitáveis, do  $\alpha$  de Cronbach em alguns domínios. A nossa interpretação é de que nas questões porventura mais objetivas, os valores parecem ser superiores, e que nas questões porventura mais idiossincráticas e auto-referentes, os valores parecem ser inferiores. Nestas últimas questões, a utilização de questões abertas poderia dar um leque de respostas mais abrangente.

### **CONCLUSÃO**

Face aos objetivos do CDC, que se prendem com a avaliação das dimensões Representação Afetivo-social da Dança e Transformação Pessoal e Social na Dança, apontando indicadores das componentes

físicas, afetivas e sociais dos praticantes de Dança - perante o que se propõe conhecer sobre as representações de pertença ao espaço e de transformações nos domínios pessoais e sociais dos praticantes -, resultou a construção de um instrumento com 105 itens distribuídos em 11 domínios e agrupados em duas dimensões: a Dimensão Representação Afetivo-social da Dança e a Dimensão Transformação Pessoal e Social na Dança. A validade de conteúdo e de construto e a consistência interna da escala foi considerada adequada, sendo que, face a esta referência, os valores obtidos validam o questionário, enquanto instrumento passível de utilização em futuras pesquisas.

Mediante os resultados apresentados e suas justificações, concluiu-se que o questionário proposto é adequado para identificar o tipo de transformação pessoal e social que um programa de Dança pode implicar na vida de jovens praticantes, sendo que poderemos considerar como eixos principais, dimensões e indicadores, as componentes físicas – pela melhor expressividade e autopercepção das emoções dos praticantes dos NAPRJ no corpo; afetivas – pela percepção do desenvolvimento de sentimentos de autoconfiança; e bem-estar e social – melhor interação com a família pela mudança comportamental em casa, melhor participação social na escola, vista pela capacidade de superação das dificuldades com os colegas, bem como no NAPRJ pela valorização e reconhecimento dos jovens como um local de experiências enriquecedoras e de acolhimento. Salienta-se, assim, que as representações de pertença ao espaço, perante as transformações nos domínios pessoais (físicos e afetivos) e sociais, mediante o desenvolvimento de competências sociais e emocionais através da Dança, ilustram uma trajetória de resiliência face às dificuldades emocionais e de ajustamento social (Risner & Stison, 2010).

Enquanto instrumento de pesquisa, este questionário pode ser aplicado e replicado em outros estudos, quer no sentido de verificar em que medida os resultados podem ser consistentes quer para avaliar resultados no que respeita às dimensões estudadas. O estudo em diversas idades pode, também, dar-nos um perfil longitudinal de como as percepções pessoais evoluem ou se evoluem.

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## Expressive differences for emotions in hearing impaired and with hearing individuals

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**Abstract:** Emotion is the most common experience of all human beings, whether normal or impaired. The universal emotions like happiness, sadness, anger, fear etc. are well recognizable through facial expressions. But even though we may identify these emotions clearly, we display them differently towards different target persons. The objective of the present study is two-fold: (1) to understand the pattern of display rules of four emotions namely, happiness, anger, fear and sadness in hearing impaired and with hearing individuals in private and public contexts, and (2) to find out whether display rules of emotions are equal for all target persons i.e. parents, friends and teachers. Display Rule Assessment Inventory of Matsumoto et al. (2005) was administered to 204 hearing-impaired and 273 with hearing individuals. The findings of the study indicate that the pattern of overall expression of emotions are different for hearing-impaired and for hearing individuals. Repeated Measure ANOVA results indicate a significant main effect of context on overall expression of both positive and negative emotions. The results also show that emotions are displayed in an amplified manner depending upon the target person. On the whole, the findings indicate that both hearing and impaired individuals regulate positive and negative emotions depending upon the target person and context.

**Keywords:** Emotions; Hearing Impaired; Target person; Context.

### Diferenças na expressão emocional entre indivíduos portadores e não-portadores de deficiências auditivas:

A emoção é uma das experiências mais comuns do ser humano, quer este seja, ou não, portador de deficiência. As emoções universais tais como a felicidade, tristeza, fúria ou medo, etc., são bem reconhecidas através de expressões faciais. No entanto, e ainda que se consiga identificar de forma clara estas emoções, a expressão individual das mesmas pode ser diferente consoante a pessoa a quem as dirigimos. O objectivo do presente estudo é duplo: (1) compreender o padrão de expressão de quatro emoções, designadamente felicidade, fúria, medo e tristeza, junto de indivíduos portadores de deficiência auditiva e indivíduos não-portadores, em contextos públicos e privados; e (2) compreender se a expressão destas emoções é igual para todos os tipos de pessoas-alvo, ou seja, pais, amigos e professores. 204 indivíduos portadores de deficiências auditivas e 273 indivíduos não-portadores preencheram o *Display Rule Assessment Inventory* de Matsumoto et al. (2005). Os resultados mostram que o padrão geral de expressão de emoções é muito diferente para indivíduos portadores de deficiência auditiva quando comparado com indivíduos não-portadores. Os resultados de uma ANOVA de medidas repetidas evidenciaram um efeito principal do contexto na expressão geral de emoções positivas e negativas. Os resultados mostram, também, que as emoções são expressadas de forma amplificada dependendo da pessoa-alvo. De uma forma global, estes resultados indicam que tanto indivíduos não-portadores, como indivíduos portadores de deficiência auditiva, regulam a expressão de emoções positivas e negativas, dependendo do alvo e do contexto.

**Palavras-chave:** Emoções; Deficiência Auditiva; Pessoa-alvo; Context.

Emotion is a complex psychological state that involves three distinct components: a *subjective experience*, a *physiological response*, and a *behavioral or expressive response* (Hockenbury & Hockenbury, 2007. pp. 117). This is applicable for both positive and negative emotions. The universal basis of seven emotions namely, anger, contempt, disgust, fear, happiness, sadness and surprise are well recognizable through facial expressions (Ekman, 1999; Ekman & Rosenberg, 1998). Emotion is associated with mood, temperament, personality, disposition, and motivation. The existence of display rules were originally documented in Ekman's (1972) classic study of Americans and Japanese students viewing stressful films when alone and subsequently with an experimenter. The expression of emotion is likely to vary depending on social expectations in specific social environments, which is called the "emotional display

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rules" (Hou & Yu, 2006). Ekman (1972 pp. 207-283) defines emotional display rules (EDR) as what has been learned, presumably fairly early in life, about which emotion management techniques are to be applied by whom, to which emotions, under what circumstances. The social situations may vary for friends, family members and acquaintances as well as for persons with higher and lower social status. These culturally shared norms dictate how and when to apply this. Display rules are culturally informed guides about what type of facial expressions and other emotional displays for a certain emotion are allowed, suppressed, or exaggerated in a given situation (Colman, 2001; Denham & Mitchell-Copeland, 1993; Ekman & Friesen, 1969; Matsumoto, Yoo, Hirayama, & Petrova, 2005). Individuals are socialized to know and enact display rules for different emotions in different situations (Denham, McKinley, Couchoud, & Holt, 1990; Garner, Jones, & Minner, 1994), so that they may become socially appropriate to interact in a given culture. Display rules are thus conceptualized as a mechanism that explains emotion expression management (Matsumoto et al., 2005). Matsumoto (1990) rated emotional facial expressions to determine how appropriate the expression of the specific emotion is for different target persons and to who people should express their emotional experiences.

Literature indicated that there is a good relationship between individuals' ability to apply EDR and social abilities (Jones, Abbey, & Cumber 1998; McDowell & Parke, 2000). Underwood (1992) found that compared to non-aggressive individuals, aggressive individuals used less EDR to disguise their anger. Matsumoto (1990) refers to display rules as values concerning the appropriateness of emotional displays that are communicated from one generation to the next. Studies reported that children understand verbal display rules better than facial display rules, and they understand prosocial display rules better than self-protective ones. Matsumoto et al. (2008) investigated collective effects of display rules across 32 countries and found greater expression toward in-groups than out-groups and an overall regulation effect.

Individuals with any kind of impairment (visual, hearing, mental etc.) experience challenges not only in their physical capacity, but also challenges in their psychological capacities to adjust with their disabilities. Visual impairment (including blindness) means impairment in vision that even with correction, adversely affects a child's educational performance. Hearing impairment, on the other hand, is a broad term that refers to hearing losses of varying degrees from hard-of-hearing to total deafness. One particular area of challenge for the hearing impaired children is the ability to socialize as because they cannot communicate. Hearing impaired children have difficulties in acknowledging that different people can hold different mental states regarding the same situation (Peterson & Siegal, 2000). The consequences of these difficulties can be inferred from their problems in relationships with peers. An important aspect of regulating relationships with others is the use of emotions. It has been observed that in course of development, children learn to display their emotions depending upon the social circumstances and in accordance with the cultural norms (Malatesta & Haviland, 1982). Hearing impaired children have been found to mask their emotions particularly anger and happiness, less frequently than normal hearing children (Hosie et al., 2000). Moreover, Hosie and colleagues (2000) found that hearing impaired children's reasons for masking their true feelings were comparatively less protective and they gave more reasons that were pro-social or concerned with norm maintenance. Rieffe & Terwogt (2006) observed that in conflict situations, deaf children used anger expression more bluntly towards peers than hearing children, and their findings suggest that emotional coaching with families and the school curriculum seem essential for developing the socio emotional competence of deaf children. Gray, Hosie, Russel & Ormel (2001) and Dyck, Farrugia, Shochet & Holmes-Brown (2004) studied participants identifying universal facial expression of emotions from a broad range of spectrum of deaf children in and observed lower performance of deaf children in identifying and labeling emotions compared to their hearing peers.

Considering these issues, the present investigation tries to understand the pattern of emotional display rules for anger, happiness, sadness and fear in hearing impaired and normal hearing adolescents in two different situations (private and public) towards in-group and out-group members. Parents and friends are considered as in-group members whereas teachers as out-group members. These positive and negative emotions have been selected for the study as we experience these emotions frequently in our daily lives. Happiness is a positive emotion and we feel it whenever we are satisfied, feel pleasure, joy or contentment. Anger occurs when we believe that we have been or are threatened with being deprived of something we believe is rightfully ours. Sadness, on the other hand, is a negative emotion and we feel it when we experience loss of someone or experience a helpless situation. Fear is also a negative emotion which creates anxiety and agitation in one's mind by the presence or nearness of danger or pain. The objective of the present study is to address the following two issues:

(a) To understand the pattern of display rules of four emotions namely, happiness, sadness, anger and fear in hearing impaired and with hearing adolescents across private and public contexts.

(b) To find out whether emotional display rules of these two groups are equal for all target persons i.e. parents, friends (in-group member) and teachers (out-group member).

## METHOD

### Participants

Participants of this study were 477 school students (204 hearing impaired and 273 with hearing) belonging to different states of India. There were 204 hearing impaired (Male = 139, Female = 65) and 273 with hearing (Male = 122, Female = 151) individuals in this study. The mean age of the hearing impaired students was 16.33 years (SD = 2.30) and for with hearing students it was 15.37 years (SD=1.25). The majority of the hearing impaired students were day scholars and residing with their parents/guardians or otherwise in the hostel, but all the normal hearing students were day scholars and residing with their parents/guardians. The socio-economic condition of the students varied from lower middle to upper middle class.

### Measures

#### *Display Rule Assessment Inventory*

The Display Rule Assessment Inventory developed by Matsumoto, Yoo, Hirayama and Petrova (2005) was used in this study. The inventory measures display rules across a wide range of target persons such as family members, friends, acquaintances and teachers/ professors. Seven universally expressed emotions namely anger, contempt, disgust, fear, happiness, sadness and surprise are used in the inventory. But in the present investigation only four emotions namely, happiness (positive emotion), and sadness, anger and fear (negative emotions) were used. Participants were asked to mention their expressive behavior towards three target persons namely, parents and friends (i.e. in-group member), and teacher (i.e., out-group member). They were asked to express “what they should do if they felt” these four emotions toward these target persons under two different settings/contexts (a) in private context (i.e., “at home or in the classroom with the target person alone”) and (b) in public context (i.e., “at restaurant or in the classroom with the target person within earshot of others”). The response alternatives correspond to the theoretical modes of expression management originally described by Ekman & Freisen (1969, 1975), which are: (a) show more than you feel it (amplify), (b) express it as you feel it (express), (c) show less than you feel it (deamplify), (e) show the emotion while smiling at the same time (qualify), (f) hide your feelings by smiling (masking), and (g) show nothing (neutralize).

#### *Background Information Schedule*

Background information were also collected from the participants through a schedule which included items like participants' age, gender, disability status, family structure, educational level, socio-economic condition of the family etc.

### Procedure

Informed consent was given by the hearing impaired and hearing participants of the selected schools. Hearing impaired participants were either interviewed individually or tested in group situation in the classroom with the help of their teachers through sign language and all the normal hearing individuals were tested in the classroom of their respective schools in group situation. The language of instruction and administration of the tests for with hearing children were either English or Hindi or Bengali depending upon the languages known by the participants. All of them were asked to imagine how they would express these four emotions namely, happiness, sadness, anger and fear in a hypothetical situation through their behavior in terms of six response formats (which were presented through sentences) toward in-group member (i.e., parents and friends) and out-group member (i.e., teachers) under two different situations (i.e., private and public). The response alternatives were as follows:

- (A) Express: (express it as you feel it)
- (B) Amplify: (show more than you feel it)
- (C) Deamplify: (show less than you feel it)
- (D) Neutralize: (show nothing)
- (E) Qualify: (show the emotion while smiling at the time)
- (F) Masking: (hide your feelings by smiling)

In this study we have used one positive and three negative emotions. It is because positive emotions are comparatively few and relatively difficult to differentiate. On the other hand, negative emotions are distinctly different experiences and have specific facial configurations. In the list of seven universal emotions of Ekman (1999), only happiness and surprise are positive emotions while the other five are negative emotions. It was envisaged that the ‘surprise’ emotion will be difficult to explain to the

hearing-impaired group and therefore, only one positive emotion 'happiness' and three negative emotions 'anger', 'sadness' and 'fear' were used.

## RESULTS

The scoring of DRAI is usually done through two procedures. In this study we have scored the data through procedure I. In procedure I overall expressivity score for emotions was calculated by following the scoring method suggested by Matsumoto et al. (2008) where the original nominal raw data were converted into continuous scales so as to maximize the use of inferential statistics. Homogeneity Analysis via Alternating Least Squares (HOMALS) analysis was used by Matsumoto et al. (2008) to arrive at one dimensional solution and which was found to be equivalent across cultures. The nominal expressive mode responses were recoded into the following scalar values for analysis, that is for amplify: .57; express: .38; qualify: .12; deamplify: -.15; masking: -.38; and neutralize: -.53. Matsumoto et al (2008) referred this dimension as a measure of overall expressivity. These scores were added by .5338 in each category to ease in the interpretation. The resulting scores ranged from "0" (hide your feelings by smiling) to "1.0989" (show more than you feel it).

In procedure II only '1' and '0' is used for scoring. Expression and Neutralization mode are calculated together, where expression mode is scored as either 1 or 0, but Neutralization mode is scored as -1 and 0. For the other four expressive modes only '1' and '0' are used.

Here we scored the data for computing the overall expressivity score for emotions by procedure I only, and then means and SD values for the two groups of individuals were calculated. The mean differences between the two contexts were also computed and the results are presented in Tables 1 and 2.

**Table 1.** Mean, SD and values of difference (Diff.) between private and public contexts for the four emotions towards three target persons for Hearing-impaired individuals.

Emotion		Target person								
		Parents			Friends			Teacher		
		Private	Public	Diff	Private	Public	Diff.	Private	Public	Diff.
Happiness	M	.68	.64	.04	.66	.66	.00	.65	.67	-.02
	SD	.34	.38		.36	.39		.34	.37	
Sadness	M	.61	.57	.04	.62	.48	.14	.54	.51	.03
	SD	.38	.36		.39	.38		.36	.35	
Anger	M	.82	.65	.17	.72	.61	.11	.68	.73	.05
	SD	.34	.37		.31	.34		.36	.35	
Fear	M	.53	.55	-.02	.57	.57	.00	.46	.56	-.10
	SD	.34	.34		.33	.33		.32	.31	

Note. Mean Difference (Diff.) was calculated as private minus public score.

**Table 2.** Mean, SD and difference values (Diff.) between private and public contexts for the four emotions towards three target persons for with Hearing individuals.

Emotion		Target person								
		Parents			Friends			Teacher		
		Private	Public	Diff	Private	Public	Diff.	Private	Public	Diff.
Happiness	M	.81	.77	.04	.81	.79	.02	.72	.71	.01
	SD	.35	.32		.36	.32		.36	.36	
Sadness	M	.42	.36	.06	.47	.36	.11	.40	.39	.01
	SD	.38	.34		.38	.33		.34	.35	
Anger	M	.71	.54	.17	.70	.52	.18	.50	.47	.03
	SD	.33	.33		.35	.36		.34	.33	
Fear	M	.53	.43	.10	.51	.46	.05	.53	.52	.01
	SD	.35	.32		.32	.30		.33	.34	

Note. Mean Difference (Diff.) was calculated as private minus public score.

The overall expressivity score for emotions indicated that the positive emotion- happiness was expressed most in private situation by normal hearing adolescents towards all the target persons. But hearing impaired adolescents displayed anger more towards parents and teachers than the other emotions. Normal hearing students expressed negative emotions particularly anger less in public situation, but hearing impaired students expressed it more publicly towards teachers particularly "anger"

and “fear”. It may be due to the fact that these hearing impaired students spend more time with their teachers in schools and they do not mask their emotions much, particularly anger as the normal hearing children which corroborates the findings of Hosie et al., (2000), which indicate that hearing-impaired children hide or mask their emotions less frequently. The hearing-impaired children due to their inability of communication or language expression, do not hide their emotions particularly anger. For normal hearing children, it may be that showing anger more in front of others is not a good sign of behavior in Indian culture. In case of students the restriction is more, so they prefer to express this emotion more in private contexts.

It has been observed that normal hearing individuals show both positive and negative emotions less in public context whereas hearing-impaired individuals show happiness, anger and fear more in public context specially towards out-group member i.e. teacher.

The mean difference between the contexts is higher for negative emotions particularly for anger for the in-group members in both hearing impaired and normal hearing individuals. That is they show more negative emotion in private context. But hearing-impaired individuals expressed anger more publicly towards teachers.

The overall expressivity score for emotions varied from target person to target person and also from context to context for both the groups. Repeated Measure ANOVA was calculated to see whether the emotional display of these subjects varied due to target person and/or context. This was done separately for the four emotions. The main effect of target person:  $F(2,472) = 4.56, p < .01$  and context  $F(1,473) = 3.23, p < .07$  was found to be significant for the emotion *happiness*. The interaction effect of target  $\times$  status of the group:  $F(2,472) = 5.79, p < .003$ , target  $\times$  context  $\times$  gender:  $F(2,472) = 4.14, p < .02$  were found to be significant for overall expression of happiness. The results show that the emotion happiness displayed by hearing impaired and with hearing adolescents varied for different target persons and also under private and public contexts.

The results indicate significant main effect of target person:  $F(2,472) = 18.84, p < .000$  and context  $F(1,473) = 63.62, p < .000$  on overall expression of *anger* which reveal that anger expression varied from target person to target person and also from private to public context. These main effects were qualified by a significant interaction effect of target  $\times$  status:  $F(2,472) = 12.85, p < .000$  and also by a significant interaction effect of target  $\times$  gender  $F(2,472) = 6.02, p < .003$ . The main effects were also qualified by a significant interaction effect of target  $\times$  status  $\times$  gender:  $F(2,472) = 4.99, p < .007$ . There are also significant interaction effects of context  $\times$  status  $F(1,473) = 4.95, p < .03$  and target  $\times$  context:  $F(2,472) = 25.26, p < .000$ . This results indicate that both status of the group (hearing impaired and normal hearing) and gender (male and female) display anger differently towards parents, friends and teachers in private and public contexts.

The negative emotion *sadness* was also found to have a significant main effect of context,  $F(1,473) = 24.72, p < .000$ . This main effect was qualified by a significant interaction effect of context  $\times$  gender:  $F(1,473) = 9.77, p < .00$ , context  $\times$  status  $\times$  gender:  $F(1,473) = 11.36, p < .000$  and target  $\times$  context:  $F(2,472) = 7.34, p < .03$ . This shows that both hearing-impaired and with hearing individuals show sadness differently in private and public situation and that too is qualified by one's gender.

*Fear* is also a negative emotion, but it was found to have significant interaction effect. Target  $\times$  status of the group interacted significantly  $F(2,47) = 5.75, p < .00$ , and also context  $\times$  status of the group  $F(1,473) = 12.50, p < .000$ . Target  $\times$  context was also found to have a significant interaction effect:  $F(2,472) = 7.34, p < .000$ . Gender was not found to have any significant effect.

## DISCUSSION

Emotional display rules of hearing impaired and with hearing students towards three target persons was studied under private and public contexts. The overall findings indicate that these emotions are displayed differently towards three target persons in different situations but the overall expressivity for emotions is slightly different for the hearing-impaired and with hearing groups. The study reflects more emphasis on positive emotion (happiness) than negative emotion (anger) by the normal hearing individuals. But the hearing-impaired group emphasized negative emotion particularly, anger more than the positive emotion. Display of emotion was more evident in relation to positive emotion and that too in private situations, which suggests that Indians, particularly the normal hearing group of individuals do not want to display emotions more in public situation especially for the negative emotions.

The magnitude for overall expression of difference between the two contexts was found to be more for negative emotion than positive emotion and this is mainly for in-group members. The probable reason may be that in Indian culture to express negative emotion in front of outsiders (i.e., publicly) is not a good sign of behaviour. The restriction is even more in case of students, so they prefer to hide or mask or suppress it publicly. But for the hearing-impaired group it was not the case. They displayed negative

emotion more for the out-group member, which may be due to the fact that they spent more time with their teachers and they do not hide or mask the emotion like the normal hearing group.

The present study highlighted the display of positive and negative emotions of one differently abled (hearing impaired) and one normal hearing group of students. Self-report of the emotions through written sentences toward different target persons is definitely a limitation of the study as it did not actually measure the expression of emotions. But still this gives an indication of the display rules followed by normal hearing and hearing-impaired groups. The study implies that overall expression and regulation of emotions is an important issue for maintaining good social relationships with others for the impaired groups as well as the normal hearing individuals depending upon the target person and the context. Future studies may be done with other indicators which will develop our findings.

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## Further evidence for the structure of the Resilience Scale in portuguese language countries: An invariance study with brazilian and portuguese adolescents

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**Abstract:** Especially since the last decades of the 20th century, research about resilience provided some insights into how people deal and overcome adversity in a positive way. Given the recent research history on this topic, discussion about theories and measures is still ongoing. In this study we aim to explore the structural invariance of the Wagnild and Young's Resilience Scale (RS), one of the most widely used measures of resilience, across Portuguese and Brazilian adolescents. A sample of 969 adolescents with ages ranging between 13 and 18 years old completed the RS. A five- and a two-factor structure for the full RS version with 25 items and a one-factor structure for a RS short version, composed of 14 items, were tested using confirmatory factor analysis (CFA). After determining the best fitting structure, a multi-group CFA was performed to test the invariance of the instrument across the Portuguese and Brazilian samples. The five- and two-factor structures for the full version revealed a poor fit. The one-factor structure revealed a good fit in both samples. Moreover, evidence for the partial measurement invariance of the short version across both samples was found. Our results indicate that the RS short version can be used for cross-cultural studies of resilience in both countries and that the five- and two-factor structures might be inadequate for comparison purposes.

**Keywords:** Resilience; Measurement invariance; Cross-cultural studies; Adolescents.

**Evidência adicional para a estrutura da Resilience Scale em países de Língua Portuguesa: Um estudo de invariância com adolescentes brasileiros e portugueses:** Especialmente desde as últimas décadas do século 20, a investigação sobre a resiliência contribuiu para aumentar o conhecimento sobre a forma como as pessoas lidam com a adversidade e a superam de uma forma positiva. Tendo em conta que este tópico de investigação é relativamente recente, continua a existir algum debate em torno das teorias e dos instrumentos de medida da resiliência. Neste estudo pretendeu-se explorar a invariância da estrutura fatorial de uma das medidas de resiliência mais utilizadas — a Resilience Scale (RS) desenvolvida por Wagnild e Young—, entre adolescentes Portugueses e Brasileiros. Utilizou-se uma amostra de 969 adolescentes, com idades que variavam entre os 13 e os 18 anos. Com recurso à análise fatorial confirmatória, testaram-se estruturas de cinco e de dois fatores para a escala completa composta por 25 itens, bem como uma estrutura unidimensional para uma versão reduzida da escala composta por 14 itens. Depois de determinada a estrutura fatorial mais ajustada, realizou-se uma análise multi-grupo para testar a invariância da medida entre as amostras de adolescentes Portugueses e Brasileiros. As estruturas de cinco e de dois fatores obtiveram um ajustamento pobre. A estrutura unidimensional revelou-se ajustada em ambas as amostras. Além disso, obteve-se evidência de invariância parcial para a estrutura unidimensional relativa à versão reduzida. Estes resultados sugerem que a versão reduzida da RS pode ser utilizada para estudos transculturais na área da resiliência em ambos os países e que as estruturas de cinco e de dois fatores são inadequadas para propósitos de comparação.

**Palavras-chave:** Resiliência; Invariância de medida; Estudos transculturais; Adolescentes.

Psychological research has dedicated efforts to understand how people adapt themselves to and overcome adversity, whether this adversity is related to psychopathology or health issues, poverty or traumatic events, such as natural disasters, terrorism, or others. Much of the research in the field of social and emotional development has dedicated efforts to the prevention and promotion of transversal skills.

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Especially motivated by the works of Hawkins, Catalano and Miller (1992), many studies conducted in the nineties focused on the factors that increased or decreased the probability of developing certain skills and of developing healthy or risk behaviors. According to this perspective, on one side, a high number of risk factors increases the probability of involvement in risk behaviors and, on the other side, a high number of protective factors is related with less vulnerability and healthier behaviors and lifestyles. The identification of these factors, whether individual, familiar, from the school or community, could therefore explain people's behaviors and to help practitioners in developing specific intervention programs.

Despite the large number of studies that endorse this perspective, a significant body of empirical evidence indicates that the exposition to risk factors, even in a substantial number, does not translate necessarily in risk behaviors (Constantine, Benard, & Diaz, 1999; Dillon *et al.*, 2007; Zolkoski & Bullock, 2012). Some longitudinal studies also highlight that even in adverse contexts a large number of individuals maintains a positive individual development, an idea that started to be widely disseminated in the seventies of the 20<sup>th</sup> century. A classic example was presented by Werner who studied children from Kauai, in Hawaii, and noticed that approximately one-third of children of alcoholic or mentally ill parents did not exhibit maladaptive behaviors (Werner, Bierman, & French, 1971; Werner & Smith, 1977). Garmezy and colleagues reported cases of children of schizophrenic mothers or with other serious mental health problems who kept to an adjusted developmental path despite all the adversity during childhood and adolescence (Garmezy, 1971, 1974; Garmezy & Streitman, 1974). Also Rutter in his studies in the Isle of Wight noticed that half of children growing up with mentally ill parents experienced positive outcomes and did not become mentally ill or present problematic behaviors (Rutter, 1979). Following these seminal works, the focus of the research has changed and efforts have been directed from the simple identification of the risk and protective factors, related to illness or psychopathology, to a deeper acknowledgment of resilient profiles and to the promotion of positive psychological adjustment and positive development (e.g.: Luthar, 1993; Masten, 1999; Rutter, 1993, 2012; Windle, Bennett, & Noyes, 2011; Zimmerman, 2013). Despite this enthusiasm, much discussion exists regarding definitions of resilience and its theoretical background. As a consequence, the evaluation of this construct continues to be a controversial issue in the international context and specifically in western culture (Zolkoski & Bullock, 2012).

In this study, we adopted the perspective of Wagnild and Young (1993) that defines resilience as the ability to adapt or “bounce back” from adversity and significant challenges. Following this perspective, the main aim of this study was to explore the factor structure and to test the measurement invariance of the Resilience Scale (Wagnild & Young, 1993) across Portuguese and Brazilian samples of adolescents. Research on these issues can contribute to the body of knowledge regarding this perspective and its evaluation, reinforce a broader consensus on the characteristics of this measure in both contexts and support the advance of basic and applied research in the resilience field. Resilience seems to be more than a children's or adolescents' trait, as it occurs always in a certain social and cultural context (Ungar, 2005, 2010). However, several researchers notice the lack of empirical data, whether qualitative or quantitative, from cross-cultural studies (Hunter, 2001; Ungar, 2008), which has evident consequences for further research and clinical practices.

### **Resilience in adolescents: From the theory to the evaluation**

The word resilience has a Latin origin (*resiliens*) and was originally used to describe the elastic quality of a determined substance (Joseph, 1994) in the field of physics. Therefore, resilience was used to describe the capacity of materials or buildings (e.g., a bridge) to absorb energy, resist to the weather, maintain its integrity and recover from eventual damages. The term resilience was later imported in the field of social sciences. In the seventies, the works of developmental psychologists, such as Werner, Garmezy or Rutter, were determinant to the establishment of a solid line of inquiry about resilience within the social sciences.

In an attempt to integrate the main milestones, Wright, Masten and Narayan (2013) identified four waves on the study of positive adaptation in the context of adversity. The first wave was centered in the definition of concepts and methodologies to understand individual factors related to resilience that make children invulnerable to adversity. Specially focused in the individual that overcome adversity contexts, the so called “resilient children” (e.g.: Luthar, 1993; Rutter, 1987; Werner & Smith, 1982), the studies that contributed to this wave considered resilience as a personality trait that would be more or less correlated with risk and protective factors (Masten & Garmezy, 1985; Wagnild, 2003). These definitions led to the development of several labels that were applied to the children and young people that resisted or balanced the risks to which they were exposed to (Rutter, 2012), as the “hardy,” “invulnerable,” or “invincible”. Doing so, resilience was associated to individual traits such as personality, self-efficacy or

creativity (e.g., Affi & Macmillan, 2011; Friborg, Barlaug, Martinussen, Rosenvinge, & Hjemdal, 2005; Waaktaar, Christie, Borge, & Turgersen, 2004). The second wave, which was dominant especially during the nineties of the 20<sup>th</sup> century contributed to an understanding of resilience as a more dynamic process resulting from the influence of other individuals and the systems in which each person is embedded (Benard, 1999; Luthar, 1999; Masten, 1999). Resilience was then positively related to proximal factors, such as family support, positive appraisals and the type of interactions with parents (Affi & Macmillan, 2011; Carbonell, Reinherz, Giaconia, Stashwick, Paradis, & Beardslee, 2002; Fergus & Zimmerman, 2005; Vanderbilt-Adriance & Shaw, 2008), but also with teachers' support (Brooks, 2006; Smokowski, Reynolds, & Bezrucko, 1999), or community relationships and resources (Davies, Thind, Chandler, & Tucker, 2011; Sameroff & Rosenblum, 2006). The third wave was composed of a body of research that attempted to translate the research findings into practice with the ultimate goal of fostering resilience. Results of successful intervention programs such as the Head Start, the Fast Track or the Project Competence Longitudinal Study (see a review in Prince-Embury & Saklofske, 2014), highlight the importance of developing an ecological systems approach to promote the positive development of the individual. Finally, the fourth wave refers to a deepening of resilience research at the level of multiple-systems, epigenetic processes and neurobiological processes. Within this wave, new interdisciplinary research (e.g., genetics, neurosciences or neurobiology) and advanced techniques of data collection (e.g., biomarkers) bring new contributions to the definition of this construct and new implications to practice (e.g.: Daskalakis, Bagot, Parker, Vinkers, & de Kloet, 2013; Friedman, Walsh, Juarez, Ku, Chaudhury, & Wang, 2014; Russo, Murrugh, Han, Charney, & Nestler, 2012; Wu et al., 2013).

Resilience can be broadly defined as a dynamic process that allows people in adverse contexts to achieve positive outcomes (Luthar, 2006; Masten, 2001, 2014). These two dimensions – the existence of adversity contexts and positive adjustment – seem to be consensual across different definitions of resilience (Luthar & Cicchetti, 2000). Consequently, in terms of evaluation, several instruments and techniques have been developed (Ospina Muñoz, 2007; Windle *et al.*, 2011). Despite the inexistence of a current “gold standard” measure of resilience, the majority of the studies have used self-rated tests, and one of the most accepted and well-established measure is the Resilience Scale (RS, Wagnild & Young, 1993). The adaptation of this scale for about 40 languages makes it one of the most disseminated and most adapted to different cultures and age groups (Ahern, Kiehl, Sole, & Byers, 2006; Ospina Muñoz, 2007; Windle *et al.*, 2011). Generally showing good psychometric properties, it is considered one of the most appropriate measures to evaluate resilience in adolescence (Ahern et al., 2006).

The RS was developed by Wagnild and Young in 1993, based on a previous qualitative study (Wagnild & Young, 1990) with 24 American women, identified as resilient after experiencing extreme stress following major life events. Based on 50 statements from the initial qualitative study, the scale was reduced to 25 items, theoretically reflecting five dimensions (Wagnild, 2009; Wagnild & Young, 1993): (1) self-reliance – the belief of the person in his/her abilities or strengths and limitations to overcome challenges; (2) meaningfulness – directly correlated with the real perception that his/her life has a meaning, a purpose or there is a good motive to live; (3) equanimity – as the ability to face life events accepting and dealing in a balanced perspective, in the best way possible; (4) perseverance – capacity to maintain motivation to act, deal with challenges with strength despite eventual setbacks; and (5) existential aloneness – the ability to feel unique and, therefore, valuing that experiences can and should be faced by each one (Wagnild & Young, 1993). The resilience scale used a likert-type response scale, ranging from 1 (strongly disagree) to 7 (strongly agree) and therefore total scores ranged from 25 to 175, with higher scores indicating higher levels of resilience. However, the empirical data collected from 810 adults did not support the hypothesized five-factor structure (Wagnild & Young, 1993). Instead, results of exploratory factor analysis suggested a factor solution with two dimensions: “personal competence” and “acceptance of self and life”. Evidence of concurrent validity was also provided, by obtaining correlations with better physical health, life satisfaction, higher morale and lower levels of depression (Wagnild & Young, 1993).

**Table 1.** Items of the Resilience Scale: full version (Wagnild & Young, 1993) and short form (Wagnild, 2010).

Resilience Scale (25 items)		Resilience Scale – Short Form (RS-14)
Original model with five characteristics	Final version with two factors	
Factor 1 – Existential aloneness Items: 3, 5, 8, 17 and 25	Factor 1 - Personal competence Items: 1, 2, 3, 4, 5, 6, 9, 10, 13, 14, 15, 17, 18, 19, 20, 23 and 24	Items: 2, 6, 7, 8, 9, 10, 13, 14, 15, 16, 17, 18, 21 and 23
Factor 2 - Meaningfulness Items: 4, 6, 11, 15 and 21		
Factor 3 - Equanimity Items: 7, 12, 16, 19 and 22		
Factor 4 - Perseverance Items: 1, 10, 14, 20 and 24	Factor 2 - acceptance of self and life Items: 7, 8, 11, 12, 16, 21, 22 and 25	
Factor 5 - Self-reliance Items: 2, 9, 13, 18 and 23		

Other studies obtained positive correlations between resilience as measured by the RS, and self-esteem, health and wellbeing (Losoi et al., 2013; Nishi, Uehara, Kondo, & Matsuoka, 2010; Pesce, Assis, Avanci, Santos, Malaquias, & Carvalhaes, 2005), as well as negative correlations with anxiety and depression (Oliveira, Matos, Pinheiro, & Oliveira, 2015; Nishi *et al.*, 2010; Oliveira & Machado, 2011; Pinheiro & Matos, 2013; Skrove, Romundstad, & Indredarvik, 2013). Studies conducted with adolescents, have found significant correlations between the scores obtained in the RS and better family health practices, particularly mothers' health practices (Black & Ford-Gilboe, 2004), lower hopelessness and higher connectedness (Rew, Taylor-Seehafer, Thomas, & Yockey, 2001).

The growing attention devoted by the research to the topic of resilience, led to a dissemination of the RS and numerous studies were conducted in order to adapt and validate this instrument to other languages and countries such as Russia (Aroian, Morris, Neary, Spitzer, & Tran, 1997), Sweden (Lundman, Strandberg, Eisemann, Gustafson, & Brulin, 2007), Finland (Losoi *et al.*, 2013), Japan (Nishi *et al.*, 2010), Spain (Heilemann, Lee, & Kury, 2003), Portugal (Vara & Sani, 2006) or Brazil (Pesce et al., 2005). However, the results of the adaptation studies were not always positive or congruent. For example, in the study of the Swedish adaptation, the five-factor structure of the original scale was replicated using two different samples (Lundman et al., 2007), whereas in the adaptation for the Spanish population, a two-factor structure composed of 23 items was the one that fitted better (Heilemann et al., 2003) and in the study of the Finnish version good reliability indicators were obtained but no clear evidence of validity was found (Losoi et al., 2013).

In Brazil, the first study with this measure was performed about one decade ago, and the first psychometric data supported a three-factor structure (Pesce et al., 2005). In Portugal, the first study of the scale was performed about at the same time, with 334 adolescents aged between 12 and 18 years old (Vara & Sani, 2006). For this Portuguese version, results from exploratory factor analysis indicated also the existence of a three-factor structure, but the items in each factor were not the same as in the study of the Brazilian version (Vara & Sani, 2006). A study conducted later, used exploratory factor analysis to test the dimensionality of the Portuguese version, using a sample of adolescents aged between 10 and 16 years (Felgueiras, Festas, & Vieira, 2010). The results of this study suggested a five-factor-structure, despite not totally correspondent with the original version. Similar results were found in a study developed by Oliveira and Machado (2011) with university students. However, Pinheiro and Matos (2013) tested the dimensionality of this 25-item version with a sample of 180 adolescents using exploratory factor analysis and presented a 23-item version with a final factorial solution supporting a single factor.

Recent studies have worked on a refinement of the RS, by excluding items with low inter-item correlations, resulting in a shorter version composed of 14 items (Wagnild, 2010). This 14-item short version (RS-14) demonstrated sound psychometric properties: evidence of a one-factor structure was found and high reliability (Cronbach's alpha = .93) and a strong correlation with the full version ( $r = .97, p = .001$ ) were obtained. This short version of the RS has been adapted to Japan (Nishi et al., 2010) and Finland (Losoi *et al.*, 2013). Moreover, it was adapted to assess different ethnic groups in the US (Aiena, Baczwaski, Schulenberg, & Buchanan, 2015; Pritzker & Minter, 2014).

This short version has also been tested using Brazilian and Portuguese samples, but the results regarding its structure are not totally consistent. The Brazilian version was studied using 1139 participants with ages ranging from 14 to 59 years old (Damásio, Borsa, & Silva, 2011) and the results of this study led to a reduction of the RS to 13 items. A study conducted with Portuguese adolescents, with ages ranging between 12 and 17 years old, suggested a reduction of the scale to 12 items (A. Oliveira et al., 2015).

In conclusion, some discrepancies between different studies regarding the factor structure of the

RS have been obtained. These discrepancies can eventually result from sampling issues: some studies used participants from very different developmental phases (e.g., Damásio *et al.*, 2011), and others used participants with less than 13 years old, an option that is not appropriate given that the authors of the RS advise against the use of the scale with participants from earlier ages (Wagnild, 2010). Considering that cross-cultural studies of resilience can provide important insights about the construct and its theoretical definition and to support the translation of the research findings to the practice in the domain of positive adjustment and health, it is important to guarantee the equivalence of the measurements across the populations that are to be compared. Therefore, the present study aims to investigate the best fitting solution for the RS and its invariance across Brazilian and Portuguese samples. Two competing factor models, namely the original five and two factor solutions, were tested for the RS full version (composed of 25 items). Moreover, a one-dimension solution for the 14-item short version was also investigated. Obtaining evidence for the equivalence of the measured construct between samples of both countries can allow future cross-cultural studies on the topic of resilience.

## METHOD

### Participants

The sample was composed of 969 adolescents, from which 391 (40.4%) were Portuguese and 578 (59.6%) were Brazilian. About half of the adolescents were girls ( $n = 522$ , 53.9%). The age of the participants ranged between 13 and 18 years old ( $M = 15.40$ ,  $SD = 1.357$ ). As we can see in Table 2, the number of girls was higher in the Portuguese sample, given that a significant difference was found between groups,  $\chi^2 = 11.407$ ,  $p = .001$ . Mean age of the participants was 15.40 for the Portuguese sample ( $SD = 1.388$ ) and 15.41 ( $SD = 1.336$ ) for the Brazilian sample, and therefore both samples did not differ in terms of age,  $\chi^2 = 9.316$ ,  $p = .097$ .

**Table 2.** Sample characteristics by country.

	Brazil		Portugal	
	n	%	n	%
<b>Gender</b>				
<b>Male</b>	292	50.5	154	39.5
<b>Female</b>	286	49.5	236	60.5
<b>Age (years)</b>				
<b>13</b>	40	6.9	40	10.2
<b>14</b>	109	18.9	68	17.4
<b>15</b>	185	32.0	100	25.6
<b>16</b>	100	17.3	82	21.0
<b>17</b>	108	18.7	81	20.7
<b>18</b>	36	6.2	20	5.1

### Measures

The Resilience Scale (Wagnild & Young, 1993) is composed of 25 items that each adolescent should classify using a likert response scale ranging between 1 (*strongly disagree*) and 7 (*strongly agree*). The Portuguese version used by Vara and Sani (2006), with Cronbach alpha of .86, and the Brazilian version used by Pesce and colleagues (2005), with Cronbach alpha of .80, were administered in this study. Both versions were available as official translations of the Resilience Scale to European and Brazilian Portuguese at the website of the scale. To test the psychometric properties of the RS-14, only the 14 items indicated by Wagnild (2010) of the original version were used in the analysis (see Table 1).

### Procedure

Samples were recruited in schools located in suburban areas of São Paulo, in Brazil, and Porto, in Portugal, using a non-probabilistic method. These cities were selected by their geographical proximity with the research centers involved, despite the cultural and demographical differences between the contexts. After gathering the informed consent of school boards and parents, the 25-item Resilience Scale version was administered to the participants in their classrooms, by a member of the research team specially trained to the task. Data was collected in the second period of the school year by a graduate student, trained by their supervisors for this specific purpose. Adolescents were also informed about the anonymous, confidential and voluntary nature of their participation.

### Statistical analyses

Confirmatory factor analysis (CFA) was used to test three models for the RS. For the full version, and following the approach used in previous studies, a five-factor and a two-factor model were tested. For the reduced version, composed of 14 items, a one-factor model was fitted. In a first step, each model was run separately for each sample and their fit was assessed.

To assess the global fit of the tested models, the following criteria were used: the chi-square ( $\chi^2$ ) values, the ratio between the chi-square and the degrees of freedom ( $\chi^2/df$ ), the comparative fit index (CFI), the root mean square error of approximation (RMSEA) and the standardized root mean square residual (SRMR). Cut-off values for fit were considered adequate when  $\chi^2/df$  was lower than 3.00 and CFI values were higher than .90. Values lower than .08 for the RMSEA and lower than .10 for the SRMR were considered to indicate an acceptable fit and values lower than .05 indicators of a good fit (Kleine, 2010; Schermelleh-Engel, Moosbrugger, & Müller, 2003). The Bayesian Information Criteria (BIC) and the Akaike Information Criterion (AIC) were used to compare the models. The model with the lowest value was considered to be the one that best represents the data. Additionally, composite reliability was computed. Values higher than .70 were considered adequate (Hair, Black, Babin, & Anderson, 2009).

After determining which model was the one that best fitted the data, in a second step, multi-group CFA was performed to test the invariance of the instrument's flagged structure across the Portuguese and the Brazilian samples. The procedure outlined by van de Schoot, Lugtig, and Hox (2012) was followed. First, a configural model, where all parameters were freely estimated, was tested. Next, metric invariance was assessed, where the factor loadings were constrained but the intercepts were freely estimated. In a third step, scalar invariance, sometimes also called strong invariance, was tested, where both loadings and intercepts were constrained to be equal across both samples. Evidence for the invariance of the model across both samples is achieved when the constraint of parameters performed in testing the subsequent models does not worsen the fit indices. When the subsequent model presented a worse fit than the previous one, partial measurement invariance was established. In order to compare model fit, and given that these models were nested, we considered not only BIC and AIC values, but also computed Satorra-Bentler scaled chi-square difference tests. However, and given that the statistical power of the study is high due to the large sample size, two additional criteria were considered, as recommended by Cheung and Rensvold (2002) and Chen (2007): (a) change in CFI ( $\Delta CFI \leq .01$ ) and (b) change in RMSEA ( $\Delta RMSEA \leq .015$ ). Differences in the latent means between the Brazilian and the Portuguese samples were calculated after establishing the partial invariance of the factor structure.

All analyses were conducted using Mplus, version 7 (Muthén & Muthén, 2012), and using the maximum likelihood robust (MLR) estimator. Only 5.3% of the sample had missing values, but the pattern of missing's was completely at random, as indicated by Little's (1988) MCAR test,  $\chi^2(775) = 645.504$ ,  $p = .99$ . Therefore, the full information method available in Mplus was used to deal with the missing data.

### RESULTS

Table 3 presents the model fit for each one of the three tested models. Results for the five-factor model and for the two-factor model were very similar: for both models acceptable values for RMSEA and SRMR were obtained for both samples. CFI values were inadequate in both samples for both models. When observing the AIC and BIC indices to compare the fit of the five- and two-factor models, in the Brazilian sample the lowest value is obtained for the five-factor model, indicating that this model is the one that best fits the data if considering the full version of the instrument. However, for the Portuguese sample, if considering especially the BIC, which is the comparison index that provides a better trade-off between fit and model complexity (van de Schoot *et al.*, 2012), the two-factor model has the lowest value and therefore seems to have a slight better fit in the full version of the instrument.

**Table 3.** Model fit in the Portuguese (N=391) and Brazilian samples (N=578).

Sample and model	$\chi^2$	df	$\chi^2/df$	CFI	RMSEA	90% CI RMSEA	SRMR	BIC	AIC
<b>Portugal</b>									
5-factor	530.928***	265	2.004	.845	.051	[.044-.057]	.057	34178.249	33840.909
2-factor	547.415***	274	1.998	.841	.051	[.044-.057]	.057	34157.101	33855.479
1-factor (SV)	134.180***	77	1.743	.930	.044	[.031-.056]	.047	18826.975	18660.289
<b>Brazil</b>									
5-factor	805.850***	265	3.041	.848	.059	[.055-.064]	.055	55807.046	55436.482
2-factor	867.348***	274	3.166	.834	.061	[.057-.066]	.057	55827.174	55495.846
1-factor (SV)	233.269***	77	3.029	.906	.059	[.051-.068]	.046	30923.119	30740.017

Note: CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; BIC = Bayesian Information Criterion; AIC = Akaike Information Criterion; SV=short version.

\*\*\* $p < .001$

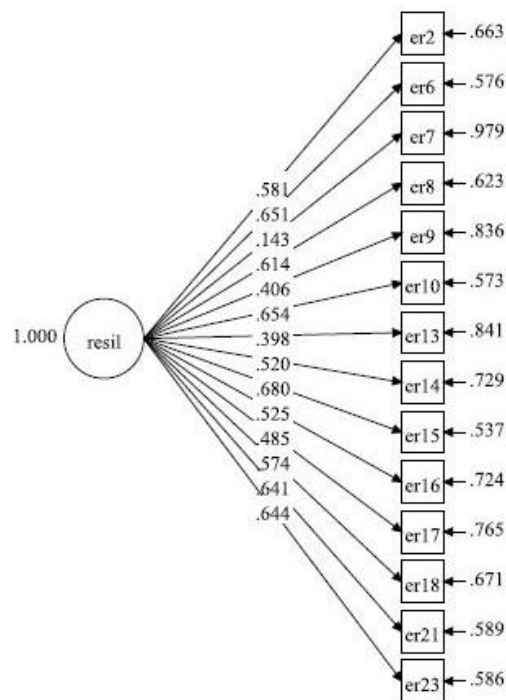
The one-factor model for the 14-item short version of the instrument presented adequate values in all fit indices in both samples.

Table 4 presents the descriptive statistics and the composite reliability for each dimension, considering all the tested models. Composite reliability was low in both samples for all five subscales, if considering the ones resulting from a five-factor solution. If considering the two-factor solution, the items of the “Personal Competence” subscale reached acceptable values, but the items of the “Acceptance of Self and Life” subscale had very low reliability in both samples. Composite reliability values for the one-dimensional short version were very high in both samples.

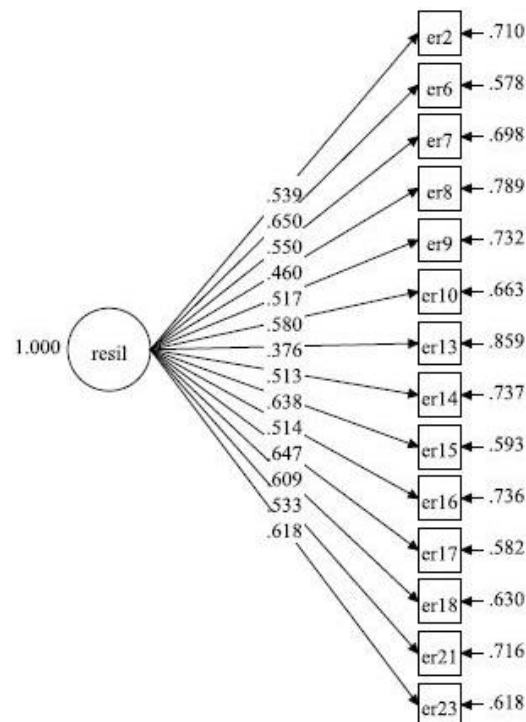
**Table 4.** Descriptive statistics and reliability coefficients.

Subscale	Number of items	Portugal			Brazil		
		<i>M</i>	<i>SD</i>	<i>CR</i>	<i>M</i>	<i>SD</i>	<i>CR</i>
<b>5-factor</b>							
Existential aloneness	5	25.94	4.87	.54	24.48	6.37	.62
Meaningfulness	5	25.42	4.70	.66	26.41	5.98	.72
Equanimity	5	24.81	4.81	.60	22.53	5.63	.50
Perseverance	5	25.75	4.94	.68	26.49	6.32	.75
Self-Reliance	5	24.84	4.98	.69	25.01	6.14	.69
<b>2-factor</b>							
Personal Competence	17	87.02	14.75	.87	87.30	18.44	.89
Acceptance of Self and Life	8	39.73	6.77	.61	37.56	8.53	.61
<b>Short version</b>	<b>14</b>	<b>73.97</b>	<b>12.61</b>	<b>.86</b>	<b>72.70</b>	<b>14.76</b>	<b>.85</b>

Therefore, considering the concerns raised in previous research about the factor structure of the full version of the instrument, the results of the CFA obtained in our study, indicating that the best fitting solution for the full version is different for each country, and the poor internal reliability obtained for the full version of the instrument regardless of the number of factors considered (two or five), led us to further test the invariance only of the short version. Moreover, the short version was the one that presented a good fit in both samples. Figures 1a and 1b show the factor loadings for the items in the short version. All factor loadings were higher than .30, except for item 7 in the Brazilian sample.



**Figure 1a.** CFA of the RS short version (1-factor) in the Brazilian Sample.



**Figure 1b.** CFA of the RS short version (1-factor) in the Portuguese Sample,

Table 5 presents the results of the invariance testing. The configural invariance model (model 0) had a good fit. The results for the metric invariance model (model 1) indicated a poorer fit: not only the Satorra-Bentler scaled chi-square test of differences was significant, but also the difference in the CFI between the configural and the metric invariance models was higher than .01. After inspecting the factor loadings and the modification indices, three items were flagged as non-invariant (see Table 5). Therefore, a partial metric invariance model (model 2) was tested, where the loadings of these three items were freely estimated across groups. This model had a good fit and did not fit worse than the configural model. Therefore, partial metric invariance was established. In a next model (model 3), the invariant loadings as well as all the intercepts were constrained equal across samples. This model showed a worse fit than the previous one in all the criteria considered for model comparison (see Table 5). Four intercepts were then flagged as non-invariant and a new model was run (model 4) where these intercepts were also allowed to differ. This model had a better fit than the previous one. Moreover, model 4 did not fit worse than model 3 as indicated by the differences in CFI and RMSEA. Therefore, we established partial scalar measurement invariance across the Portuguese and the Brazilian samples for the short version of the instrument.

Given that no full scalar invariance was established, cross-cultural comparisons must be made with caution. Therefore, we compared the differences in the latent means considering only the results for the non-invariant items. A significant mean difference favoring the Brazilian sample was found in the latent trait measured by the short version ( $\Delta M = .16$ ;  $p = .026$ ).

**Table 5.** Measurement invariance of the short version across the Portuguese and Brazilian samples

Model	$\chi^2$	<i>df</i>	$\chi^2/df$	CFI	RMSEA	90% CI RMSEA	SRMR	BIC	AIC	Comparison	$\Delta CFI$	$\Delta RMSEA$	$\Delta SB - \chi^2$	<i>df</i>
<b>Model 0: full configural invariance</b>	353.507***	154	2.296	.916	.052	[.045-.059]	.047	49809.912	49400.306	-	-	-	-	-
<b>Model 1: full metric invariance</b>	412.139***	168	2.453	.897	.055	[.048-.061]	.083	49782.483	49441.145	Model 0 vs 1	.019	.003	69.525***	14
<b>Model 2: partial metric invariance<sup>a</sup></b>	373.727***	165	2.265	.912	.051	[.044-.058]	.071	49753.001	49397.034	Model 0 vs 2	.004	.001	18.324	11
<b>Model 3: partial scalar invariance<sup>b</sup></b>	688.899***	179	3.849	.785	.077	[.071-.083]	.100	50077.117	49789.418	Model 2 vs 3	.127	.026	428.129***	14
<b>Model 4: partial scalar invariance<sup>c</sup></b>	406.005***	175	2.320	.903	.052	[.046-.059]	.066	49720.346	49413.142	Model 2 vs 4	.009	.001	35.873***	10

Note: CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; BIC = Bayesian Information Criterion; AIC = Akaike Information Criterion;  $\Delta SB - \chi^2$  = Satorra-Bentler scaled chi-square difference test.

<sup>a</sup> Estimating freely the loadings of items 7, 8 and 17 across groups; all other loadings constrained;

<sup>b</sup> All intercepts and loadings constrained, excepting loadings of items 7, 8 and 17 that were freely estimated;

<sup>c</sup> Estimating freely across groups the loadings of items 7, 8 and 17, as well as the intercepts of items 7, 8, 14 and 21; all other loadings and intercepts constrained;

\*\*\* $p < .001$



## DISCUSSION AND CONCLUSIONS

Despite the enthusiasm showed in the last decades and the consequent growth of research in the field of resilience, some challenges remain, especially relating to the universality of the findings across cultures. Also different theoretical models and instruments have been developed and tested in several countries and contexts. One of the measures that has received major attention is the Resilience Scale (Wagnild & Young, 1993) and this interest has been translated into several psychometric studies and adaptations to different populations. Nonetheless, the findings of the research in the different countries have not been consistent regarding the RS factor structure: although the authors of the original version used a theoretical framework with five dimensions, empirical results have supported either a two-factor (Wagnild & Young, 1993) or a five-factor structure (Felgueiras *et al.*, 2010; Lundman *et al.*, 2007; Oliveira & Machado, 2011); others have not found a clear factor structure (Losoi *et al.*, 2013; Nishi *et al.*, 2010). Therefore, as previously stated by some authors, comparing the evidence of cross-cultural validity of the theoretical models is difficult (Hjemdal, Roazzi, Dias & Friborg, 2015).

In the Portuguese and Brazilian contexts, the results of some studies supported the original five factor structure (Felgueiras *et al.*, 2010; Oliveira & Machado, 2011), despite the items that loaded on each factor were not totally correspondent to the ones indicated in the study of the original version (Wagnild & Young, 1993), and others supported a three factor structure (Pesce *et al.*, 2005; Vara & Sani, 2006). To overcome these difficulties, a short-version of the measure with just 14 items (RS-14) was developed and a one-factor structure has been consistently found in the different adaptations of this version for different countries (e.g., Aiena *et al.*, 2015; Oliveira, *et al.*, 2015; Losoi *et al.*, 2013; Nishi *et al.*, 2010; Pritzker & Minter, 2014). Despite this consensus, some studies propose alternative short versions with 13 (Damásio *et al.*, 2011) or 12 items (Oliveira *et al.*, 2015). Note that most of this body of research has used exploratory factor analysis. The main aim of our study was to investigate the factor structure of the RS, either in its full and short version, using confirmatory factor analysis (CFA) and to test measurement invariance across Brazilian and Portuguese samples, so that fair cross-cultural comparisons can be performed. CFA allows the direct testing of the fit of the data to a theoretical model, the testing of the fit of concurrent models and the testing of measurement invariance (Kleine, 2010) and consequently was preferred in our study.

When considering the factor structure testing of the full version of the RS, the five-factor structure seems to fit better in the Brazilian sample, whereas the two-factor structure seems to fit slightly better in the Portuguese sample. This finding indicates that, even if resilience is a construct that can be fragmented into smaller competences (e.g., meaningfulness, perseverance, acceptance of life and self, among others), these competences might not be easily compared across distinct countries and cultures. Besides this lack of concordance in the best fitting structure, low reliability values were found for the full version of the RS in both countries, regardless of the number of factors considered. The reliability values were more adequate in the RS-14, and the hypothesized one factor structure presented a good fit, with all items having factor loadings higher than .30 in both samples.

Moreover, our results provided evidence of partial measurement invariance across the Portuguese and the Brazilian samples for the short version of the instrument, supporting the assumption that most of the items that compose the instrument measure the same psychological construct in both groups. This finding allows future direct comparisons of the scores obtained by adolescents from Brazil and Portugal, but these comparisons must be performed only using the invariant items. This finding can also have theoretical implications: a common one-dimensional structure for both samples seems to mean that the resilience construct, defined as a whole, is comparable in both cultures. However, considering that no full scalar invariance was established, cross-cultural comparisons should consider social construction, the countries, cultures and children's and adolescents' representation of resilience construct (Ungar, 2005, 2010).

The findings of the present study are particularly useful for research in the field of resilience in Portugal and Brazil. Firstly, the results highlight that the short version of the RS-14 scale has good psychometric properties, but also point out the partial scalar measurement invariance of the 14-item short version. This contributes to strengthen the validity of the measure and allows us to ensure the comparable nature of the results evaluated with this measure in both countries. Moreover, the use of the short version for the assessment of resilience has practical advantages, as it is less time consuming. Overall, our results also highlight some limitations of the full version of the RS, even when the samples include only adolescents with ages higher than 13 years old.

A possible limitation of the study is the lack of information about adolescents' life events. This is a current issue in adaptation studies of resilience measures. However, further studies should involve more adolescents eligible according the adversity and the outcomes, whether to explore the profile of resilient adolescent or to compare adolescents' characteristics with extreme profiles. Given the existing discussion

about gender or age effects on resilience (e.g.: Losoi et al., 2013; Lundman et al., 2007; Sun & Stewart, 2007), further studies should also explore the effect of demographic variables in resilience. Also the cultural and demographic differences between both cities involved should be considered as a limitation of the present study. It would be interesting to include other measures about adolescents' perceptions of their context of living, whether at social, educational but also cultural level, considering values and norms in their communities to a broader and culturally based definition of resilience (Ungar, 2005, 2008). Finally, data from the RS-14 version was collected from the original 25-items version. Further studies with different groups or using both measures can be used.

To conclude, we recall the need to use reliable and valid measures in research and in the evaluation of projects. Only using sound literature and empirically-based measures we can ensure the effective results of intervention. Considering the dialectic relationship between theory and practice, this study gives us some insights to improve literature-based interventions that could be evaluated with RS-14. We expect that this study contributes to stimulate cross-cultural resilience research and that new boundaries can emerge between both countries, translating the results of research studies into practice.

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## "The place I long to be": Resilience processes in migrants

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**Abstract:** Migration has been addressed in studies with a marked focus on its obstacles and difficulties, particularly in the contact with the host country. Recognizing that migrating is a complex process that involves several hardships, it is imperative to understand how migrants overcome adversity and to become aware of the resources mobilised to be cultural adjusted. Based on the theoretical perspective of resilience, this study aims to understand the contexts of adversity, resources and adjustment of Cape Verde migrants in Portugal, who have migrated to continue their studies in higher education. The collected 10 biographical narratives revealed the meanings of their life journeys, both in their country of origin and in the host country. The analysis of the narratives allowed the understanding of the diversity of resilience processes among the participants. The adversities were related to two main dimensions: cultural differences and interpersonal relationships with the Portuguese. In terms of resources, participants stressed the importance of the Cape Verdean diaspora upon arrival to the new country. Along the length of stay for some migrants, this remained the main resource; however, others were developing belongings and significant attachments in a broader context. In terms of cultural adjustment, many configurations have emerged, standing for the fluid nature of the resilience process, which can occur in different ways.

**Keywords:** Resilience; Migration; Transnationalism; Autobiographical narratives.

**"The place I long to be": Processos de resiliência em migrantes:** As migrações têm sido abordadas através de estudos com um enfoque particular nos obstáculos e dificuldades, nomeadamente no contacto com o país de acolhimento. Reconhecendo que migrar é um processo complexo que envolve várias dificuldades importa compreender o modo como os migrantes superam a adversidade, bem como se torna importante conhecer os recursos mobilizados para serem culturalmente ajustados. Partindo da perspectiva teórica da resiliência, este estudo procurou compreender os contextos de adversidade, recursos e ajustamento dos migrantes cabo-verdianos em Portugal, que migraram para continuar os estudos no ensino superior. As 10 narrativas biográficas recolhidas revelaram significados das suas trajetórias de vida, tanto no país de origem como no país de acolhimento. A análise das narrativas permitiu compreender a diversidade dos processos de resiliência entre os participantes. As adversidades relacionaram-se com duas principais dimensões; as diferenças culturais e as relações interpessoais com os portugueses. Ao nível dos recursos, foi salientada a importância da diáspora cabo-verdiana na chegada ao novo país. Ao longo do tempo de permanência, para alguns migrantes, este permaneceu como o principal recurso, no entanto, outros foram desenvolvendo pertenças e vinculações significativas num contexto mais alargado. Em termos de ajustamento cultural, surgiram diversas configurações, sugerindo a natureza fluida do processo de resiliência, que pode ocorrer numa multiplicidade de formas.

**Palavras-chave:** Resiliência; Migração; Transnacionalismo; Diáspora; Narrativas.

Studies on migrants have addressed the adversities and negative consequences on migrants' arrival and permanence over time in a new country. In general, a range of assumed issues are related to the barriers and obstacles regarding contact with host societies as well as a list of the various migrants' losses (e.g. family ties, language, cultural frame of reference) after leaving their country of origin (e.g. Berry, 1997; Boss, 2006; Utsey, Giesbrecht, Hook, & Stanard, 2008).

Although these processes are present and possibly simultaneous, few studies have devoted attention to the dynamic processes involved in the interaction between adversities and resources (which is the basic assumption of resilience for some authors, e.g. Davydov, Stewart, Ritchie, & Chaudieu, 2010; Luthar, Cicchetti, & Becker, 2000; Luthar, Sawyer, & Brown, 2006; Ungar, 2008) when in the host country. The theoretical perspective of resilience has a proposal complementary to the perspective rooted in adversity. The concept's basic notion recognises the existence of adverse contexts but focuses on

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mobilised resources to overcome adversity in positive adjustment processes (Luthar, Cicchetti, & Becker, 2000).

In migration literature, a lot of studies focus on the period between arrival and permanence over time in the host country from the perspective of social and cultural differences and contrasts (e.g. Noh & Kaspar, 2003; Padilla, Cervantes, Maldonado, & Garcia, 1998; Yakushko, 2010), excluding part of the journey made in the country of origin (Yijälä & Jasinskaja-Lahti, 2010). In this sense, the concept of transnationalism goes beyond the division between countries and proposes an understanding through an approach that goes beyond national borders, “Transmigrants take actions, make decisions, and develop subjectivities and identities embedded in networks of relationships that connect them simultaneously to two or more nation states” (Basch, Schiller, & Szanton-Blanc, 1994, p.7).

Seeking to know more about resilience and migration from the transnationalism perspective, this study was conducted to understand the migration process, observed through the continuity between country of origin and host country. Based on this, an understanding of the adversity, resources and adjustment in life paths was sought. Therefore, we hoped to study the meanings attributed by Cape Verdean migrants to their life in the country of origin, including the decision to migrate. Cape Verde is a country profoundly marked by migration since its independence from Portugal, and its diaspora had a tremendous importance in consolidating its transition to an autonomous state. Barata and Carling (2008) state that few countries in the world have been as marked by migration as Cape Verde. Simultaneously, Cape Verdean communities around the world are consolidated or ‘mature’—in the words of Carling (2003)—and they are typically engaged in transnational practices in host countries. In Portugal, Cape Verdeans are the oldest consolidated migrant community with an enormous diversity of transnational practices.

In this study, we also wanted to understand the meanings attributed by migrants to their migratory transition and the changes that occurred in the length of stay in Portugal. Through this approach, we tried to understand the resources that enable the migrants to overcome the difficulties faced in the host society. With this goal in mind we use the concept of resilience as a process that may take multiple configurations. As such, this study focuses on the individual in the social and cultural context and as an agent and product of the interaction with contexts.

### **Resilience and Migration**

The conceptual proposal of this study was built on fundamental concepts that have interdisciplinary and distinct epistemological foundations. Thus it is necessary to clarify these concepts and address the ways that they are connected.

The concept of resilience emerged from knowledge gathered in positive psychology, epistemologically based on a positivist perspective. The study of positive psychology encourages a shift from the focus on deficit or disease to the strength in human condition and development (Seligman, 2002). Studies in this field have sought to assess how individuals use certain resources when faced with adverse contextual determinants. Therefore, one possibility of the concept's definition used in empirical research (though there are other points of view, such as an understanding as trait or result of a process; Richardson, 2002) refers to resilience as a dynamic and circumstantial process. It consists of a positive adjustment or adaptation due to the action of protective factors in adverse circumstances or conditions (Luthar et al., 2000).

Many studies have operationalized the concept through a predictive approach, searching for the influence of protective factors in order to predict resilience even in the presence of risk factors. In this study, however, we complied with Yunes' (2003) proposal instead, highlighting the need for studies with an approach based on the subjective dimension of resilience that capture the meanings assigned by people to their individual experience. This idea opens the door to communication with other epistemological foundations. We aimed to understand resilience as a dynamic and circumstantial process based on the building and sharing of socially constructed meanings. Ungar (2008) has highlighted concern regarding a certain hegemony in studies about resilience and, as such, seeks to include the cultural dimension in the definition. In this article we adopted the concept of resilience defined as follows: *‘In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways’* (Ungar, 2008, pp. 225. According to this definition, emphasis is given to the importance of the cultural foundations (that form each person individually) involved in the ability of individuals to navigate and negotiate for the resources they need.

The characteristics and idiosyncrasies of the Cape Verdean community were specifically analysed through the lenses of the transnationalism concept for the general purpose of understanding migration

processes. Transnationalism is defined as *'the process in which immigrants create social fields linking their country of origin with the country where they have settled'* (Schiller, Basch, & Blanc-Szanton, 1992, pp. 81). This reinforces the need to recognise the link between the point of departure and arrival without losing sight of the real, continuous and uninterrupted process that characterises this movement (Gois, 2008; Gois & Marques, 2008). In other words, a look at Cape Verde transnationalism can be a valuable tool for understanding various areas of interest, such as the management of cultural heritage between the community of origin and the host country, the physical and emotional connection that is maintained, strengthened and transformed within the country of origin, or the new established attachments, as reported by other authors who studied transnationalism (e.g. Portes, Guarnizo, & Landholt, 1999). In the case of Cape Verdeans, the country of origin will always be a strong reference point (Évora, 2006), shaped by colonial and post-colonial history as well as the relations of independence and dependence with Portugal.

Numerous perspectives can be adopted when the studies of resilience and migration are considered together. One of the most significant aspect is to focus on the relation of adversity, resources and positive adjustment to cultural specificities. Among studies about acculturation, Berry (2001) suggested that the best form of adjustment for migrants is the reciprocal integration and interaction of cultures (from origin and host countries). However, other authors (e.g. Babha, 1994; Vertovec, 2001) brought other proposals beyond bi-culturalism, demonstrating that migrants are not necessarily oriented towards the origin or destination country, being capable of orientation to various places, communities and societies at the same time (Vertovec, 2001). Thus, the positive adjustment proposed by the concept of resilience, in this study it will be understood as cultural adjustment. If the concept of transnationalism proposes a variety of views on how migrants achieve a positive adjustment in relation to cultures, so the resilience processes can occur in different ways—as many as the existing possibilities in the individual relationships of migrants with cultures.

Using the concept of transnationalism, this study aimed to understand the resilience processes of Cape Verdean migrants through the meanings attributed to their life paths. We explore the dynamics between adversity and resources that lead to cultural adjustment in the continuity between the country of origin and the host country. The proposal of abductive logic, designed to meet the goal of the research, assumes (as stated by Reichertz [2009]) an open attitude towards the discovery of new meanings and significances. The biographical narratives were chosen as the vehicle that enables the understanding of the migration processes from a qualitative perspective.

### **Cape Verde migration in Portugal**

The migratory movement from Cape Verde to Portugal consists of different phases, having started with a long tradition of migration reported since the eighteenth century (Carita & Rosendo, 1993). Always against the backdrop of “abandonment, repopulation and recurrent droughts” (Grassi, 2006, p. 2) and justified as being necessary and inevitable, the history of Cape Verdean migration can be explained through different flows, destinations, causes and people.

The latest and steady migration wave to Portugal occurred from the 1960s onwards, with its greatest intensity in 1974–1975 (Carita & Rosendo, 1993). If the movement was initially mainly associated to the entry of technical staff, higher education individuals or employees of public and colonial administration (Carita & Rosendo, 1993), it quickly changed. It was the beginning of the arrival of a great number of men who travelled with the main goal of covering manpower shortages in the construction and public work industries that were in expansion back then (Grassi, 2006). In addition to this migrant population, with at least a decade of residence in Portugal, many Cape Verdean family members entered the host country through family reunion, including siblings, wives and children (Carita & Rosendo, 1993). However, due to bureaucratic and administrative barriers, the legal migration flow decreased, giving way to the entry of undocumented Cape Verdean migrants, which represented up to 50% of the Cape Verdean population in Portugal, at that time (Grassi, 2006). Along these different phases in migratory movement, it is important to highlight the movement of many young Cape Verdean people arriving to attend institutions of technical and higher education, which also represent a key component in the migratory dynamics of this population.

The presence of Cape Verdean migrants in Portugal becomes an issue of great relevance, not only because it is the second largest migrant community but more so owing to the fact that it is the oldest one. That is to say, this community has remained relatively constant in size and has had a number of “migration cycles” already in Portugal (Machado, 2005). However, statistical data are discordant between Cape Verdean and Portuguese authorities (Batalha, 2008). In 2003, the Institute of Cape Verde Communities (IC-CV) reported that the number of citizens from this archipelago living in Portugal exceeded 100,000 individuals, while in the same year, the Immigration Report Frontiers and Asylum



(RIFA) of Foreigners and Borders Service (SEF) indicated that this number did not exceed 54,000. The last RIFA (2013) accounts for the presence of 42,401 legal Cape Verdean residents, representing 11% of the foreign population in Portugal.

Studies on the Cape Verdean migrants in Portugal have been less abundant (Machado, 2005), and those that exist are typically produced by social science subjects, such as sociology or anthropology (e.g. Carita & Rosendo, 1993; Évora, 2006; Grassi, 2006).

This study was conducted with Cape Verdean migrants who arrived to pursue their studies in Portuguese universities. We selected this specific migrant population because studies about Cape Verdeans in Portugal tend to focus on the ones that leave Cape Verde in disadvantaged socio-economic and professional conditions (who remain in the same conditions in Portugal as well). Nevertheless, a significant number of Cape Verdeans arrive in Portugal to receive higher education, and a part of them remains in the country (Carita & Rosendo, 1993). Therefore, this type of migration brings some specificity, since the starting conditions of the migrants may be different when compared with migrations due to other reasons and motivations (political and economic ones, amongst others). Through the complexity of their life paths, we wanted to understand more about the challenges these migrants face and the resources they mobilise.

## **METHOD**

In studies on migration, various methods of conducting and analysing biographical narratives have been used mostly in the tradition of phenomenological narration analysis and objective hermeneutics (Apitzsch & Siouti, 2007). In this study, we used the case reconstruction method (Fischer-Rosenthal & Rosenthal, 1997), because it seems very well adjusted to the studies on transnationalism in migrants. The basic idea is that through the reconstruction process of each case, it is possible to gain access to the interaction between the individual and institutional aspects of social reality. "Our aim is rather to reconstruct the interactional significance of the subject's actions, the underlying structure of the biographers' interpretations of her or his life, which may go beyond the subject's own intentions" (Rosenthal, 1993, pp.60). For this purpose, as mentioned by the authors, it uses the principles of abduction and sequentially, without losing sight of the narrative perspective as a whole (*Gestalt*). The principle of abduction is applied because it does not have any particular theory in view and expects that surprising facts will be discovered. The principle of sequentially highlight that social activity is a sequence of actions that involves choices in every situation, independently of the narrator's perspective. Applying this principle in the analysis means looking at the range of possibilities open to the subject in a certain situation, the selection that is made, the possibilities ignored and the consequences of the decisions. So, the sequential analysis involves interpretation through the reconstruction of the meaning of the text following the sequence of events (Rosenthal, 1993).

## **Procedures**

We adopted the theoretical considerations on how to conduct the interview in the traditional formulation adopted by Schutze (1983, cited by Apitzsch & Siouti, 2007) and Rosenthal (1993). These authors suggest an open introductory question to start the autobiographical narration and allowing the narrator to spontaneously tell his/her life story until he/she indicates that the narrative is concluded. It is distinguished from other methods because of the assumption that there are two levels of analysis in each narrative; the life story as it was lived and the narrated story. By distinguishing between these two levels, as well as analysing the relation between them, it is possible to carry out the reconstruction process in each case in a process-oriented manner.

The interview was conducted in order to integrate the abovementioned theoretical considerations. Thus, the opening question for this study was formulated as follows: "I would like to ask you to tell me your life story, all experiences and events that you remember. You can take the time you want. I will not interrupt you. Only at the end I will make some questions." After the conclusion of the narrative, as the narrator indicates, some questions were presented as to the need for the clarification of the reported content, particularly ambiguities, gaps, hesitations or contradictory information (Schutze, 1983, cited by Apitzsch & Siouti, 2007).

The participants of this study were initially contacted through the participants of a previous study, using the snowball technique. These people were asked to appoint somebody from the Cape Verdean community that had been in Portugal for more than 2 years. The meeting and the development of the narratives occurred in places chosen and suggested by each participant. Thus, some narratives took place in the houses of the participants, others in cafés they used to go to, or intended to this end. At each meeting the objective of the study was explained, as well as the dimensions of voluntary participation and the guarantee of the protection of their confidentiality and anonymity in information treatment, and each

participant signed an informed consent form. This study complied with the principles of the code of ethics of psychologists in Portugal (*Ordem dos Psicólogos Portugueses* [Order of Portuguese Psychologists], 2010).

The narratives were conducted by the first author of this study and voice recorded. Subsequently, this information was transcribed by an investigation assistant, and the voice-recorded information was used again in the process of analysis of the narratives, simultaneously to the text of the transcriptions. The narratives had durations varying between 45 minutes and 2h10m; the full transcription of each interview and the respective notes were followed by the method of analysis.

The analysis of the case reconstruction narrative in this study followed the aforementioned authors' proposal, systemised in five sequential stages (these stages are explained in detail in the method section of the article; Fischer-Rosenthal & Rosenthal, 2004): (1) analysis of biographical data; (2) Text analysis and thematic areas; (3) Reconstruction of life story; (4) Detailed analysis of individual text segments; (5) Contrasting life story as narrated with life as it was lived.

The stages of the presented reconstruction method aim to find the process of the narrative creation in the present life, without losing sight of the reciprocal relationship between both of them and the unity of the case. Due to space limitations and meeting the objective of this study, this article will not present the analysis in each of these steps, choosing to present the final results of the reconstruction cases.

The analysis of the narratives was elaborated and reformulated systematically by the authors of this article, implementing the stages of the method and following the meanings attributed by participants to their migratory experiences. The analysis was performed first by one of the authors, and then made by two other researchers. In the end, the analysis of each of the researchers was discussed by all in order to reach a consensus. The case reconstruction method has a subjective nature that is inherently related to the subjectivity of researchers who use it as a way to know the life experience of the participants. In this study, all authors work in research projects on cultural diversity and three of them are migrants or direct descendants of migrants. Their migratory experiences are also present in the way migration processes are understood, in general and particularly in this study. The personal experience of researchers can help to empathize with the narratives of migrants, for recognizing this experience in their own lives.

### Participants

We collected 10 narratives of six men and four women, between 22 and 36 years old, living in the urban area or in the outskirts of Lisbon. Among these migrants, three were still studying and six had already completed their studies in higher education, thus already integrated in the labour market (two in Computer Science and one each in Law, Civil Engineering, Social work and Sociology). One had abandoned studies and was working as hairdresser. All participants' names were kept anonymous, and pseudonyms were given to them.

### RESULTS

The biographical narratives were grouped by common and salient features in the form of contact with the host country while simultaneously bringing other common aspects of the country of origin. Following the proposal of Hollway and Jefferson (2000, chapter 6), we decided to group narratives to gather common characteristics in a larger and heterogeneous group of participants in an attempt to retain also the individual expression of the meanings assigned by migrants. The common aspect that characterised each group is the similar configuration in the cultural adjustment and the use of the resources (mainly attachments and belongings) developed over time in Portugal. In each group, we intended to highlight the relationship with the diaspora, feeling of belonging, direction of the attachments, recreation of cultural practices and the shape of the cultural adjustment. Following this purpose, four groups were created: (1) Death of motherland? Tensions in perspective; (2) Here as there—Cape Verde's heat; (3) The world is overseas; (4) To stay or to go back? Missing *morabrezza*.

#### Death of motherland? Tensions in perspective

Adriano, 34, from the Island of *Fogo* (15 years of residency in Portugal), talks about a past marked by the separation of his parents at the age of eight, the father's absence and long hours without his mother, who had two jobs to support him and his brother. Soraya, 36, native of *São Vicente* (17 years in Portugal), shares very little about her childhood and gives away nothing about her life in Cape Verde, referring vaguely to the way it was as "a good time, as per normal standards".

Both experienced financial struggles in Portugal due to the loss of the scholarship provided by the Government of Cape Verde. As a result of a lack of academic success, they were forced to manage school with precarious jobs. Adriano admits to having had a hard time juggling work and studying, all the while

finding it difficult to follow school standards with insufficient study methods in Computer Engineering. Soraya, on the other hand, studied law. She highlights other initial difficulties, such as weather shock, referring to a particular chill she used to feel—*coldness in the soul*. This made it difficult to go to classes, which took place in the morning: “It was very hard for me in first year, I'd sleep a lot, I'd sleep until noon”. The contrast of rhythms in the new country and other differences such as the existence of an elderly Portuguese population, poor responsiveness from Portuguese people regarding interpersonal relationships and a cold and unwelcoming population were additional difficulties. During this period, the most significant relationships were established with Cape Verdean colleagues who also studied in Lisbon, with whom she rented a house and whom Soraya considers as sisters.

On the relations with the Portuguese and the differences between countries, Adriano and Soraya experienced different tensions. However, they both felt a certain pressure related to loyalties and affiliations, between preserving the past, the origins and the links in the present. For Adriano, entering the labour market brought the possibility of feeling welcomed by Portuguese people, “I joined the company in which I work today, which is a small but very consistent company that always has good customers and I am very cherished by my bosses, who are very fair and very honest. I really enjoy working there”.

At the same time, when entering the Portuguese job market, Adriano rediscovered Cape Verde culture: “Since I have been here, I learned to appreciate the music when I first started playing the guitar, but after living here I actually really enjoyed it. Before that, I didn't like “morna”. And I also didn't like “cachupa”. “Cachupa’ made on Saturday containing broth and meat ...” This proximity to the traditional culture of Cape Verde accompanies the desire to not go back. However, Adriano's wife would like to return to Cape Verde, generating other tensions related to this division between places and cultures: “I'm not ready to go back, if I have to I will. I think that it's really a matter of loyalty to the company, too. I'd like my daughter to be Cape Verdean just like me that she could be born with the culture. But I also don't mind at all that she's Portuguese and I made sure to teach her the language, I'm afraid of the bilingual issue, that it might confuse her”.

The tensions felt by Soraya materialised in a different way but with the same result as Adriano's in terms of choices and possibilities in the new country that run counter to the country of origin. Soraya married a Cape Verdean who intends to live in Lisbon and is averse to the idea of returning to Cape Verde. Apparently, she ended up remaining in Portugal for him, despite the tension experienced with the Portuguese way of life. “It was supposed to be only five years and then leaving, I was only going to complete my studies and not live here ... There are seats here in which I'm faced directly opposite the other passenger and sometimes I sat there and people won't even greet me. That kind of thing is normal here, but not in Cape Verde! Nowadays, I act that way too; I don't even remember ever being “different” any more”.

### **Here as there—Cape Verde's heat**

Ângela, 29, born in *Santiago*, grew up in limited financial resources. The beginning of her adolescent life in Cape Verde was the basis for later choices in her life. Regarding this period, Ângela says, “I was about to turn 18, and I wanted to go out with my friends more, but my father wouldn't let me and I was beginning to turn against him. I thought he wasn't being fair with me. And my mother also wouldn't let me because she was afraid of him ... I started to rebel ...” In this context, Ângela felt that the male-dominated society of Cape Verde was too oppressive for women—promoting their dependency and preventing the freedom of choice.

Deise, 32, was born and raised on the island of *São Vicente* in a large family with many financial difficulties and dealt with the tragic event of the death of both parents when she was six years old. Deise started working at the very young age of 13, without dropping out of school. At the time, she discovered the Seventh-Day Evangelical Church of the 7th day, where she found encouragement from other believers to not give up, “Thank God I always had the privilege of finding people who helped me, who were always by my side ... I owe that to God, because He always provided people to help me”. When she completed the 12th grade, she applied for a scholarship to study in Portugal with the support of the church.

Adilson, 22, was born on the island of *Boavista*, a deeply rural environment isolated from larger villages, where his family was dedicated to agriculture and livestock. “My routine always consisted of going to school early and, later in the day, I looked after the animals and I hardly had any time to study. But I always got good marks ... There were no roads, only rocks ...”

Ângela, Deise and Adilson left Cape Verde in different socio-economic conditions although they had few financial resources and different motivations to study abroad. For Ângela, the decision to study in Portugal was related to her father, attending a study course that he considered important for the future (marketing and advertising), which she later abandoned due to not being able to pay rent. “I've been

saying since I was a child, “I want to be a hairdresser!” and that dream slowly died. After that, when I came here to study, I was here mainly for my dad. (...) but things didn't end up that way, when I first started working at the hair salon I loved it, and I still do. I do it of my own volition, not because I was pushed to it”. This opportunity for Ângela came through her aunt who lives in Lisbon and knew the hair salon owner.

Their life paths grow closer in the difficulties they faced in Portugal due to periods of instability and insecurity (namely, demanding financial needs, illegal stays in the country or psychological distress) that threatened their stay in Portugal despite the desire for permanence. Deise went to Portugal to study social work with the support of a scholarship, faithful contacts at the Church and acquaintances of Cape Verdean friends also studying in the country. These people were crucial in helping her with the difficulties faced during this period. On the one hand, the scholarship amount was low compared to monthly expenses, sometimes cutting short basic needs such as food. On the other hand, Deise felt attacked with disrespectful and derogatory comments about her origins: “People in the street make fun of me, saying ‘black girl’ and stuff like that (...) They regard Cape Verde as an underdeveloped country, a country of dumb people”. Ângela faced marked difficulties in obtaining legal documentation after lacking the student Visa that she had when first arrived in the country, and she remained in the country illegally for a period of almost three years. She says that during this time, her attitude was crucial, “I left my country not fearing the challenge because if there's one thing I've never been afraid of it is taking risks, and I made it ... Today, what I cherish most is my independence; I wouldn't want to go back to depending on anyone, least of all my parents. I love my independence!”

Adilson came to Portugal to study Computer Engineering (attending last year) and struggled greatly to keep up with the requirements in the new country, “I was lost ... everything was different, the lifestyle, the weather, life was more stressful, people rushing everywhere (...) once I stood paralysed at the tube's exit, I thought I was going to pass out”. After this episode and because of constant emotional unease, Adilson resorted to the psychological support service of the University he attended. He has the following to say about counselling: “In the beginning, it was weird and I was ashamed. I wouldn't tell anyone anything, but it was a good thing for me ... I started to feel more confident every day, I went out more and I spoke more easily to people, and friends came afterwards. I later on realized a lot of Cape Verdean students also went through a bad time in the beginning”. The proximity to colleagues and friends brought “Cape Verde's heat”. “(...) I missed it... there was a residence only made up of Cape Verdean people and we used to play and sing ‘mornas’ and I laughed all the time. We were happy (...) I want to finish my studies and stay here, me and a lot of my friends. This way we get to be together with the assurance that we're home”.

For Ângela, the entry into the job market as a hairdresser has allowed her to regain financial security and a regular legal situation. But above all, according to her, there is a *possibility to find a piece of Cape Verde here*. She further admits, “(...) in the hair salon alone, I met four of my family members. We started talking, not knowing we were related ... I also found a neighbour whom I had not seen in so long ... In the train station, I find people I haven't seen in years!” Ângela summarises the dynamic relationship with the two worlds she inhabits: “It's because, deep down, I can't live away from it. I'm here as if I'm there and I'm there as if I'm here (...)”

Ângela worked at a Private Welfare Institution, did volunteer work in a Cape Verde Association and also continued with church activities. There was not enough time for everything she wanted to do. “I was there last year on vacation, and it was weird ... I had to always be occupied, because if I stopped, I had the urge to go back again ... I missed Portugal. It was only a couple of days, but I did. (...) I ended up liking the stress here! But, when I'm here, I think a lot about my brothers and nephews; I miss them, the sea, the beach”.

### **The world is overseas**

Diogo, 26 years, was born in *São Vicente* and he has been in Portugal for eight years. He was born in a family but was “taken” (a term used in Cape Verde) by another family he has since accepted as his own: “What I feel for the person I call mum isn't the same, because since before I knew I was somebody, it was her with me until now, and that's why I call her my mum. She took me in when I wasn't even a year old ...”

Miguel, 30, came from *Fogo* Island to Portugal around nine years ago. “I grew up amongst women”, he says, referring to his family of origin consisting of his mother, grandmother and three sisters, who worked long hours to make a living for the family under dire financial circumstance. He has a positive recollection of his upbringing because he felt taken care of in this feminine universe. However, concerning other periods of life, such as his teenage years, he is not as positive, “I was a bit fed up with them ... I mean ... I adore them and all but I was tired of them, always fussing, always wanting to know everything ...”

He left Cape Verde when he got accepted into a University in Portugal with a Cape Verde scholarship offered by the government, and he desired to leave the country for the challenge of exploring a new country, "It was my first time leaving Cape Verde; I've always wanted to travel abroad. I was in ecstasy, yes, in ecstasy. Everything was new ... I always went around with a smile on my face, back in those days".

Diogo arrived in Portugal to study computer engineering and faced great difficulties keeping up with the formal standards of education, orienting and sorting himself in the geographical space and dealing with bureaucratic and administrative issues. "In the beginning, everything was hard. I used to say that I couldn't do it ... I got discouraged. I said: 'I'm going back home! This isn't for me!'" The presence of family and Cape Verdean friends made the familiarisation of space and school learning possible. "I have a friend here (...) we are from the same Cape Verde region, and she had already been here from August. When I arrived, she took me to the school and introduced me to a boy from Fogo Island. He taught me calculus, and I stopped going to classes and started getting lessons from him..."

The arrival in Portugal for Miguel was a mix of interest in exploring what was new and appealing in a new country, in a very *'positive and optimistic'* way. At that time, he lagged behind in school performance due to the standards of the Sociology course as well as difficulties relating to Portuguese colleagues, "(...) because I always had an answer at the tip of my tongue. I wanted to have fun and make friends quickly, and I thought being from Cape Verde or Portugal was all the same. It took a while for me to grasp the fact that it wasn't. But oh well, it turned out alright".

After an initial adjustment period, Diogo took a liking to living in Portugal. Contrasts with Cape Verde were highlighted through the size of urban centres in Portugal, in terms of economic and employment opportunities and through the impact of globalisation, for which food chains are a good example: "McDonald's is one thing I find fascinating about people. When I arrived here, I was like them ... I wouldn't cook, and I ate out many times. I liked the food, and I started liking it even more. There was no McDonald's in Cape Verde! I don't know if there is one in Africa ... in South Africa, maybe". This urban dimension of Portugal first entered Diogo's house in Cape Verde through his older sister who studied in Portugal. "When my sister came to Cape Verde on holiday, she spoke of the Colombo shopping centre. And us Cape Verdeans, in terms of sports, we also root for Benfica, Sporting or Porto [Portuguese football teams]. I saw the stadium of Benfica in my mind and I dreamt of playing football too. I guess I was not very surprised at what I saw when I arrived".

In adjusting with modernity in Lisbon, Diogo was having difficulties in interpersonal relationships with Portuguese people in public spaces, where different forms of discrimination prevailed: "I have also been to a club where the security guy was from Cape Verde, and he told me that me and my friend who used to go there could go in, but my other friends couldn't because his boss didn't let a lot of people in ... a lot of black people".

Over time in Portugal, Miguel started to appreciate different perspectives, namely those showing flexibility and valuing differences between cultures. He recognised the importance of leaving Cape Verde so he could understand these dynamics. "Now I know a couple of bars, in the fashion of a residence, where everybody interacts. I get to talk to people of various cultures, I can foresee things, I understand more, I open my mind more ..." The contrasts between countries was more apparent in the dimension of gender roles, recognizing Cape Verde as a much more conservative society: "anyone that leaves Cape Verde to go somewhere else has a different view than those who stay because there are boys or men who are chauvinists and don't let women do stuff, and when I get here, I acquire a new perspective".

### **To stay or to go back? Missing *morabrezza***

Mayra, 23, born on the island of Sal, had a childhood marked by a serious illness in the immune system that required constant hospitalisations. For this reason, parents and family redoubled care and have become "very protective" of her. Family members made joint efforts to help care for Mayra with particular emphasis from her father.

It was Mayra's father who helped her prepare for her stay in Portugal (in a marketing course), alerting her to the difficulties that she would face. He too had studied in Portugal, as well as several other family members. "He started giving me advice and told me I would experience a lot of difficulties here, that I had to always be really strong to face them ... the majority of my family members studied abroad..."

Lúcio, 24, was born in São Nicolau in a small family with sound financial resources and independent businesses. The family lived around the benefits and advantages that the economic situation provided. The family business was quite significant, functioning in an advantageous socio-economic environment.

Joseph, 27, a native of Santiago, asserts that he is from the "entire Cape Verde". Because of his father's profession, he ended up living in four different islands. For this reason, he was very close to his

siblings, because his friends got lost in the frequent relocations that marked his childhood up to high school: "that's why I say that travelling to Portugal was crossing only a bit more of sea than I'm used to".

Mayra (student) arrived in Portugal (4 years ago) to study environmental engineering and shares the difference she felt between the time she first arrived and the present. Upon her arrival in Lisbon, two dimensions were assured. The first one was family members who helped her understand the paperwork related to student visa, tax card, bank account, and she states, "I didn't need to do it, because they took care of everything for me". The second one was the colleagues and friends from Cape Verde who facilitated her school adaptation. "In the same classroom, same class, I met two Cape Verdeans, and, together with them, I was able to adapt. But as far as the rest goes, it was pretty hard. When one finds, for instance, a Cape Verdean, one can deal and adapt a lot better than with Portuguese people ..."

Like Mayra, Joseph recognised the importance of family at the time he came to Portugal to study Computer Science. "I lived with my sister for two weeks. She was moving from her house when I stayed at the place she was at with two people I already knew. They taught me the tube's map, the Embassy location, the University and where other such places were at". Just like the others, Joseph faced increased difficulties in establishing contact with Portuguese students and the Portuguese population in general. "When I studied, I thought it was only something related to school groups, but later I realized that it was normal, that Portuguese people don't like Cape Verdean people much. At work, people say African people are lazy". After six years in Portugal, Joseph is doing an internship in a company, still with an undefined contractual situation. "I miss my friends and family, I talk to them every day, my father asks me why I don't return to Cape Verde and I think: what am I doing here?"

Lúcio, living in Portugal for three years (still a student of Aerospace Engineering), felt the initial period in Portugal was quite hard due to two main reasons: the difficulty in achieving standard performance in school subjects and the reduced interaction with Portuguese people who constituted the majority of individuals in the private university he attended, with perceived devaluing relationships. "I'm not saying that everybody is like that but some people in my school are actual racists. They already have established groups. If someone wants to be part of them, they always have excuses to turn people down".

For Mayra, the network of family and friends from Cape Verde took the edge out of the initial impact. However, she felt quite alone in between the time spent in school and the time at home studying or talking to family members of Cape Verde through Skype. She mentions the difficulty in relating with Portuguese people, and infrequent gatherings with Cape Verde friends seemed to duplicate the environment of Cape Verde tradition: "I go out with my friends once in a while, I go to parties or even to a friend's house, we laugh, seat, talk ... In Cape Verde, this is called "Xintada", where there are drinks, food, chatting, music and the atmosphere is more private; nothing fancy. I spend more time at home and at school than anywhere else".

For Lúcio, the dimension of relationships and interactions, coupled with a decline in household incomes in his family in Cape Verde, had an adverse effect in his life in Portugal. He found it difficult to gather enough money to pay for school and food every month: "In the beginning, I was still alright. When I started going to school, everything got worse ... and I ended up sadder. At the end of the first couple of months after class, I went out and told my brother, 'I'm going back to Cape Verde!' I was crying and I said, 'I can't do this anymore, I'm returning to Cape Verde!'" However, sharing the house with friends, his brother and other Cape Verde colleagues allowed him to stay and re-invest in school goals. "On Fridays for instance, after an entire week of studying, I met at a café with friends or we played football once in a while. We even had a Cape Verde team of students in Lisbon".

Mayra, Lúcio and José all agree on the importance of the family in Cape Verde and the relationship they maintained with them through existing technologies. The relationships with close family were also maintained through regular visits to Portugal as well as through the trips to Cape Verde during work and school holidays. The plan or possibility of returning to their country of origin, in the short or medium term, was also a common agreement among the three.

## DISCUSSION

This study aimed to understand the resilience processes in Cape Verdean migrants in Portugal through the meanings attributed by them to their life paths. We examined the continuity of subjectivity processes between the country of origin and the host country. We used the lens of transnationalism to understand the interaction between adversity and resources towards cultural adjustment, exploring the connection between past and present experiences and the social and cultural contexts of both countries. Therefore, the method of biographical narratives suited this purpose, allowing access to life paths and migration processes through the reconstruction method (Fischer-Rosenthal & Rosenthal, 2004).

The narratives shared a common ground on the reason of migration: all of them left the country of origin in order to continue their studies in Portuguese universities. For many of these young migrants,

there is a Cape Verdean continuity that remains in Portugal through people and environments. Some of them wish to return to their country after completion of studies, which makes coming to Portugal a temporary migration (although most of them end up staying even after considering the possibility of returning), as highlighted also by Meintel (1984).

Regarding life in Cape Verde, dimensions of difficulties for the migrants were found in significant relationships with others or major losses of these people during childhood. Difficulties were also related to the social and cultural contexts, such as conservatism and patriarchy. The other significant dimension in the country of origin concerned the socio-economic condition characterised by low incomes. A majority of these migrants received a scholarship from the Cape Verde Government to complete their education in Portugal, as confirmed by Cape Verde Government data on students. The economic difficulties for the migrants persisted in Portugal, initially because the scholarship was insufficient to cover the costs. Later, due to poor school performance, most of these students lost their scholarship, compelling them to manage studies with precarious jobs.

In general, these migrants were supported by a family organisation in the country of origin, aimed at continuing the children's studies and aspiring for social mobility—a prospect of a better lives than their parents (Suárez-Orozco, Suárez-Orozco, & Todorova, 2008; Seabra, 2010).

Another very important resource was Cape Verde's Diaspora in Portugal (Carling & Barta, 2008). Information about the country and on Portuguese people reached Cape Verde long before migrants left the country, beginning a first contact with Portuguese culture and some operating social systems of the country (Meintel, 1984). This Diaspora, directly related to the idea of transnationalism (Anthias 1998; Butler, 2001; Cohen 1997), was an important resource on arrival in the host country, as discussed below.

Despite this previous contact, Cape Verde migrants signalled periods of greater adversity in Portugal. One of the adverse conditions, as mentioned above, was due to the financial situation of many migrants due to low scholarship amount or, in some cases, the loss of this amount. Those who were already entrenched in the job market apparently managed to regain a stable, if not favourable, financial condition at least better than the one they had in Cape Verde or during their time as students.

There was an initial difficulty specifically regarding the academic scenario due to the large disparity between the two countries in the standard of teaching methods and level of content transmitted, as outlined in studies by Évora (2013) on Cape Verdeans in higher education. Previous studies revealed difficulties in the schooling of migrants in Portugal (Machado, Matias, & Leal, 2005; Marques & Martins, 2005; Cardoso, 2006). In this academic context and outside too, the adversities were related to two main dimensions: cultural differences and interpersonal relationships with the Portuguese people. The first dimension includes aspects of cultural practices, such as climate disparities, linguistic differences, accelerated life rhythm and difficulties in spatial orientation in the city. The second dimension involves the devaluing nature of relationships with Portuguese people (through rejection and prejudice). The Portuguese society and cultural context is globally perceived as hostile, as in the Challinor (2008) studies on Cape Verde identity, in which these dimensions of life for Cape Verde people in Portugal are highlighted.

The analysis of the narratives also showed two central dimensions at the level of resources: sense of belonging and attachments established through emotional ties. These dimensions were the main resources that allowed overcoming adversity in the resilience process. The feeling of belonging is part of the need for security and to be emotionally attached to people and places, pursuing the feeling of being at home (Lovell, 1998). This sense of belonging is directly related to the possibility of establishing emotional ties through close relationships with others (Sroufe & Waters, 1977). In the words of Guibernau (2013, pp. 27), *'belonging by choice assumes that the individual is, to a certain extent, free to choose among a set of different options. The act of choosing entails a personal decision and a personal commitment to be acknowledged by other members of the group. It fosters a sense of belonging emerging out of the individual's active engagement in the construction of his or her own self-identity to be defined by means of his or her identification with the group'*. In this study, migrants demonstrated the importance of this resource by the way Cape Verde's Diaspora in Portugal allowed the sense of cultural belonging and emotional ties.

The Diaspora in the form of emotional ties with friends from Cape Verde allowed softening the impact on arrival in Portugal. The initial period tended to be disorganised, with difficulty in understanding habits, customs and other cultural practices of the new country in the spatial orientation or in the mental space. These friends and family members from Cape Verde were an important resource to face the impact of pragmatic difficulties, namely the bureaucratic context of permanent visas, the difficulty in finding a house or financial hardships. Simultaneously, while softening the initial impact, these ties allowed for Cape Verde cultural practices to be carried out or for the use of *Creole* as language, thus ensuring the sense of belonging.

Over time, the connection with the Diaspora regained new and different configurations. According to some authors (Faist, 2010), the attachments and belongings related with the Diaspora are not always built towards the country and culture of origin. On the contrary, there are many possibilities and configurations (Vertovec, 1999; 2001; Appadurai 1996). These different configurations are the products of resilience processes in terms of cultural adjustment, occurring in different ways. In this study, we observed migrants of the first group that reported a significant tension of attachments between the country of origin and the host country, simultaneously with the transformation of cultural practices of origin and diffuse feelings of belonging. In the second group, the relationship with the country of origin was guided by the established relationship with other Cape Verde people living in Portugal that recreated the Cape Verde environment and culture but with the traits of Portuguese people and Portugal. In the third group, the sense of belonging was developed through globalisation coupled with the cosmopolitanism of European societies, with a tendency to diversify the significant attachments in terms of cultural origin. The fourth group preserved the belonging and attachment to people, places and culture of origin while maintaining the connection with their own country through technologies that allow for permanent contact and the movement of people between Cape Verde and Portugal. These various configurations found in the four groups highlight the fluid nature of the relationship of migrants in the Diaspora, through mixed relations with the host country's culture or other cultures - interactions of products from a context of globalisation in major cities. The hybrid dimension of this diaspora, as noted by several authors (Faist, 2010; Safran, 1991), stands out for the importance of considering the resilience process as fluid also towards cultural adjustment, occurring in different ways for the migrants participating in this study.

## CONCLUSION

This analysis of the narratives reinforces the understanding of resilience processes not as a result but as a complex and intertwined process between conditions and contexts, similar to authors that point out the interest in the concept of resilience in this dynamic and complex dimension (e.g. Luthar et al., 2000). It is also a concept that highlights the contributions of culture specificities (Ungar, 2008) but focuses on individual subjectivity and specificity (Yunes, 2003). The resilience process of migrants in this study assumes several configurations, such as the annulment of adversity's impact, developing alternative possibilities or overcoming adversities by integrating them into trajectories and life paths. It is important to note that these are naturally unfinished processes. The subjective meanings and aspects of individual migrants change over time and due to changes and shifts in the individual life paths. This aspect of mutability is stressed by the authors of the narratives analysis method (Fischer-Rosenthal & Rosenthal, 2004), which emphasise the hypothetical and temporary nature of the results.

In terms of the implications of clinical work with migrants, this study can be of great importance considering the way issues related to the country of origin are evaluated, since many migrants had life paths marked by adverse conditions even before migrating. As such, these hard conditions in the origin country may be related to difficulties experienced in the host country, where they are significant and recreated, therefore, requiring the attention of clinicians. On the other hand, in this article, we identify the dimensions of belonging and social, cultural and emotional attachments related to the need to be accepted. As such, the therapeutic relationship may constitute the possibility to develop important emotional ties in a therapeutic space (Bordin, 1994).

Regarding the limitations of this study, we concede to the fact that the analysis of narratives is always hypothetical and temporary in nature, as suggested by the authors (Fischer-Rosenthal & Rosenthal, 2004). This implies that the analysis in this study will certainly change with the permanence of migrants over time in the host country. Another limitation is regarding the fact that the study was conducted with Cape Verdean migrants who shared the commonality of leaving the country of origin to pursue further studies in Portuguese universities. This analysis is possibly insufficient to analyse the experiences of the Cape Verdean migrants who arrive in Portugal in other contexts and age groups. Due to this specificity of young participants and their stay in Portugal (only three years in some cases), the biographical narratives contained little information on life in Cape Verde, making it difficult to capture the sense and meanings they attribute to this period before migration.

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## Resilience and self-concept of competence in institutionalized and non-institutionalized young people

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**Abstract:** The institutionalization of young people may have important negative influence on their development and emotional well-being. The aim of this study was to analyze the relations between resilience and the self-concept of competence in institutionalized and non-institutionalized young people. The sample was composed of 158 young people, aged between 15 and 18 years old. The following instruments were used: a socio-demographic questionnaire, the Healthy Kids Resilience Assessment Module and the Self-Concept of Competence Scale. The results showed: (1) no significant differences between the two groups in terms of resilience; (2) the non-institutionalized sample revealed higher scores on the self-concept competence; and (3) there was a strong positive correlation between resilience and self-concept of competence amongst the institutionalized sample. These results are discussed in the light of the constructivist perspective of resilience.

**Keywords:** Resilience; Self-concept of competence; Institutionalization; Young people.

**Resiliência e autoconceito de competência em jovens institucionalizados e não-institucionalizados:** A institucionalização de jovens pode ter importantes influências negativas no seu desenvolvimento e bem-estar emocional. O objetivo desta pesquisa foi analisar as relações entre a resiliência e o autoconceito de competência em jovens institucionalizados e não institucionalizados. A amostra é constituída por 158 jovens com idades compreendidas entre os 15 e os 18 anos de idade. Os instrumentos utilizados foram um questionário sociodemográfico, o Healthy Kids Resilience Assessment Module e a Self-Concept of Competence Scale. Os resultados mostram que: (1) não existem diferenças significativas entre os dois grupos a nível da resiliência; (2) a amostra de jovens não institucionalizados apresentou resultados mais elevados relativamente ao autoconceito de competência; e (3) existe uma correlação positiva de forte magnitude entre a resiliência e o autoconceito de competência entre os jovens não institucionalizados. Os resultados são discutidos tomando como referência a perspectiva construtivista de resiliência.

**Palavras-chave:** Resiliência; Autoconceito de competência; Institucionalização; Jovens.

There are several reasons that can lead to the institutionalization of children and young people. When separation is clearly in the best interest of the child, such as in cases of neglect or abuse, different options should be available depending on the situation and needs of the child. According to the Portuguese Law for the Promotion and Protection of Children and Young People in Danger (Lei n.º 142/2015), situations of abandonment, maltreatment, sexual abuse, violence, neglect, exploitation, and crime and absenteeism at school are some examples of situations that can compromise the health and the welfare of children and young people, justifying that they be removed from family and placed in institutions, either temporarily or permanently. In fact, when the family does not effectively respond to the needs of the children, several measures can be implemented.

As there are still few foster families in the Portuguese system, most of the children and young people are placed in children's homes (Mota & Matos, 2015). The placement in children's homes is the placement of the child or young person in the care of a body that has the facilities and resources for permanent foster care, as well as a professional team able to guarantee appropriate attention to the needs of these children and to provide them with the conditions that will support their education, well-being and holistic development (Lei n.º 142/2015).

In recent decades, the academic community has shown an increasing interest in issues related to residential care for children and youth (Mota & Matos, 2015). However, institutionalization is a subject of great complexity, often questioned and undervalued in the context of child protection. Institutionalization should be the last measure to be applied, but has in recent years has gradually increased in Portugal

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(Instituto da Segurança Social, 2015). Due to complex family conditions, the high number of requests for institutionalization and the lack of alternatives, there are more and more children and young people in residential care, although this situation is still seen negatively by society (Chapman & Barth, 2004; Havlicek, 2011; Linares, 2002).

Many voices have argued that, instead of protecting children and providing opportunities for development, institutionalization can also become a kind of maltreatment (Linares, 2002). Nowadays, researchers advocate the need to strengthen measures aimed at preserving family support; and if the removal of children from their families should still be the best option, then their placement in children's homes should be prioritised (Instituto da Segurança Social, 2015; Linares, 2002).

According to several researchers, many children and young people who are drawn into the child protection and public care systems have experienced significant levels of emotional suffering (McAuley & Davies 2009; McCann, James, Wilson, & Dunn, 1996; Meltzer, Lader, Corbin, Goodman, & Ford, 2004). In spite of the fact that the population of children and young people in care can present significant levels of difficulty; many can overcome the difficulties encountered in their lives and develop adaptively (Daniel, 2003, 2007).

In face of this, some theorists and researchers (Daniel & Wassell, 2002; Rutter, 2006; Gilligan, 2001, 2004) have highlighted the importance of resilience of children and youth in this context. They suggest that building up a self-concept of competence through supportive environment appears to accentuate and promote resilience. In fact, the interest in emotional competence has been increasing in recent decades, in the sense that professionals working in this area may promote these competencies in children and young people, so that they can overcome the challenges and the adversities faced in their lives.

The aim of this study is to analyze the resilience and the self-concept of competence in institutionalized and non-institutionalized youth in the southern region of Portugal and the association of these dependent variables with gender, age, school level and school retention and home visits (for institutionalized young people).

### **INSTITUTIONALIZATION, RESILIENCE AND SELF-CONCEPT OF COMPETENCE**

The family, as the first agent of socialization, must respond to the physical, psycho-emotional and social needs of their children. However, some parents cannot fulfill their role, hindering or even making it impossible for children to develop themselves properly. In more severe cases, where there is considered to be a risk or a danger to the children due to situations of abuse or neglect it is necessary to remove them from the family and ensure their safety and proper development by promoting the necessary measures for their protection (Leve, Harold, Chamberlain, Landsverk, Fisher, & Vostanis, 2012).

The institutionalization of children and young people has undergone significant changes in recent decades. There is a growing global consensus that efforts to improve care in the institutions will not on its own solve the problems of children and young people in residential care, or meet their best interests. Efforts must focus more especially on the underlying reasons for the decisions of placing children in residential care. In fact, the complex and often the interlinked factors, such as poverty, family breakdown, inflexible child welfare systems and the lack of alternatives to residential care, require holistic responses that can identify families at risk early, address their needs and prevent the removal of their children (Schoenmaker, Juffer, van Ijzendoorn, & Bakermans-Kranenburg, 2014).

It should be mentioned that in recent decades a great investment has been made in family support, in order to help parents and empower them in their parental role, so that children and young people may receive care, attention and affection, essential for their development and well-being. However, in spite of this investment in supporting families at risk, many families still fail to respond effectively to the needs of their children. Therefore, and according to Libório and Ungar (2010), the resource of children's homes, although it should be avoided whenever possible, remains for many children and young people the best solution.

An increasing number of children and young are placed in children's homes due to experiences of physical, sexual, emotional, or psychological abuse and/or neglect. In fact, many young people have experienced considerable challenges that place them at risk of negative adult outcomes: poverty, separation, abuse, neglect, loss, and disruption. The relationships that these youth develop at the hosting institution are mediated by their life stories, often of suffering, rejection and hostility. These stories can play a fundamental role in the development of these young people (Scott, 2012).

The institutionalization influences their life story, either as a risk or as development potential. When a neglected child is removed from her family, though the purpose is to protect the child and provide her the development conditions and some measure of welfare, institutionalization can sometimes rather than alleviate them, perpetuate some problems. Often it is difficult to determine the effective and

real impact that institutionalization has, but it is argued that sometimes this increases the risk of negative outcomes (Leve et al., 2012). Several studies have been conducted in this area, and different theoretical approaches about the effects of institutionalization have emerged, highlighting either their negative or positive aspects, since this effects will necessarily be different from individual to individual and from context to context (Havlicek, 2011).

However, not all children present negative outcomes; some show limited or relatively minor negative effects. Rutter (2006) argues that the essence of adaptation in the context of adversity is captured by the scientific field of resiliency research; and that with the right support systems, children and young people can develop resilience in the face of adversity (Ocasio, Staats, & Van Alst, 2009).

In recent decades, the theme of resilience has constituted a fascinating subject for many researchers. Nevertheless, the concept of resilience is not without controversy, which often can lead to its validity and usefulness being questioned (Martins, 2005). Although, traditionally resilience has been defined as a static individual trait, it is important to move away from this definition (Rutter, 2006). Resilience can be viewed a dynamic developmental process that is best measured by the presence or absence of risk (factors that contribute to poor outcomes) and protection (factors that buffer against risk). Risk factors increase the likelihood of a future negative outcome; while protective have an opposing effect, moderating the risks effects (Anthony, 2011). The protective factors are associated with long-term social and emotional well-being in the child's whole world (Daniel & Wassell, 2002). The existence of protective factors can help explain why some children may cope better with adverse life events than others.

These factors exist at several levels: the individual, peer, family, school, neighborhood, community, societal, and cultural levels (Anthony, 2011). Taking this into consideration, researchers suggest that, instead of referring to the young people as "resilient", is better to use the terms "development of resilience" or "development of resilience processes". Thus, resilience is not only the ability of an individual to survive and thrive in face of adversity; it is a complex, developmental and interactive process (Anthony, 2011). The ability of young people to recover from exposure to risk can be supported by combining efforts to reduce risk with strategies that increase the quantity and strength of protective factors (Scott, 2010, 2012; Simmel, 2012).

Research clearly indicates that specific conditions in the lives of young people, called protective factors help mitigate challenges and to recover and thrive despite significant adversity. The increase of these protective factors in the lives of young people in residential care helps them to develop resilience (Yates & Grey, 2012).

The development of resilience is the result of human adaptive processes and assets interacting with one another. People develop resilience because of the interaction of the following factors: healthy brain development, including the capacity for cognition; healthy attachment relationships, including parenting relationships; the motivation and ability to learn and engage with the environment; the ability to regulate emotions and behavior; and supportive environmental systems that include education, cultural beliefs, and faith-based communities (Ocasio, Staats, & Van Alst, 2009; Scott, 2012; Ungar, 2006).

The intelligence, understanding of self, self-esteem, secure attachment, social and emotional competences, emotional regulation (Masten & Powell, 2003), temperament, coping strategies, locus of control, attention, genetic heritage, sense of humor, religiosity, prospect of future and gender (Rutter, 2006), are all examples of protective factors that have an important role in promoting resilience.

According to Benard (2012) when young people develop resilience, they are able to cope with, adapt to, and recover from even the most substantial challenges. Developing resilience is essential for young people leaving residential care to grow and succeed as adults (Unrau, Font, & Rawls, 2012).

There are many factors associated with resilience, but Gilligan (1998) suggests three fundamental building blocks: (1) a secure base, whereby the child feels a sense of belonging and security; (2) good self-esteem, which is an internal sense of worth and competence; and (3) a sense of self-efficacy, that is, a sense of mastery and control, along with an accurate understanding of personal strengths and limitations.

The self-concept of competence is a protective factor, playing an important role in the development of resilience. Self-competence is a term developed by Susan Harter (1982), and it generally refers to perceptions of ability in broad academic areas, such as how good of a student one is in general. Self-competence may also refer to perceived ability in subject areas as a whole. This definition is very similar to self-concept. However, while self-concept also addresses the student's beliefs about academic difficulties and student affect, self-competence refers only to their perceptions related to success. The self-concept of competence is the opinion that the subjects holds about themselves in relation to their cognitive, social and creativity skills. The self-concept of competence is a predictive variable of the academic success, and refers to the perception of oneself in the ability to deal effectively with the environment, enjoy successes and deal properly with failures, triggering cognitive and affective

mechanisms that promote persistence (Faria, 2002; Faria & Lima Santos, 2004).

Approaches to apply resilience theory to practice focused research on the factors associated with resilience have led to the development of a number of guiding frameworks for intervention. Research shows that focusing on the strengths of young people is crucial to future outcomes. This means focusing on resilience factors, help children and young people cope with adversity (Bostock, 2004). There is some consensus in the articulation of these frameworks and it is suggested that the most effective intervention programs involve multi-faceted paradigms that attempt to reduce risk, strengthen meaningful assets, and recruit core developmental processes within the child, family and the community (Masten & Powell, 2003). It is argued that the attention to different domains in children's lives, namely secure attachment relationships, education, friendships, talents and interests, positive values and social competencies, can help practitioners to appraise and identify ways to strengthen their resilience (Bostock, 2004; Daniel, Wassell, & Gilligan, 2010). For children and young in the care system, it is not always immediately obvious that they have a secure base in the world. Living in residential care may mean that fragile relationships have been broken, and some never recover (Gilligan, 1998).

Resilience research identifies three core components that build resilience and help young people succeed: caring relationships, high expectations, and opportunities for participation and contribution. Numerous studies show that caring relationships are the most critical factor in promoting a healthy and successful development for young people even in the face of multiple risks (Benard, 2012).

In a study of institutionalized children and young people, Cordovil, Crujo, Vilarica and Caldeira (2011) identified resilience factors that seem to have greater importance for the protection of children and young people, such as positive self-esteem, talents recognized by others and cognitive skills. They concluded that males had more psychopathology and fewer resiliency factors when compared to females.

Professionals who work in the children's homes play an important role by supporting caring relationships, ensuring positive experiences, and promoting the self-concept of competence of children and young people in the foster care system. Childcare professionals can make the difference and they are seen as key to successful development of children (Bostock, 2004; Collins, Spencer, & Ward, 2010).

Taking into account the context describe above, the aim of this study is to analyze the relations between resilience and the self-concept of competence in institutionalized and non-institutionalized youth. We intend to analyze the resilience and self-concept of competence in institutionalized young people, comparing them with a group of young people living with their families.

## **METHOD**

### **Participants**

This study is exploratory, cross-sectional, and descriptive establishing a comparison between two groups and following a predominantly quantitative methodology (Cohen, Manion, & Morrison, 2007). The research was conducted in southern Portugal, involving young people living in residential care. The sample was collected in five children's homes for children and young people, and young people living with families, aged between 15 and 18 years old. These institutions welcome children and young people of both sexes up to 18 years, who were previously living in dangerous situations, and who were institutionalized.

These children and young people had been away from their original families for more than six months as a measure of protection. The young people living in families were selected from a state school in the area for easy access (the principal investigator was developing an advisory and consultancy project in that school; thus, the data collection was authorized by the school director). The inclusion criterion was that they should be living with their families.

The sample is non-probabilistic, for convenience and included 158 participants, (females:  $n = 77$ ; males:  $n = 81$ ), aged between 15 and 18 years old ( $M = 16.36$ ;  $SD = 1.13$ ). The sample consists of two sample groups: 76 are institutionalized, and originate from five institutions, belonging to the national network of homes for the care of children and young people danger; while the remaining 82 young were living with their families.

### **Instruments**

#### *Personal Data Questionnaire and Socio-Demographic*

The questionnaire consists in a set of items related with socio-demographic data. Two versions of the questionnaire had been produced: one for institutionalized young people, intending to collect specific data about personal, familiar, institutional and school context; and the other for young people living with their respective families, which aims to collect the data relative to personal, familiar and school context.

*Healthy Kids Resilience Assessment Module (HKRAM)*

The HKRAM was developed by Constantine and Benard (2001), and adapted to Portuguese context by Martins (2005). The scale consists of 58 questions, which assess 17 protective factors and traits of resilience, namely external and internal Assets. External factors are the School Environment, Home Environment, Community Environment and Peer Environment. Internal factors are the Cooperation and Communication, Self-Efficacy, Empathy, Problem solving, Self-awareness, and Goals and Aspirations. There is also a group that evaluates important aspects related to resilience (Response-Set Breakers). The items are organized in a questionnaire in the form of four-points Likert subscales. The first subscale is on a continuum between Strongly Disagree, Disagree, Agree and Strongly Agree. In the remaining subscales the respondent must choose to answer on a continuum between Totally False, a Little False, Right and Very Right. The scale achieved excellent internal consistency ( $\alpha = .93$ ) in its adaptation to Portuguese (Martins, 2005). The internal consistency in this study was excellent for both samples of institutionalized youth ( $\alpha = .92$ ) and non-institutionalized youth ( $\alpha = .90$ ).

*Self-Concept Competence Scale (SCCS)*

The Self-Concept Competence Scale (SCCS) was developed by Rätty and Snellman (1992), and adapted for the Portuguese context by Faria and Lima Santos (2004). The scale consists of 31 items, each rated on a five-point Likert scale, in which 1 - Totally Disagree, indicates a low self-concept of competence, and 5 - Totally Agree indicates a high self-concept of competence, reflecting the degree to which each individual self-characterizes itself in each field of competence. The SCCS items are organized into three dimensions: Cognitive, Social and Creativity. The first dimension includes three sub-scales called: (1) Resolution of problems, assessing the perception of competence in the field of cognitive learning, problem solving and applying knowledge to practice; (2) Sophistication in Learning, which assesses the perception of competence in the field of investment and motivation in learning; and (3) Prudence in Learning, which assesses the perception of competence in the field of accuracy and depth in learning. The second dimension comprises two sub-scales: (4) Social Assertiveness, which assesses the perception of competence in the social area, especially the ability to express opinions, make new acquaintances and initiate actions; and the sub-scale (5) Social Cooperation, which assesses the perception of competence in the field of cooperation with others. The third dimension formed by the sub-scale (6) Divergent Thinking, which assesses the perception of competence linked to creativity. The internal consistency scale achieved good results ( $\alpha = .80$ ). The internal consistency in this study was also good for both samples of institutionalized youth ( $\alpha = .85$ ) and non-institutionalized youth ( $\alpha = .82$ ).

*Life Event Checklist (LECL)*

The Life Event Checklist (LECL) was developed by Werner and Smith (1992), and adapted to Portuguese context by Abreu and Xavier (2008). It consists of a list of 32 stressing events, such as the loss of family members, economic conditions, job loss among others. The application of this instrument allows an evaluation of risk. More than four stressing events throughout the life of an individual point to a risk status (Meiros & Xavier, 2010).

**Procedure**

Data collection was conducted among a group of young people living in children's homes and young people living with their respective families and attending state schools. An authorization for data collection was made to the children's home directors and to the school director. The school director distributed the application for cooperation to parents, requesting their authorization so that their children could participate in the study. If so, the informed consent should be signed.

To observe the ethical standard principles, the researcher informed all participants of the objectives and relevance of the study. Participants, their guardians (technical directors) and parents provided their informed consent to participate in the study. The principle of confidentiality of information was observed and the participants were assured their names would not be mentioned in any stage of the study. All documents related to the participants were kept in a designated folder in a safe place. The right to opt out of the study was offered with no restrictions for the participants. They were also reassured that they would not be affected by their statements and that all their remarks would remain confidential.

The set of instruments were applied in a single session and were self-administered and the response time was on average, 40 minutes. The application took place in the classroom context, in a meeting room, with the presence of one of the researchers and in a private room in the children's homes. The processing of the questionnaires' application took place between October 2015 and February 2016.



After collecting the questionnaires, statistical processing was performed using IBM SPSS (version 22.0). To analyze the data, a descriptive analysis was carried out in order to characterize the sample concerning all the variables. To establish associations between independent and dependent variables, inferential statistics was applied. The t-test was used for independent samples to compare differences between females and males, as well as the non-parametric Mann-Whitney Test to analyze associations between ordinal variables. Pearson's correlations were also used to verify the associations between dependent variables. The significance level established was  $p = .05$  (Cohen, Manion, & Morrison, 2007).

## RESULTS

### Healthy Kids Resilience Assessment Module - HKRAM

Regarding the total resilience (HKRAM), no significant differences were found between the institutionalized ( $M = 2.91$ ,  $SD = .38$ ) and non-institutionalized young ( $M = 2.98$ ,  $SD = .33$ ), despite the group of non-institutionalized presents a slightly higher average ( $t = 1.12$ ,  $p = .263$ ) (Table 1).

For the HKRAM variables, it is emphasized that the resiliency characteristics, operated through the Internal Assets, proved to be significantly different between the two groups ( $t = 2.76$ ,  $p = .007$ ), showing that the average is higher in the group of non-institutionalized young people.

A more detailed analysis allows one to find statistically significant differences in Cooperation and Communication ( $t = 2.71$ ,  $p = .008$ ), Self-efficacy ( $t = 2.85$ ,  $p = .006$ ) and in Goals and Aspirations ( $t = 3.91$ ,  $p < .001$ ). The observed differences show a similar trend, and the non-institutionalized respondents have a higher average, particularly marked in Goals and Aspirations.

**Table 1.** Differences in the resilience in the two groups – HKRAM.

	Institutionalized ( <i>n</i> = 76)		Non-institutionalized ( <i>n</i> = 82)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Total External Assets	2.89	.42	2.96	.40	.98	.327
School Environment	2.93	.50	2.70	.49	2.52	.013
Home Environment	3.00	.65	3.17	.63	1.47	.144
Community Environment	2.83	.55	3.00	.67	1.52	.130
Peer Environment	2.80	.53	2.98	.50	1.88	.062
Total Internal Assets	2.76	.48	3.18	.38	2.71	.007
Cooperation and Communication	2.78	.61	3.05	.52	2.71	.008
Self-Efficacy	2.86	.74	3.19	.47	2.85	.006
Empathy	3.03	.60	3.21	.64	1.57	.118
Problem-solving	3.08	.75	2.96	.86	.89	.376
Self-awareness	3.10	.71	3.23	.62	1.05	.294
Goal and aspirations	2.98	.78	3.46	.64	3.91	.001
Response Set-Breakers	2.87	.42	2.80	.45	.87	.385
Total Resilience	2.91	.38	2.98	.33	1.12	.263

Despite not having found statistically significant differences between the two groups for protective factors (External Assets), it was possible to conclude that for the group of institutionalized youth, the average School Involvement is significantly higher ( $M = 2.93$ ,  $SD = .50$ ) and the mean Involvement with Peers Group is marginally lower ( $M = 2.80$ ,  $SD = .53$ ). Finally, there were no statistically significant differences in the average of the Response Set Breakers between the two groups ( $t = .87$ ,  $p = .385$ ).

Analyzing the three general indicators of resilience of this scale, it is found that in both groups, the resiliency traits (Internal Assets) are the most valued, followed by external protective factors (External Assets) and, finally, the Response Set Breakers.

### Self-Concept Competence Scale

Regarding the self-concept of competence, it was observed that the group of non-institutionalized young had a higher average ( $M = 3.58$ ,  $SD = .52$ ) and that the mean was significantly different between non-institutionalized and institutionalized respondents ( $t = 2.96$ ,  $p = .004$ ) (Table 2).

**Table 2.** Differences in Self-Concept Competence in the two groups.

	Institutionalized ( <i>n</i> = 76)		Non-institutionalized ( <i>n</i> = 82)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Resolution of Problems	3.27	.76	3.62	.60	.29	.004
Sophistication in learning	3.01	.88	3.30	.76	1.99	.049
Prudence in learning	3.03	.90	3.36	.73	2.32	.022
Social Assertiveness	3.46	.78	3.74	.64	2.27	.025
Social Cooperation	3.53	.81	3.98	.67	3.45	.001
Divergent Thinking	3.24	.89	3.47	.76	1.60	.113
Self-concept of competence	3.26	.72	3.58	.52	2.96	.004

The analysis of the six subscales shows that they all have the same trend, with the average always being higher in the group non-institutionalized young, except in the subscale of Divergent Thinking, in which there was no statistically significant difference ( $t = 1.60, p = .113$ ) (Table 2).

### Life Event Checklist

The analysis of results shows that, for non-institutionalized young people, the more significant stressful life events are school failure (43.9%); parent divorce (41.5%); school change (34.1%); prolonged absence of the father (30.5%); home moving (29.3%); the support of social assistance services (25.6%) and financial problems (20.7%). The experiences less commonly reported were the death of a brother (1.2%); being a victim of home abuse (1.2%); alcoholic mother or mental illness (1.2%) and being involved with the services of the Children and Youth's Protection Commissions (1.2%) (Table 3).

**Table 3.** Life Event Checklist Results - Non-institutionalized group.

Life Event	<i>f</i>	%
School failure	36	43.9
Parent divorce	34	41.5
School change	28	34.1
Prolonged absence of the father	25	30.5
Home moving	24	29.3
The support of social assistance services	21	25.6
Financial problems	17	20.7
Mother's job loss	15	18.3
Father's job loss	8	9.8
Mother's severe illness	6	7.3
Young disease	6	7.3
Father's severe illness	6	7.3
Mother's prolonged absence	5	6.1
Problems with the justice	4	4.9
Alcoholic father	4	4.9
Rejection problems in class	4	4.9
Severe family discord	4	4.9
Bullying at school	4	4.9
Problems with the use of substances (drugs / alcohol)	3	3.7
Brother or sister with disabilities	2	2.4
Death of father	2	2.4
Death of brother or sister	1	1.2
Victim of home abuse	1	1.2
Mother alcoholic mother or mentally illness	1	1.2
Accompaniment by the Children and Youth's Protection Commissions	1	1.2

With reference to the criteria proposed by the authors (four or more stressors events throughout the individual's life point to a risk status) most non-institutionalized young respondents are not at risk (62.2%,  $n = 51$ ).

### Relations between resilience, self-concept competence and gender

The results show that in the institutionalized group the average of the subscales of the School Involvement ( $t = 2.66, p = .010$ ) and Family Involvement ( $U = 199.5, p = .033$ ) (External Assets - protective factors) are statistically higher in females.

Considering also the institutionalized young people, significant differences were observed in two factors for the resilience traits, particularly in the Internal Assets, concluding that the average in Empathy is higher in females ( $U = 189.0, p = .017$ ), while the average of the Problem Solving is marginally higher in males ( $U = 211.5, p = .055$ ).

In the sample group of non-institutionalized young, regarding protective factors, the only significant differences are in Involvement with Peers Group ( $t = 2.26, p = .027$ ), whereby female respondents have a higher average. It was possible to find significant differences in Internal Assets ( $t = 2.33, p = .022$ ), and it was observed that the average in female respondents is higher. The same trend was found in the factors Empathy ( $t = 2.07, p = .042$ ), Problem Solving ( $t = 1.86, p = .067$ ), and Goals and Aspirations ( $t = 1.90, p = .061$ ), the differences being statistically significant in the first case and marginally significant in the second.

The analysis shows that gender does not seem to significantly influence the self-concept of competence. Only marginally significant results were found in the subscale of Cooperation and Communication ( $t = 1.88, p = .067$ , and  $t = 1.93, p = .057$ ), and in this case it can be concluded that whether institutionalized or not, the average of the young females is higher.

### **Age, school grade and school retentions**

Age also does not seem to reveal any statistically significant association with resilience, regardless of respondents being institutionalized or not. The influence of school grade on resilience appears to be minimal. In short, the only statistically significant correlations found between the school grade and resilience were in the factors Cooperation and Communication ( $r = .421, p < .01$ ), and Goals and Aspirations ( $r = .516, p < .01$ ), in the group of institutionalized youth. In this group, there is a correlation of moderate magnitude, i.e. institutionalized youths have higher values in the Cooperation and Communication and the goals and aspirations, as the level of education increases.

Finally, when the analysis involves the variable school retentions (number of years), it is possible to conclude that, in institutionalized young people, in general, a greater number of retention is significantly associated with lower levels of resilience ( $r = -.357, p < .05$ ). Specifically, in this group, the protective factors, External Assets ( $r = -.364, p < .05$ ), Internal Assets ( $r = -.441, p < .01$ ) and the Response Set Breakers ( $r = -.397, p < .01$ ) are negatively associated (moderate magnitude effect) with the number of years of school retention.

In the group of non-institutionalized young, the number of years of school retention are significantly negatively correlated (low magnitude) to the factor Goals and Aspirations ( $r = -.273, p < .05$ ) and the Response Set Breakers ( $r = -.245, p < .05$ ).

It is also found that, regardless of being institutionalized or not, age seems to have no statistically significant association with self-competence. However, when the analysis focuses on the possible influence that the grade attended may have on the self-competence, positive associations in institutionalized respondents were found, namely in the Total scale ( $r = .312, p < .05$ ) and in the subscales of Sophistication and Learning ( $r = .351, p < .05$ ) and Prudence in Learning ( $r = .373, p < .01$ ) (weak magnitudes).

In general, it can be concluded that in this group of respondents, the self-concept of competence tends to be higher when the grade attended in school is more advanced. Finally, since a statistically significant correlation was only found when involving the number of years of school retention, in particular in the subscale Learning Sophistication ( $r = -.263, p < .05$ ) and only in the group of non-institutionalized young, it was concluded that the number of years of school retention does not seem, in this sample, to influence the self-concept of competence.

### **Home visits**

It is possible to observe that, notwithstanding the average of the results of resilience (HKRAM) being slightly higher in respondents who visit their respective families (with the exception of the factor Self-efficacy), these differences were not statistically significant ( $U = -.85, p = .395$ ). Similarly, statistically significant differences were also not found in the self-concept of competence and the home visits ( $t = .13, p = .894$ ).

### **Relations between resilience, self-concept competence (institutionalized youths)**

When considering the institutionalized young people, the data suggests that there is a positive correlation (strong magnitude) between the resilience (HKRAM) and the self-concept of competence ( $r = .712, p < .05$ ), i.e., as the resiliency traits are most accentuate, the self-concept of competence also tends to be higher, or vice versa (Table 4).

**Table 4.** Relations between Resilience and Self-concept competence (institutionalized group).

	Total HKRAM	External Assets	Internal Assets	Response Set-Breakers	Total Self concept of competence
Total HKRAM	-	.897**	.895**	.812**	.712**
External Assets	.897**	-	.794**	.593**	.584**
Internal Assets	.895**	.794**	-	.548**	.785**
Response Set-Breakers	.812**	.593**	.548**	-	.460**
Total Self concept of competence	.712**	.584**	.785**	.460**	-

### Relations between resilience, self-concept competence and risk status (non-institutionalized youths)

Analyzing the relationship between resilience, self-concept of competence and the risk status, in relation to the non-institutionalized young people, one can conclude that resilience (HKRAM) is significantly and positively correlated with the self-concept of competence ( $r = .486, p < .05$ ), i.e. there was a tendency to self-concept of competence to be higher to the extent that the resilience is also higher, or vice versa.

In particular, this effect is more prevalent when it involves resilience characteristics (Internal Assets), and the magnitude of effect observed is moderate ( $r = .612, p < .05$ ); in the case of protective factors (External Assets) and Response Set Breakers, the observed magnitudes are relatively weak ( $r = .329, p < .05$ ; and  $r = .268, p < .05$  respectively). There is no evidence that the risk status may have any association with the resilience and self-concept of competence.

### DISCUSSION

Comparing the results obtained, either in respect to resilience or to the self-concept of competence, there were no significant differences between the institutionalized young people and non-institutionalized. Despite no significant differences in the two sample groups, both present good results; the non-institutionalized young people present somewhat higher values. These data suggest however, that these institutionalized youth present protective factors in their lives. In fact, although the problems associated with institutionalization, it should be mentioned that these institutionalized young present values of resilience and self-concept of competence within the satisfactory range.

Several studies indicate that resilience processes can develop when there is a support network, such as support teams and professionals in the institutions and in school (Tomazoni & Vieira, 2004). Professional's psychosocial support may contribute to the development of the ability to deal with adversity, promoting resiliency features and an adaptive development (Ocasio, Staats, & Van Alts, 2009; Rutter, 2006; Siqueira & Dell'Aglio, 2007).

The results suggest that these young people probably found in the institution a secure base through which they feel a sense of belonging and security, developed a good self-esteem, an internal sense of worth and competence, self-efficacy, sense of mastery and control, along with an accurate understanding of personal strengths and limitations (Gilligan, 1997).

Regarding the variable self-concept of competence, the data reveal that there are significant differences between the groups, with the non-institutionalized young having a higher self-concept of competence. Taking as reference the scientific literature, the self-concept of competence is largely influenced by the individual experience, as well as the identification to primary caregivers. It can be inferred that institutionalized young people seem to have a more fragile self-concept, which is corroborated by the study developed by Chapman, Wall and Barth (2011). In this context, the study from Baia (2009) may also be referred to, wherein the non-institutionalized young group has a higher self-concept of competence when compared to the group of institutionalized young. These data point to the need for the institutions to promote the development of resilience and self-concept of competence.

Analyzing the relationship between resilience and socio demographic variables, it appears that for the gender variable in the group of institutionalized youth, the average result from the School Involvement and Family Involvement are significantly higher for the female gender. Nevertheless, there are some controversies regarding the variable gender as protection factor in adolescence (Rutter, 2006), the results from the current study seem to indicate that this sample may also show this trend.

Significant differences were observed in two factors for the resilience traits (Internal Assets) in the institutionalized group of youth. Specifically, it was found that on average Empathy is higher in female subjects, while the average of the Problem Solving is marginally higher in males. For these results, the hypothesis can be in accordance with some scientific literature that girls seem to be more sensitive and able to put themselves in another person's place, showing better results in empathy, while boys seem

more concerned with external situations, thus revealing higher results in their problem solving skills (Rueckert, 2011). Indeed, the issue of higher empathy in females is also referred to by Benard (2012).

Considering the protective factors for non-institutionalized young, significant differences were only found in Peers Group Involvement, in which the female respondents had a higher average. The same results were found in the study of Silva (2009) and the average of affective relations in the female group is significantly higher than in the male group.

With regard to resilience traits in the non-institutionalized youth group, significant differences were found in the Internal Assets, and it was observed that the average for the female gender is higher. The same trend was found for the Empathy, Problem Solving and in Goals and Aspirations. The differences are statistically significant in the first case and marginally significant in the other. The results obtained by Silva (2009) are similar, revealing that the average female group is significantly higher than the male group in the following factors: Cooperation and Communication, Empathy and Problem Solving.

Taking into account the variable age, regardless of young people whether or not institutionalized, it appears that age does not seem to have any statistically significant association with resilience. It should be noted that some researchers suggest that age might be a protective factor for resilience (Constantine & Benard, 2001; Daniel, 2007; Havlicek, 2011; Martins, 2005). However, the results obtained in this study can be justified by the fact that young people are aged between 15 and 18 years old, and do not exist a great variability in relation to developmental tasks of this stage of the life cycle.

Regarding the influence that the grade attended may have on resilience, the study only found statistically significant correlations between attended school year and the factors Cooperation and Communication and Goals and Aspirations, and this only occurred in the group of institutionalized young people.

In short, in this group there is a moderate tendency for the Cooperation and Communications whereas Goals and Aspirations presented higher results, insofar as the scholar grade attended is more advanced. This result is interesting since that institutionalized young people will have to put into action all the means at their disposal, cooperating and communicating with others and setting goals for their life, in order to overcome the adversities they face in their lives.

Similarly, the results of Baia (2009) support these findings. This study showed that regardless of young people being institutionalized or not, students with more qualifications will have more effective mechanisms for successful adaptation to risk factors. These data also seems to agree with the theory of resilience which argues that the grade attended and age seems to predispose people to develop a greater ability to overcome difficulties (Daniel, 2007; Leve et al., 2012; Rutter, 2006).

When the analysis involves retentions in school, it is possible to conclude that, in institutionalized young people, in general, a greater number of years of retention is significantly associated with lower levels of resilience. Specifically, it was observed in this group that External Assets (protective factors), Internal Assets (resilience traits) and the Response Set Breakers are negatively associated (moderate effect magnitude) to the number of years of school retention. These results are corroborated by Cicchetti (2013), who states that the academic achievement and school success are associated with greater resilience. Ungar and Liebenberg (2013) similarly explore the importance of contextual factors, including external resources and involvement in the community, as protective factors in resilience and school success.

In the group of non-institutionalized young people, the number of years of school retention seemed to be significantly and negatively correlated with the Goals and Aspirations and the Response Set Breakers (low magnitude).

Analyzing the relationship between self-concept of competence and socio demographic variables, it appears that the variable gender does not seem to significantly influence the self-concept of competence. In fact, marginally significant results were only found in subscale of Social Cooperation. Thus, it can be concluded that regardless of young people whether being institutionalized or not, the female mean is higher than that of the males. These results corroborate those obtained by Magalhães et al. (2003), who reported that the girls are more competent in terms of social cooperation. The same was also observed in the study from Faria (2002).

The variable age, regardless of being institutionalized youth or not, shows no statistically significant association with self-competence. However, these findings are contradict by the scientific literature, since according to Faria (2002), increasing age tends to promote greater knowledge about oneself.

When analyzing the influence that the grade attended has on self-competence in the institutionalized young, positive associations were found in the total scale and the subscales of Sophistication and Learning, and Prudence in Learning, but this was relatively small.

In general, it seems reasonable to conclude that, in the group of institutionalized youth, the self-concept of competence tends to be higher as the grade attended is more advanced. In fact, the literature indicates that young people in higher education have higher development levels of identity. These results are corroborated by those obtained by Faria (2002), who also found differences regarding the cognitive dimensions Prudence in Learning, and Sophistication and Learning, and with the social dimension of Assertiveness, which reveals that, as young people develop, they acquire greater self-confidence in their abilities.

Concerning the school retention factor, a significant correlation was found in the group of non-institutionalized youth, in particular for the subscale Sophistication and Learning.

Results indicated that institutionalized youth show lower results in the characteristic of resilience, particularly in the Internal Assets, with statistically significant differences in Cooperation and Communication, Self-efficacy, and Goals and Aspirations. In these cases, similar trend differences have been observed, i.e., non-institutionalized young exhibit higher means, which are especially pronounced in the Goals and Aspirations factor. These results corroborate those obtained by Baia (2009), and by Collins, Spencer and Ward (2010), which reveal that young people living in children's homes have more fragile motivation as well as their goals and expectations. In this sense, as Sullivan, Jones and Mathiesen (2010) defend, a good coordination is necessary between professional staff within institutions, i.e., it is important that multidisciplinary teams can act to reduce the negative effects and respond appropriately to the needs of these children and youth.

Concerning the protective factors (External Assets), and despite not having found statistically significant differences between the two groups compared, it is possible to conclude that in the group of institutionalized youth, the average School Involvement is significantly higher and the average Peers Group Involvement is marginally lower.

This appreciation of the School Involvement can be explained by the need that these young people have to link up to significant people, attending to their emotional needs and emotional fragility, and that the school and teachers can play a protective role and become a resilience factor.

In the study from Silva (2009), with institutionalized youth, although higher average has been attained on Family Involvement factor, followed by Community Involvement, the less perceived external protective factor was, as in the current study, the Involvement with Peers Group.

Although in the literature it is considered that the peers play an important role in adolescent life, institutionalized youth of this sample report more adults as protective factor than the peer group. Thus, the fact that institutionalized young people value more the school involvement than the non-institutionalized youth seems to make sense, because, according to Raviv et al. (2010), the school community can contribute to strengthen the resilient process of adolescents, who find compensatory identification figures in school.

In analyzing the three general resilience indicators, it can be seen that in both groups the highest average is found in Internal Assets, followed by External Assets, and, finally, in the Response Set Breakers. These results indicate that internal resilience factors are those most valued by young people. The same results were found in studies of Baia (2009) and Silva (2009). This trend is also supported by Collins, Spencer and Ward (2010) and Gilligan (1998).

With regard to the various dimensions of Self-concept Competence, it was observed that the averages are higher in the group of non-institutionalized young, except in the subscale of Divergent Thinking (dimension creativity), which did not show significant differences between the two groups.

The results obtained in the current study are relevant and raise many questions related to the development of institutionalized youth. Although it can be said that these young people are resilient in all areas of their life, what is certain is that, despite this, the competence of self is more fragile than that of their peers. These results corroborate those obtained by Baia (2009). The averages are higher in young people living with their families, in relation to first the social dimension, then the creativity dimension and, finally, the cognitive dimension.

In order to determine the relationship between home visits, on one hand, and the resilience and self-concept of competence of institutionalized youth, on the other hand, it was found that, despite the average resilience being somewhat higher in young people visiting family (with the exception of Self-efficacy), these differences were not statistically significant. These results, though the differences are not significant, point to the importance of the family, since young people that often go home have more resilience mechanisms and self-concept of competence. These mechanisms allow them to deal more effectively with the difficulties they face in their lives (Rutter, 2006). The results of the current study are also supported by the constructivist theory of resilience, which defends the relevance and role of the family involvement and emotional relationships for the development of resilience (Constantine & Benard, 2001; Daniel, 2003, 2007; Masten & Powell, 2003; Rutter, 2006).

In this context, according to the theory of resilience, even when the family as a whole does not perform their duties properly, provided that at least some family members meet the needs of children and young people, this will eventually work as a protective mechanism and resilience factor (Rutter, 2006).

The analysis of the relationship between home visits and the competence of self-institutionalized young people shows no statistically significant differences. These results are contrary to those obtained in the study of Baia (2009) in which young people who used to visit the family home have higher levels of competence of self, suggesting that the family may hold an important role in development of competence of self.

The analysis of the relations between Resilience and Competency Self-concept in institutionalized young people shows a strong positive correlation; that is, as the resilience is greater, also the competence of self tends to be higher, or vice versa. These results are corroborated by scientific literature, which supports the existence of a relationship between resilience and self-concept of competence, since the resilient subjects present behaviors and skills similar to those subjects who perceive themselves as competent (Benard, 2012; Ocasio, Staats, & Van Alts, 2009).

The analysis of the relationship between resilience, self-concept of competence and risk status, leads to conclude that in the group of non-institutionalized youth, resilience is significantly and positively correlated with the self-concept of competence; i.e., the higher the perception of resilience, the greater the perceived competence of self, or vice versa. This effect is most noticeable when it involves resilience traits (Internal Assets), where the strength of the observed effect is moderate; in the case of protective factors (External Assets) and Response Set Breakers, the strengths are relatively weak. The same trend is observed in the study of Baia (2009), who also found a significant correlation in institutionalized young people, suggesting that the higher the self-concept of competence, greater, the resilience.

It was found that, with non-institutionalized young, stressful life events are more common and likely to put them at higher risk. The most salient life events reported were the school failure, parents' divorce, school change, the prolonged absence of the father, home moving, the support of social assistance service and financial problems.

In the study of Meireles and Xavier (2010), results were similar and the most stressful life events were the absence of the mother or father, school problems in the past, school failure and retention, financial difficulties and mistreatment. Results have shown no evidence that these risks may be associated with resilience and self-concept of competence, at least in this sample.

The results showed no significant differences between the two groups in terms of resilience. Despite of that the non-institutionalized sample revealed higher scores on the self-concept of competence and there is a strong positive correlation between resilience and self-concept of competence amongst the institutionalized sample.

It is important to emphasize that there are differences between the institutions and even within institutions in the care provided. Despite that, according the constructivist perspective of resilience, the results from this study allow us to conclude that it is crucial to develop strategies and mechanisms for the development of resilience in care institutions. When the rights to protection, provision and participation in a holistic and multi-agency setting are met, it is possible to say that these factors reduce vulnerability, increase resilience and promote the development of self-concept of competence in institutionalized young.

Several limitations to this study can be identified when interpreting the results. First, the size of the sample makes it impossible to generalize from the results obtained. Secondly, the cross-sectional design of the study prevents the identification of causal relationships between the variables. Finally, the resilience assessment tool is not specifically adapted for institutionalized youth, and also the exclusive use of self-report measures poses some limitations, as to the effect of social desirability. Future studies should take into account these limitations and focus on studying the impact long-term institutionalization.

Results of this study should be viewed as a contribution to a better understanding of these issues. When young people develop resilience and self-concept of competence, they are able to cope with, adapt to, and recover from even the most substantial challenges. Developing resilience and self-concept of competence is markedly essential for young people living in residential care and for them to grow and succeed as adults.

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## Flow experience, attentional control, and emotion regulation: contributions for a positive development in adolescents

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**Abstract:** Research has shown that optimal experiences lead to positive development outcomes. Adolescence is a critical period for the engagement in daily optimal experiences, namely, flow experience, since it is a period of experimentation and definition of interests. Adolescents are more willing to attend new challenges and develop new skills, finding more opportunities within contexts to develop engaged and happy lives. In this article, we review the major findings of the impact of flow experience in adolescents' lives and positive development, and the individual and contextual factors associated with this psychological state of consciousness. We specifically relate attentional control and emotion regulation concepts to flow experience. We discuss the possible link between flow and these self-regulation abilities and its potential for positive adolescent development. Finally, we make some conclusions and suggest new lines for future research concerning predictors of flow experience within a social and ecological framework.

**Keywords:** Flow experience; Attentional Control; Emotion Regulation; Adolescents; Positive Development.

**Experiência de flow, controlo atencional e regulação emocional: contributos para o desenvolvimento positivo de adolescentes:** A investigação tem demonstrado que as experiências ótimas promovem o desenvolvimento positivo. Sendo a adolescência marcada pela experimentação e definição de interesses, é também um período crucial para a ocorrência de experiências ótimas na vida diária, concretamente, a experiência de Flow. Os adolescentes estão mais propensos a procurar desafios e desenvolver novas competências nos vários contextos, emergindo assim a possibilidade de experienciarem Flow e desenvolverem vidas bem-sucedidas. O presente artigo apresenta uma revisão dos principais resultados da investigação acerca dos fatores individuais e contextuais associados à experiência de Flow e do impacto desta na vida dos adolescentes. Especificamente, o artigo discute as possíveis relações entre o Controlo Atencional, a Regulação Emocional e a experiência de Flow, e a importância destes para o desenvolvimento positivo dos adolescentes. Adotando uma perspetiva social e ecológica, o artigo apresenta conclusões e sugere novas linhas de investigação futura acerca dos preditores da experiência de Flow.

**Palavras-chave:** Experiência de Flow; Controlo Atencional; Regulação Emocional; Adolescentes; Desenvolvimento Positivo.

A positive developmental approach to the study of adolescence brings the possibility to unveil processes and mechanisms of what constitute an optimal functioning in teenage years, which can eventually be applied to those who are not living satisfactory and enriching lives (Rich, 2003). This positive emphasis adds to the problem and risk perspective a new way of conceptualizing development and brings some changes in what constructs should be the target of research and intervention (Tolan, 2014).

Flow experience appears as one central construct for research about adolescents' optimal and positive development. Flow experience is defined as an optimal psychological state characterized by a profound absorption, total concentration, enjoyment and intrinsic motivation in the activity (Csikszentmihalyi, 1990). Csikszentmihalyi (1975, 1990) studied the flow concept extensively and its relationship with adolescents' well-being, psychosocial adjustment and academic achievement (Csikszentmihalyi & Larson, 1984).

Literature has been trying to identify the factors that contribute to the occurrence of flow experience in adolescence. Cognitive, emotional, motivational and social variables, along with contextual factors have proven to be important for the occurrence of flow experience (Schmidt, Shernoff, &

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Csikszentmihalyi, 2007). However, there is still a lack of research on this area, especially regarding the role of individual self-regulation abilities.

Adolescence is a developmental period marked by major changes in the way adolescents control their thoughts, emotions, and behaviors. Thus, self-regulatory abilities are of extreme importance at this age, since they represent one of the mechanisms through which adolescents can successfully face the challenging tasks of the teenage years (Steinberg, 2005).

Attentional control and emotion regulation are at the core of self-regulation abilities (Raffaelli, Crockett, & Shen, 2005). Attentional control is defined as the capacity to consciously and voluntarily regulate one's attention, focusing and switching attention when needed (Derryberry & Reed, 2002). Emotion regulation refers to the individual ability to use a set of processes to regulate emotions (Gross, 1998). Researchers have consistently associated these two constructs with the onset and maintenance of various psychological disorders in adolescence (Chaplin & Cole, 2005; Muris, Van Der Pennen, Sigmond, & Mayer, 2008; Racer & Dishion, 2012; Southam-Gerow & Kendall, 2002). However, in recent years, empirical evidence showed that attentional control and emotion regulation are also positively associated with indicators of well-being and positive functioning (Gross & John, 2003; Gumora & Arsenio, 2002; Kuhnle, Hofer, & Kilian, 2012; Teixeira, Silva, Tavares, & Freire, 2015; Vasey, Harbaugh, Mikolich, Firestone, & Bijttebier, 2013).

The aim of this paper is to present the constructs of flow experience, attentional control, and emotion regulation, how they interact and how they contribute to positive and optimal development in adolescence.

We organized this paper into five parts. First, we present the conceptual framework of flow experience and the impact of this experience on adolescents' lives and developmental trajectories. We also review the major findings of person-level characteristics and the internal and external dimensions of experience associated with flow experience. Then, in a second and third part respectively, we focus specifically on attentional control and emotion regulation, presenting the concepts and their relation to psychological disorders and positive adolescent development. We review the literature concerning the relation of each one to flow experience. In a fourth part, we discuss the possible link between all these three concepts with the flow theory as background and within a positive developmental approach. Finally, we make some conclusions and point toward new directions for research on adolescence and optimal development.

## **FLOW EXPERIENCE**

In the last decades, more researchers had become interested in studying the positive (rather than negatives) aspects of adolescent functioning and how these relate to positive youth trajectories and developmental outcomes (Rich, 2003). Embracing the idea that adolescents are producers of their development (Larson & Tran, 2014; Lerner, 1982; Seiffge-Krenke, Kiuru, & Nurmi, 2010), it becomes relevant to know how adolescents positively address the wide range of developmental challenges they face in their daily lives.

The study of the quality of subjective experience during teenage years has grown as an important issue to deepen the knowledge about adolescent daily functioning from an ecological perspective (Csikszentmihalyi, Larson, & Prescott, 1977; Schmidt et al., 2007). Investigating subjective experience had brought interesting possibilities for learning more about interactions among adolescents and their contexts in their daily lives (Bassi & Delle Fave, 2004; Csikszentmihalyi & Larson, 1984). It also has informed about opportunities and constraints for reaching an optimal functioning (Swann, Keegan, Piggott, & Crust, 2012), particularly, for adolescents attaining optimal psychological states when involved in daily activities (Choe, Kang, Seo, & Yang, 2015).

The concept of flow experience was introduced by Csikszentmihalyi (1975) to represent those moments of optimal psychological functioning where everything in the person seems to 'flow' in a natural and synchronized way. People who experience a state of flow report a loss of self-consciousness and a total focus on the activity, feeling that inner sensations, rules, goals, challenges, and feedback are interacting smoothly and orderly. When in a flow state, individuals function at their fullest capacity in an effortless and enjoyable manner (Csikszentmihalyi, 1990).

Flow theory postulates that flow experience has six dimensions: a) an intense and focused concentration; b) a merging of action and awareness; c) a sense of being in control; d) a loss of self-consciousness; e) a sense of distortion of time and f) intrinsic motivation while engaged in the activity. For entering into a flow state, three pre-conditions must be met: a balance between perceived high challenges and high skills, clear goals for the activity and immediate feedback (Nakamura & Csikszentmihalyi, 2002). Research has shown that individuals can experience flow in all kind of activities and contexts (Csikszentmihalyi, 1997) and that people from different cultures describe the experience of

flow in a similar way (Delle Fave & Massimini, 2005; Massimini, Csikszentmihalyi, & Delle Fave, 1988).

The conceptual flow model, which researchers have refined over the years (Csikszentmihalyi, 1975; Delle Fave & Massimini, 2005; Massimini & Carli, 1988), considers that to reach a flow state and to have an enjoyable experience, challenges and skills must match at a higher level than the individual average. Flow is a dynamic state: a shift in this challenge-skill balance modifies subjective experience and gives rise to other subjective states. The initial Four Channel Model (Csikszentmihalyi, 1975), operationalizes four different subjective experiences: flow (high challenges, high skills), anxiety (high challenges, low skills), relaxation (low challenges, high skills) and apathy (low challenges, low skills). Regarding the quality of experience, flow corresponds to an optimal experience whereas apathy is the worst daily experience individuals can have (Csikszentmihalyi & Csikszentmihalyi, 1988). An Italian research team refined the initial model and developed the Experience Fluctuation Model, an eight-channel and more complex model (Massimini & Carli, 1988). It adds four transitional channels to the initial Four Channel Model: activation, control, boredom, and preoccupation, which represent subtle changes concerning the quality of subjective daily experience. Although some authors have criticized this type of flow conceptualization (Løvoll & Vittersø, 2014), the four or eight-channel model have been extensively used in flow research.

Following Csikszentmihalyi's initial theoretical and empirical work, other researchers continued to study flow experience in a diverse array of settings like sport, school, work and leisure (e.g. Csikszentmihalyi & Csikszentmihalyi, 1988; Csikszentmihalyi & LeFevre, 1989; Jackson, Kimiecik, Ford, & Marsh, 1998). In particular, research in sport psychology has largely contributed to the study of flow concept in athletes (e.g. Jackson, 1992, 1995, 1996; Jackson et al., 1998) and to the development of self-report instruments to assess flow experience (Jackson & Eklund, 2002; Jackson & Marsh, 1996; Marsh & Jackson, 1999). Considering a componential approach, which integrates the nine dimensions of flow experience, sports researchers developed the Dispositional Flow Scale-2 (DFS-2; Jackson & Eklund, 2002) and the Flow State Scale-2 (FSS-2; Jackson & Eklund, 2002; Jackson & Marsh, 1996). These instruments measure, respectively, the dispositional tendency to experience flow in general (broad trait) or in specific activities (domain-specific trait) and the intensity of flow experience within a particular event recently experienced (state). They have been used extensively in areas other than sport (e.g. Fullagar & Kelloway, 2009; Rogatko, 2009; Wang, Liu, & Khoo, 2009).

Other researchers have used alternative approaches to measuring flow experience (see review by Moneta, 2012). Based on the descriptions of flow obtained in interviews with artists and people with different occupations, Csikszentmihalyi developed the Flow Questionnaire (FQ; Csikszentmihalyi & Csikszentmihalyi, 1988) to measure the prevalence of flow in general and in specific contexts. The FQ presents definitions of flow and asks respondents if they have had similar experiences and in which situations or activities. Then they have to rate their subjective experience when they are engaged in those activities. Another approach used a more complex measurement method to capture flow in daily experience. The Experience Sampling Method (ESM; Csikszentmihalyi et al., 1977) is a real-time measure that was developed to assess the internal dimension (perceptions of challenges and skills and cognitive, emotional and motivational components) and the external dimensions (location, company, activity) of momentary experience. Respondents carry an electronic device along one week. This equipment signals them (randomly or pre-programmed) to respond to a brief questionnaire about the experience they were having at that moment. This methodology allows researchers to have samples of respondents' daily momentary experience, therefore, measuring flow and the quality of experience associated with it. Researchers can then analyze data at a person-level or a beep-level which gives them an amount of additional and valuable information about the interplay between the person and his/her contexts.

The reported measures allow researchers to assess flow experience based on different conceptual approaches. Despite the advancements in flow measurement, future research should continue to improve the different measurement methods for obtaining a more clearly and integrated view of the construct of flow (Moneta, 2012).

### **Flow experience in adolescence**

Adolescents present a high variability in experiential states along the day (Larson, Csikszentmihalyi & Graef, 1980). Their quality of experience is highly dependent on context, which results in higher, quicker and less predictable mood changes, in comparison to adults. Those adolescents who respond to the variations of the environment with a higher control to accomplish their goals become more confident and competent and have more possibilities to enter in a flow state (Csikszentmihalyi & Larson, 1984). Flow is an optimal state since most of the dimensions (cognitive, affective and motivational) of subjective experience when in a flow state are on a positive level (Csikszentmihalyi & Csikszentmihalyi, 1988). Flow experience shows some variations among adolescents and across different activities (Bassi & Delle Fave,

2012; Freire, Lima, & Fonte, 2009). However, the major variation in flow is due to differences in subjective experience within the same adolescent along the week than between adolescents (Schmidt et al., 2007).

The person-level characteristics associated with flow in adolescents are gender (with girls experiencing more flow than boys), high self-esteem, high self-efficacy and high optimism about the future (Schmidt et al., 2007). However, different results were found by Stavropoulos, Alexandraki, and Motti-Stefanidi (2013) concerning gender. They showed that boys were more likely to experience flow than girls, but the study reported only to internet activities. Leibovich, Maglio, and Giménez (2013) found that the experience of flow decreases with the increase of age (from 12 to 17 years). Openness to experience and extraversion are two personality factors that were found to predict the occurrence of flow experience (Bassi, Steca, Monzani, Greco, & Delle Fave, 2014; Leibovich et al., 2013).

Concerning the external dimensions of subjective experience (activities, location, and company) in daily life, adolescents experience more flow in active or structured leisure activities than in school activities (Bassi & Delle Fave, 2004; Mesurado, 2009; Schmidt et al., 2007). When in the school context, they report more flow in social interactions with peers and extracurricular activities related to leisure, such as sport and arts, when compared to curricular ones (Freire et al., 2009; Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003). When flow emerge in classroom curricular activities, it occurs predominantly in subjects like mathematics, history and sciences (Csikszentmihalyi & Larson, 1984), or in activities such as class discussions, individual work (laboratory, exercises) and test/quiz resolution (Shernoff, Knauth, & Makris, 2000). This kind of activities has specific characteristics like clear goals and rules, immediate feedback, development of abilities or skills, which make them more flow-inducive (Csikszentmihalyi, 1997; Mesurado, 2009). They are also more structured, challenging and allow adolescents to be more in control and to be more active (Shernoff et al., 2003).

Although being an important part of the subjective experience that explains flow state, these external dimensions are not its unique predictor. Internal dimensions of the subjective experience such as the autonomy (wanting to do the experience), the balance of high challenges and high skills, the importance of the activity, the perception of success at the activity and focused attention explained 45% of the variation in flow in adolescents' daily life (Schmidt et al., 2007). Huang, Chiu, Sung, and Farn (2011) also found that focused attention was a critical determinant of the immersion dimension of flow, but, specifically, in web-based and text-based interaction environments. In a recent qualitative study of Choe et al. (2015), adolescents (16 to 18 years) identified the sense of control as the psychological condition that facilitates students' flow in learning. Other researchers showed that the basic psychological needs of competence, autonomy, and relatedness in adolescents predicted dispositional and state flow in sports (Coterón, Sampedro, Franco, Pérez-Tejero, & Refoyo, 2013; Moreno, Gimeno, & González-Cutre, 2010) and in internet use (Zhao, Lu, Wang, & Huang, 2011). A set of internal psychological dimensions seem to have an important contribution to flow, but more research is needed to replicate and to extend these results, providing an integrated view of their specific role in adolescents' flow experience.

In sum, person-level characteristics, external and internal dimensions of subjective experience have a direct contribution to flow experience. However, the interplay between them should not be disregarded as well as possible moderator or mediator roles. For example, research showed that person-level characteristics revealed a mediation role between contextual dimensions and flow experience (Leibovich et al., 2013). Moreover, as we mentioned previously, the contribution of gender seems to differ accordingly to context. Stavropoulos et al. (2013) found that if assessing flow in a domain-specific activity (internet), boys have more flow (not girls), which put in evidence the important role of context in the relationship between person-level characteristics and flow experience. Another example is what concerns intrinsic motivation and its relation to flow. Theoretical background and empirical evidence show that flow experience is an intrinsically motivated state characterized by higher levels of autonomy (Csikszentmihalyi, 1975; Deci & Ryan, 2000; Schmidt et al., 2007). However, empirical evidence does not show linear results concerning this issue. Flow experience is not always associated with high levels of intrinsic motivation and autonomy. Bassi and Delle Fave (2012) showed that optimal experience in schoolwork is associated with low self-determination (less autonomous regulation) in a sample of adolescents. Delle Fave and Massimini (2005) found that motivational and affective variables varied across different activities, while the cognitive variables remain stable. Situational/contextual features can explain these apparently contradictory results. Autonomy does not seem to be an essential component of flow experience in some contexts. Overall, the evidence provided by these studies support the interactionist and ecological perspective about the nature of flow experience, considering both person and contextual features (others, places, activities) when explaining this subjective state (Freire, 2006, 2011; Schmidt et al., 2007).

### **Flow experience and adolescents' positive development**

Positive development can be defined as the individual growth concerning positive psychological, behavioral and social outcomes, considered from a strengths-based perspective, which emphasizes individual potentialities and view adolescents as resources (Damon, 2004; Lerner, Almerigi, Theokas, & Lerner, 2005). It can also be defined within an integrated perspective of well-being and happiness, which joins the subjective (hedonic) and psychological (eudaimonic) conceptualizations (Delle Fave, Brdar, Freire, Vella-Brodrick, & Wissing, 2011; Keyes, Shmotkin, & Ryff, 2002).

Regarding positive development within a strength-based approach, the enjoyment associated with flow drives the adolescent to repeat the activity in which emerged the flow experience, entering into a process of progressive complexification of skills and strengths. For sustaining the flow state, the activity must provide challenges with increased difficulty. To respond to those challenges, the adolescent must develop a set of activity-related skills if he/she wants to maintain an optimal state of experience. This process shapes individual trajectories as it implies an individual psychological selection in which interests and goals are defined (Massimini & Delle Fave, 2000; Nakamura & Csikszentmihalyi, 2002). It is through this mechanism that adolescent interacts with the environment to create opportunities for a positive development of inner strengths and the self (Freire, 2006).

Regarding a broader positive development perspective, linked to well-being, flow experience is associated with a series of positive outcomes regarding children and adolescents' functioning (Bassi & Delle Fave, 2004; Csikszentmihalyi & Larson, 1984). Adolescents who experience more flow have higher satisfaction with life (Asakawa, 2010; Bassi et al., 2014), higher psychological well-being and self-esteem (Bassi et al., 2014; Nakamura & Csikszentmihalyi, 2002; Steele & Fullagar, 2009), higher sociability and joy (Hektner, Asakawa, Knauth, & Henshaw, 2000), increased positive affect (Rogatko, 2009), increased happiness (Csikszentmihalyi & Hunter, 2003) and higher engagement in learning and achievement (Mesurado, 2010; Schüler, 2007; Shernoff et al., 2003; Steele & Fullagar, 2009). The impact of flow experience goes beyond the immediate increase in the quality of subjective experience while performing the activity, having a long lasting and cumulative effect on adolescents' development (Csikszentmihalyi & Larson, 1984; Massimini & Carli, 1988). However, flow does not lead to positive development automatically. Outcomes of flow experience vary according to the structure's degree of the activity, the goals and the long-term process of meaning-making (Delle Fave, 2009; Freire, Tavares, Silva, & Teixeira, 2016).

### **ATTENTIONAL CONTROL**

Research has made considerable progress in highlighting the voluntary and conscious processes in controlling our actions and in modulating our temperamental reactivity. Individuals actively make efforts to regulate their thoughts, feelings, and behaviors, counteracting the automaticity inherent to human behavior (Derryberry, 2002). Voluntary self-control implies the awareness of one's self and the external world. It is through consciousness that we voluntary control our mental processes (Posner & Rothbart, 1998).

One of the earliest forms of self-control is the capacity to control attention (Rothbart, Posner, & Rosicky, 1994). Attentional control is defined as the individual capacity to focus and shift attention voluntarily, to control external and internal distractions and to reach specific goals (Derryberry & Reed, 2002). It is considered a dispositional component of self-regulation (Diehl, Semegon, & Schwarzer, 2006).

The capacity to voluntarily control one's attention relies on executive attentional mechanisms (prefrontal cortex) (Derryberry, 2002). Norman and Shallice (1986) developed a model of executive attentional control. The authors proposed that a Supervisory Attentional System (SAS) monitors and regulates the activation of appropriate schemas for action but also creates new schemas to respond to novel or conflicting situations when the automatic attentional processes can no longer respond. SAS is slower but more flexible than the automatic attentional processes as it requires conscious control (Norman & Shallice, 1986). Similarly, Posner and colleagues (Posner & Peterson, 1990; Posner & Raichle, 1994; Posner & Rothbart, 1998) developed a model in which attentional control relies on a voluntary attentional neural system (anterior attentional system) that regulates automatic responses, in opposition to an involuntary one (posterior attentional system). These systems are related to motivational processes and are triggered by the person's needs and goals (Derryberry, 2002). Therefore, it is expected the existence of individual differences in the ability to control attention.

Attentional control develops earlier in infancy and through adolescence and has an important role in regulating distress (Posner & Rothbart, 1998). The increase of activity in executive areas and of neural connectivity in adolescence impacts cognitive and emotional development of teenagers (Casey, Jones, & Somerville, 2011; Luna, Padmanabhan, & Hearn, 2011; Steinberg, 2005). Adolescents become more able to exert cognitive control in a flexible manner (Luna et al., 2011). However, this is an ongoing process of



neural maturation and interaction with context and environment. There are still immaturities in normative adolescent functioning that limit the consistent use of attentional control abilities. So, concerning adolescent's socioemotional development, adolescence can be conceptualized as a transitional life period of adjustment but also of increased vulnerability (Steinberg, 2005). The increase of executive related capacities in this age period creates opportunities for the onset of psychopathology but also represents a chance to recruit new tools for respond in a more flexible and adjust manner to new challenges, and not persevere in inefficient modes of thinking, feeling and behave.

Research shows that attentional control is linked to the development of psychopathology in childhood and adolescence. Individual differences in attentional control are related to the internalizing and externalizing problems (Derryberry & Rothbart, 1997; Eisenberg et al., 2001; Sportel, Nauta, de Hullu, de Jong, & Hartman, 2011). Lower levels of attentional control have been consistently associated with more psychological problems in children and youth, namely anxiety, aggression, depression, rumination and ADHD (Meesters, Muris, & Van Rooijen, 2007; Muris, de Jong, & Engelen, 2004; Muris, Meesters, & Rempelberg, 2007; Muris, Mayer, Lint, & Hofman, 2008; Muris, Van Der Pennen, et al., 2008; Verstraeten, Vasey, Raes, & Bijttebier, 2009). However, attentional control seems to have also a protective function toward psychopathology and adolescents' maladjustment. Attentional control moderates the effect of negative affect on the development of depressive symptoms in adolescents (Vasey et al., 2013). High levels of attentional control reduce the effect of high behavioral inhibition (reactive temperament) on the reporting of internalizing symptoms by adolescents (Sportel et al., 2011).

Fewer studies addressed the relationship between attentional control and positive outcomes in adolescence. To the best of our knowledge, only two studies have done so. Zorza, Marino, de Lemus, and Mesas (2013) found that effortful control (from which attentional control is a component) predicted academic performance and social competence of adolescents. Checa, Rodríguez-Bailón, and Rueda (2008) showed that an efficient executive attention is related to positive academic outcomes and social adjustment of adolescents.

### **Attentional control and flow**

In his theoretical flow model, Csikszentmihalyi (1990) pointed out the important role of attention in the control of consciousness and the enjoyment of everyday life. He defends that attention is our most important tool to improve the quality of experience. Moreover, that entering into a flow state requires the adequate use of psychological skills, such as the ability to control attention. However, few studies have tried to put in evidence the role of attentional capacities for the occurrence of flow experience.

A qualitative study with 12 different samples (14 to 86 years) has found that people from different cultures describe the flow experience in similar ways regarding its onset and its continuation (Massimini et al., 1988). Concentration is pointed as the second main trigger to enter in a flow state (13% of the respondents of different cultures), being the first the performance of the activity itself (40%). Interestingly, concentration was identified more like a trigger for the onset of flow experience than a factor for its continuation. Considering only the college students' participants, concentration becomes the major factor for becoming involved in the flow experience (and not the second one, as identified by the adult participants). The authors suggest that this difference is due to the developmental stage students are in, which is devoted to intellectual activities in a great proportion of time, and consequently requires a greater amount of investment of attention and concentration, comparatively with adult life (Massimini et al., 1988). Therefore, concentration seems to be important to the occurrence of flow experience, especially for entering into a flow state and for students. However, there is a lack of research to consistently confirm this result.

Hamilton, Haier, and Buchsbaum (1984) have found specific attentional patterns associated with the intensity of flow experience in their laboratory studies. Intrinsic enjoyment (a central characteristic of flow experience) was significantly correlated with self-reported attentional control and with an observed attentional increase in cortical area. Research on online flow models and in e-learning environments showed that focused attention is a direct antecedent of flow and has a significant effect on determining students' flow level (Esteban-Millat, Martínez-López, Huertas-García, Meseguer, & Rodríguez-Ardura, 2014; Novak, Hoffman, & Yiu-Fai Yung, 2000; Shin, 2006). Abuhamdeh and Csikszentmihalyi (2012) found that attentional involvement (amount of attention devoted to moment-to-moment activity) mediates the relationship between the balance of challenges/skills and enjoyment. They suggest that attentional processes could be the central feature of flow experiences. Swann, Keegan, Piggott, and Crust (2012) highlighted the effects of mindfulness interventions in flow athletes. Self-regulation of attention, which is the main component of mindfulness training, has been related to increases in global flow and the flow dimensions of clear goals and sense of control. Cohen, Tenenbaum, and English (2006) also demonstrated that a psychological skills training intervention (with a component of attentional control

training) with two female college-level golfers helped the athletes to achieve optimal emotional states.

Although putting in evidence important results, the studies mentioned above do not conceptualize attentional processes within the same perspective and consequently, do not measure the construct equally. Some studies assess the amount of attention/concentration participants have in the moment of performing the activity, using real-time measures (e.g. Abuhamdeh & Csikszentmihalyi, 2012) and others attend to the capacity to control attention in a specific context/activity, using retrospective questionnaires (e.g. Esteban-Millat et al., 2014). This difference in the approach for measuring attention serves obviously the goals of each study. However, we should look at these results with cautious because they are referring to distinct phenomena. The majority of research about attention in flow experience focuses on the dimension of concentration which is part of the experience itself. For bringing some clarity to this issue and avoiding tautological explanations, it is fundamental to distinguish between the individual ability to control voluntarily attention, and the intense concentration felt during the ongoing flow experience. Some authors bring this issue to scientific debate arguing that effortless attention, which characterizes flow experience, is different from effortful attention (attentional control) (Dormashev, 2010; Ullén, De Manzano, Theorell, & Harmat, 2010). The former refers to a state of heightened attention where the person exerts no mental effort while the latter represents a state of high attention during the mental effort.

So, if we direct our lens to empirical studies that focused on the relationship between attentional control, conceptualized as a dispositional characteristic, and flow experience, research becomes inexistent. Nevertheless, there are some studies that point to some directions about the subject. For example, Abuhamdeh and Csikszentmihalyi (2012) showed that 20% of the variance of attention involvement in daily life (attention/concentration felt during the performance of the activity) resided at the between-level person. The authors suggested the existence of personal characteristics that influence this attentional involvement. Csikszentmihalyi (1990) had already considered earlier that how attention is used is a result of personality traits or specific patterns of functioning. The author introduced the concept of autotelic personality for describing those individuals who tend to enjoy life or do things for their own sake, having certain metaskills which allow them to enter more frequently and easily in a flow state (Csikszentmihalyi, 1997). Being or not associated with autotelic personality, we consider that these patterns of functioning could be an expression of attentional control capacity.

Unfortunately, none of these reviewed studies linked attentional capacities to flow experience during the adolescence period. The majority used college students or adult samples. Only a few studies conducted by Csikszentmihalyi and Larson (1984) showed that adolescents who voluntarily use their attentional capacities and have goals can find enjoyment in the activities. More studies with adolescents are needed to clarify the role of attentional control for the occurrence of flow experience.

## **EMOTION REGULATION**

The definition of emotion regulation is a controversial topic since it refers to a complex construct that involves the management of multiple components (e.g. cognitive, neurophysiological, behavioral, culture and contextual) (Zeman, Cassano, Perry-Parrish, & Stegall, 2006). A widely accepted definition considers emotion regulation as the “extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one’s goals” (Thompson, 1994, p. 27–28).

Emotion regulation is a topic of great interest in the scientific community when studying youth (Riediger & Klipker, 2014). Adolescence is a period of increased emotionality, due to the major bio-psycho-social transformations teenagers experience throughout their growing process. Associated with pubertal changes, greater negative emotionality, sensation-seeking and risk-taking arise in early adolescence (Nelson, Leibenluft, McClure, & Pine, 2005). These transformations heighten the vulnerability for emotional and behavioral dysregulation since the complete maturation of executive brain regions is still not complete in this period (Steinberg, 2005). Todd, Cunningham, Anderson, and Thompson (2012) suggest that the emotion regulation capacity becomes more sophisticated and complex with cognitive/executive development, giving rise in adolescence to more deliberate and flexible strategies.

However, all these transformations must be conceptualized within an ecological perspective as they occur in the adolescents’ daily lives and are interwoven with their social contexts and culture. Teenagers spent more time with peers than within the secure context of the family. Besides, society expects adolescents to be more autonomous and work toward the achievement of selected goals (Lerner, Freund, De Stefanis, & Habermas, 2001). Responding adaptively to these daily and contextual demands can be a challenging task for teenagers. However, it also gives them the opportunity to apply their developing regulatory capacities to the complex array of emotions elicited by new and unpredictable

situations (Larson, 2011). Regulating one's emotions in socially and contextually adaptive ways have been shown to be an important resource for interpersonal and intrapersonal healthy psychological functioning (Gullone, Hughes, King, & Tonge, 2010; Southam-Gerow & Kendall, 2002).

Different theoretical frameworks exist in the literature concerning emotion regulation processes and functioning. The process model of emotion regulation (Gross, 1998) is one of the most reported and used in empirical research. It is an interesting model to account for if we want to explore the relationship between emotion regulation and flow experience because it takes into consideration the person-situation interaction, resembling the ecological approach that supports flow concept. The model is based on a process-oriented approach and defines emotion regulation as a set of different conscious and unconscious processes, by which positive and negative emotions are increased, diminished or maintained (Gross & Thompson, 2007).

Gross's model (1998) differentiates two sets of emotion regulation strategies based on the moment they are used in the emotion-generative process: antecedent-focused strategies, usually used earlier and before the emotion response have been totally generated, and response-focused strategies, employed later when an emotion is already being experienced (Gross & Thompson, 2007). Situation selection, situation modification, attentional deployment, and cognitive reappraisal are the antecedent-focused strategies operationalized by the model whereas response modulation represents the response-focused strategy (Gross & John, 2003). Situation selection and situation modification involve taking action toward the environment, shaping the individual's situation. Attentional deployment and cognitive reappraisal regulate emotions without changing the environment. Instead, they involve the transformation of internal aspects by using cognitive capacity (e.g. distracting or moving the focus of attention away from the situation; concentrating on a specific aspect of the situation; ruminating or directing repetitively attention to our feelings). In turn, response modulation influences the experiential, physiological and behavioral aspects of the emotion that have already been generated (e.g. taking drugs, doing exercise, suppressing the expression of emotions) (Gross & Thompson, 2007).

The two emotion regulation strategies that have received more empirical attention are cognitive reappraisal and expressive suppression. Cognitive reappraisal implies changing the way we think about a situation to decrease its emotional impact. Expressive suppression refers to the inhibition of the emotion-expressive behavior. This strategy does not change the emotion itself, only its expression (Gross & John, 2003). Empirical studies showed that reappraisal have, in general, healthier effects on affective, cognitive and social functioning and are associated to better well-being than suppression (Butler, Egloff, Wilhelm, Smith, Erikson, & Gross, 2003; Gross, 1998; Gross, 2014; Gross & John, 2003; John & Gross, 2004). Mauss, Levenson, McCarter, Wilhelm, and Gross (2005) presents response coherence between experience, behavior and physiology as a possible mechanism for explaining this differential impact of different emotion regulation strategies on psychological functioning. Besides psychological functioning, research has investigated the implications of using different emotion regulation strategies, linking them to psychological, neural, physiological and physical functioning (e.g. Gross, 1998; Nyklíček, Vingerhoets, & Denollet, 2002; Ochsner & Gross, 2005; Woodward, Shurick, Alvarez, Kuo, Nonyieva, Blechert et al., 2015).

An extensive research exists relating emotion (dys)regulation to different internalizing and externalizing psychological disorders in adolescents (Garnefski, Kraaij, & van Etten, 2005; McLaughlin, Hatzenbuehler, Mennin, & Nolen-Hoeksema, 2011; Silk, Steinberg, & Morris, 2003; Southam-Gerow & Kendall, 2002). For example, the use of less effective emotion regulation strategies in down-regulating negative affect was found to be related to higher levels of depressive symptoms and problem behavior (Silk et al., 2003). Emotion dysregulation predicted increases in anxiety symptoms, aggressive behavior, and eating pathology after controlling for baseline symptoms (McLaughlin et al., 2011). Higher depressive symptoms, higher neuroticism, lower scores on extraversion, agreeableness, and conscientiousness, were associated with a greater use of the suppression strategy by adolescents (Gullone & Taffe, 2012; Larsen et al., 2012).

Other studies investigated the impact of emotion regulation on the positive development of adolescents. Gumora and Arsenio (2002) found that emotion regulation is associated with positive educational outcomes, like the student's ability to learn and to develop social competence. Fried (2011) showed that antecedent emotion regulation strategies are positively correlated with students' personal skills whereas response-focused strategies are negatively correlated with students' social skills and with academic engagement in the classroom. Cognitive reappraisal strategy has been associated with healthier and positive indicators of psychological functioning in adolescence (higher extraversion and openness to experience; higher self-esteem and life satisfaction), while suppression has been linked to maladaptive outcomes (Freire & Tavares, 2011; Gullone & Taffe, 2012; Teixeira et al., 2015). However, this is not without its critics and some authors challenge this perspective of a higher effectiveness of one strategy

over another (Koole, van Dillen, & Sheppes, 2011). Gross and colleagues (Gross, 2013; Gross & Thompson, 2007) adopt a functionalist perspective and make an important remark by assuming that the adaptability of emotion regulation processes will depend on the context.

Other theoretical models of emotion regulation present some commonalities with Gross's process model. The control-value theory focuses on achievement emotions in learning contexts (Pekrun, 2006; Pekrun, Frenzel, Goetz, & Perry, 2007). It is a more integrative theoretical framework, which builds on assumptions from different psychological theories. It considers the antecedents of achievement emotions (appraisals of value and control; goals; beliefs), the social environments, the achievement emotions and their effects on learning, embedded in a cyclical process of reciprocal causation. According to this theory, emotions can be regulated by targeting any element of this circulatory loop: the appraisals (appraisal-oriented regulation), the environments (selection and design of environments), the emotion itself (emotion-oriented regulation), or the capacity for learning (problem-oriented regulation) (Pekrun et al., 2007). Gross's process model and the control-value theory share common ground regarding the main core features in emotion regulation (Gross, 2014). They account for similar strategies to regulate emotions (cognitive modification, situation modification, and behavioral/response modification), the importance of goals, and the emotion regulation outcomes (affective, cognitive and social consequences or, more specifically, the effects of different emotion regulation strategies on learning and achievement).

### **Emotion regulation and Flow**

Research concerning the impact of emotion regulation on the occurrence of flow experience is practically inexistent. Only a few studies in sport psychology address this issue but they do so with adult population (and not with adolescent samples). Jackson, Thomas, Marsh, and Smethurst (2001) found that a set of cognitive skills are particularly important for attaining flow experience and, subsequently, optimal performance in leisure sports settings. One of these psychological skills was the use of good emotional control, which helped to explain the variation of dispositional and state flow in athletes with aged between 16 to 73 years.

A recent investigation of Swann, Piggott, Crust, Keegan, and Hemmings (2015) with European tour golfers identified the factors that influenced the nine dimensions of flow experience in a particular way. Concentration was the most influenced dimension of flow. Among the facilitators of heightened concentration were the psychological skills of the players which seemed to facilitate the entering and the managing of flow states. These self-reported psychological skills referred to the golfers' attempts to "avoid disruption or conscious interference, by taking their mind away from the importance of the situation" (p. 65). Interestingly, this seems to refer to a particular kind of emotion regulation strategy - the distraction strategy preconized in Gross's model (1998).

Indirect evidence also comes from studies about the effectiveness of sport training programs in the enhancement of the quality of athletic performance. Emotion regulation techniques are one of the skills commonly targeted in these interventions. Findings showed that the use of emotion self-regulation is an effective tool for the improvement of the athletes' optimal zones of performance (Cohen et al., 2006; Robazza, Pellizzari, & Hanin, 2004).

### **LINKING FLOW EXPERIENCE, ATTENTIONAL CONTROL, AND EMOTION REGULATION**

Flow experience is a cognitively highly demanding experience. Being in a flow state means being deeply focused, highly concentrated and totally absorbed in the activity at hand. It is reasonable to assert that flow experience can be facilitated if adolescents have the ability to be better focused and to avoid external and internal distractions (Csikszentmihalyi, 1975). This ability to be better focused on the momentary experience can be associated with a general capacity or temperamental characteristic like attentional control. This one should not be necessary during the flow state since it requires awareness of the self, which is contrary to the flow dimension of loss of self-consciousness. Therefore, attentional control should be seen as an important individual capacity that actuates before the occurrence of flow experience, helping to reach it. This assumption is in agreement with the distinction we have previously mentioned between effortless attention and effortful attention (attentional control) (Ullén et al., 2010). The former referring to the high concentration (without effort) felt during the flow state and the latter representing a different kind of concentration, which requires a voluntary mental effort.

However, being a multifaceted construct, flow experience involves the commitment of other internal dimensions besides cognition. Motivational and emotional dimensions should also be considered. During the performance of activity, attractive alternative actions can compromise the involvement in the activity by distracting the adolescent (Fries, Dietz, & Schmid, 2008). This situation leads probably to motivational interference, and consequently, increases the difficulty to reach a flow state (Kuhnle & Sinclair, 2011), since flow is a highly intrinsically motivated state by nature. So, adolescents need to have

a good attentional control to maintain their focus on the activity and to guarantee an optimal level of motivation for reaching a flow state. On the other hand, negative emotions can interfere with the occurrence of flow experience (Csikszentmihalyi, 1997). Using effective emotion regulation strategies can guarantee that these emotions do not disrupt the concentration needed to be in that absorbing state. Moreover, emotion regulation can enhance the positive affect associated to flow experience. Therefore, adolescents who have a better attentional control and use effective emotion regulation strategies could have probably a better chance to reach a state of flow. Kuhnle et al. (2012) referred to a self-control capacity that can help guiding adolescents' behavior towards a specific goal and to the pursuit of a chosen activity, by controlling impulses, emotions, and other cognitive processes. Based on the ideas of Csikszentmihalyi and LeFevre (1989), the authors argued that adolescents with higher self-control are more protected from distractions of other concurrent intentions and by this way reach more easily a flow state (Kuhnle et al., 2012). The authors found that self-control is a predictor of flow in adolescence. A self-report questionnaire was used to assess self-control as the capacity to regulate adolescent's attention, emotion, and behavior.

Many of the studies revised along this paper, especially in sport psychology, point toward the importance of self-control abilities, namely a greater control over attention and emotion, for the occurrence of flow experience (e.g. Esteban-Millat et al., 2014; Jackson et al., 2001; Swann et al., 2012; Swann et al., 2015). In a recent systematic review, Swann et al. (2012) conclude that flow seems to be influenced by a range of different variables: internal states (such as focus and thoughts/emotions), behavior (e.g. preparation) and environmental conditions. However, focus and thoughts/emotions seem to be central concepts as they have been found in every study and in all the three categories: facilitate, prevent and disrupt flow experience. Moreover, applied sport psychology interventions that target psychological skills that help athletes to regulate their mental and emotional states have been shown to be effective in achieving optimal states (e.g. Cohen et al., 2006).

Despite being conceptually separate constructs, the relationship between these two self-control abilities – attentional control and emotion regulation - must be regarded, since there is evidence showing that controlling attention is itself a crucial component of emotion regulation processes (Todd et al., 2012; Wadlinger & Isaacowitz, 2011). Eisenberg, Fabes, Guthrie, and Reiser (2000) suggest that, besides neurophysiological processes, emotion regulation is also attained through the effortful management of attention such as attention shifting, attention focusing, and distraction. Individuals with low levels of attention-executive control are poor at regulating emotions (Derryberry & Rothbart, 1988, 1997; Rothbart, Ellis, & Posner, 2004). Indeed, difficulties in attentional control are related to the use of maladaptive emotion regulation strategies (e.g. suppression and rumination) (Tortella-Feliu et al., 2013). Fox and Calkins (2003) reviewed studies concerning the association between attentional control and control of emotions in children. A higher capacity of attentional was associated to greater self-control of emotion.

Along our paper, we analyzed attentional control and emotion regulation as interrelated but independent constructs, both part of the broader psychological construct of self-regulation. However, a distinct theoretical approach defends that different self-regulation processes (attention regulation, emotion regulation, and behavioral regulation) cannot be separated because they interrelate in such complex ways (Diamond & Aspinwall, 2003; Fox & Calkins, 2003). This approach considers self-regulation an integrated psychological construct. These authors suggest that children and adolescents put in action simultaneously diverse dimensions of self-regulation to respond to the challenges of everyday life experience. Raffaelli et. al. (2005) empirically tested this assumption, confirming that a one-factor model represents better self-regulation as an integrated construct. Such approach suggests that researching in isolation the different forms of self-regulation might compromise our understanding of the phenomenon of self-regulatory abilities, concerning its underlying mechanisms, its relation with contexts and its developmental trajectory.

Therefore, considering the relationship between attentional control and emotion regulation, it will be more enriching and promising for research to include them both when studying the influence of self-regulatory processes on adolescents' optimal functioning.

## CONCLUSION

By recognizing the importance of voluntary self-regulation processes in the development of optimal experience and functioning, we assume that adolescents have an active role in the co-construction of their development pathway (Gestsdottir & Lerner, 2008; Lerner, 1982).

However, besides the influence of temperamental characteristics, contextual factors seem also to play an important role in eliciting optimal states in youth lives (Bassi & Delle Fave, 2004; Mesurado, 2009). Theoretical models and empirical evidence of flow experience showed that this optimal

psychological state is complex and involves dispositional and situational factors (Schmidt et al., 2007). Thus, crossing personal and contextual characteristics is essential for understanding and explaining flow experience. Embracing an ecological or contextual perspective (Bronfenbrenner, 1979) about adolescent development and optimal experience places the interaction among the adolescent, others and locations in a prominent place within research (Freire, 2006, 2011). This approach has a direct implication on the type of measurement used to assess optimal experience and adolescent psychological functioning. The use of measures that guarantee an ecological validity is necessary to capture these phenomena as they occur in the natural contexts of adolescents' daily lives. Real-time measures, particularly the Experience Sampling Method (ESM; Csikszentmihalyi et al., 1977; Hektner, Schmidt, & Csikszentmihalyi, 2007) are a good example. Daily life methodologies allow the analysis of the interaction between social, psychological, and physiological processes within their natural contexts, by tapping adolescents' ongoing experience (Reis, 2011).

However, some authors defend that although recognizing the importance of contextual components for attaining flow, it is essentially under the control of the mind (attention) that we have the possibility of reaching the psychological state of flow (Jackson & Csikszentmihalyi, 1999). As Csikszentmihalyi and Larson (1984) postulates "it is not the context itself that determines whether a teen is happy or sad but the way he or she uses the constraints and opportunities in each" (p. 119).

Promising directions for future research on adolescents' optimal experience should include the investigation of self-regulation abilities in conjunction with contextual features and the underlying mechanisms through which these different antecedents or factors operate. The majority of the empirical research reviewed had assessed only correlational relationships, and some tested the predictive value of psychological factors on flow experience. So we must be cautious as these findings did not test causality relationships. More research is needed with longitudinal designs and mixed methodologies to identify the psychological factors and associated situational features which enhance or diminish the frequency and intensity of flow experiences. This type of research may highlight important causalities and could identify youth specific profiles associated with common positive developmental pathways or trajectories (Larson & Tran, 2014). These would provide the basis for the development of comprehensive theoretical models addressing the occurrence and development of optimal experiences and optimal functioning in youth.

Knowing what individual abilities foster flow experience in normative adolescence and how these processes occur and develop over time, can inform positive clinical interventions, especially those that target disorders marked by apathy, boredom, and absence of enjoyment. If in some cases, we can change and manage the activities structure and the environment to create the conditions for flow occurrence (e.g. school setting), other times we have to work directly with the adolescent to help him/her to have a proactive role and find flow experience in daily life. Self-regulation processes are available to consciousness and can be selected and controlled by adolescents (Gestsdottir & Lerner, 2008). Recent literature suggests that the processes involved in attentional and emotion regulation can be improved through practice (Wadlinger & Isaacowitz, 2011). Therefore, learning to manage self-regulatory capacities could be a central point in different interventions with adolescents for attaining optimal everyday functioning.

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## Atitudes dos pares sobre a inclusão: Contributos da adaptação de um instrumento

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**Resumo:** Para uma plena inclusão educativa, são centrais as interações entre todos os alunos. Apesar da importância das suas atitudes e comportamentos, os pares são um dos grupos menos estudados. Em dois estudos, procuramos uma estrutura com boa validade e fidelidade da escala *Chedoke-McMaster Attitudes towards Children with Handicaps* junto de estudantes Portugueses para, posteriormente, analisar as atitudes das crianças e adolescentes em relação à inclusão. A partir de análises factoriais exploratórias e confirmatórias, foi encontrada uma solução mais curta, mantendo uma estrutura multidimensional com boa validade e fidelidade. Com o instrumento, foi possível encontrar diferenças entre rapazes e raparigas e uma relação entre idade e a dimensão cognitiva. Ainda, o contacto com pares com NEE aparece como factor determinante nas atitudes, seja entre os alunos com familiares, com amigos ou com colegas com NEE pela primeira vez na turma. Os resultados e suas implicações são discutidos.

**Palavras-chave:** *Atitudes; Pares; Inclusão.*

**Peer attitudes toward inclusion: Contributions of an instrument adaptation:** For a full educational inclusion it is necessary the interaction among all students. Despite the importance of the attitudes and behaviours, peers are one of the least studied. In two studies we search for a structure with good validity and reliability of the *Chedoke-McMaster Attitudes towards Children with Handicaps* scale toward Portuguese students to, afterwards, analyse children and adolescents of the attitudes regarding inclusion. From exploratory and confirmatory factor analysis, a shorter solution was found, keeping a multidimensional structure with good validity and reliability. With the instrument, it was possible to find differences between boys and girls and a relationship between age and cognitive dimension. Yet, contact with SEN peers appears as a determining factor in the attitudes, either among students with SEN family, SEN friends or SEN colleagues for the first time in the class. The results and their implications are discussed.

**Keywords:** *Attitudes; Peers; Inclusion.*

Duas décadas após a Conferência Mundial Sobre Necessidades Educativas Especiais (NEE), em Salamanca (UNESCO, 1994), muito tem sido feito pelos países subscritores para adequar a sua legislação e as suas práticas para uma escola inclusiva. Para tal, "(...) o princípio fundamental das escolas inclusivas consiste em todos os alunos aprenderem juntos (...)" independentemente das suas características, potencialidades ou limitações (p. 11). Mas isso tem implicado alterações significativas ao nível da Escola, seja em termos de constituição de turmas, no envolvimento dos diversos agentes educativos, na gestão dos espaços e dos tempos, na utilização de estratégias pedagógicas e acompanhamento específico, mas também, e especialmente, na aceitação e partilha das actividades na sala de aula e fora dela entre alunos com e sem necessidades educativas especiais (NEE).

Na implementação deste novo paradigma de escola, a revisão da literatura tem permitido encontrar diversos desafios, oportunidades e benefícios. Apesar dos desafios que têm vindo a ser descritos ao nível da adequação dos recursos nas escolas, na formação de professores, na promoção de práticas inclusivas na sala de aula ou na relação entre as famílias e expectativas de pais e professores (e.g.: Cook, & Schirmer, 2003; Day & Prunty, 2015; Dias & Cadime, 2016; Malinen et al., 2013), que acabam por não criar condições para uma participação autêntica (Lloyd, 2008), algumas oportunidades e benefícios têm sido relatados na literatura desde os anos 90 (e.g.: Hammeken, 1996; Stevens & Slavin, 1995). Não querendo tornar este balanço exaustivo (ver, por exemplo, em Katz & Mirenda, 2002; Miles &

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Singal, 2010; Ruijs & Peetsma, 2003) parece existir um largo consenso acerca das vantagens académicas e sociais da inclusão de crianças e jovens com NEE nas escolas regulares. No entanto, e como é apresentado num documento da Agência Europeia para as Necessidades Especiais e a Educação Inclusiva (2014), essas oportunidades não se confinam apenas às crianças com NEE, mas estendem-se a toda a comunidade educativa, seja pelos recursos e qualidade que é proporcionada para a aprendizagem de todos os alunos, a maior abertura e colaboração entre professores e especialistas de áreas diversas, o maior envolvimento e participação dos pais, etc. Estes benefícios, de acordo com relatos de experiências bem-sucedidas na literatura, apontam para melhorias evidentes na aprendizagem, mas também em termos emocionais e sociais, que se reflectem em termos de interações, proximidade e envolvimento entre todos os alunos (e.g.: de Graaf, van Hove, & Haveman, 2013; Farrell, Dyson, Polat, Hutcheson, & Gallannaugh, 2007; MacArthur, Kelly, Sharp, & Gaffney, 2007; Wilkinson & Pickett, 2010). Com base nessas experiências e no avanço da literatura, por certo se avançará no sentido da melhoria da escola (Ainscow, Booth & Dyson, 2006).

Para o sucesso de todo este sistema de relações, é de assinalar a importância das interações entre os pares. A forma como os alunos com NEE são envolvidos no grupo turma em que estão inseridos, a possibilidade de participar nas diferentes actividades na escola, de aprender com os pares e desenvolver competências sociais e relacionamentos próximos são um bom indicador do grau de inclusão. Contudo, a investigação tem assinalado algumas dificuldades dos alunos com NEE em estabelecer relação com os pares sem necessidades especiais, ficando frequentemente em risco de isolamento social (e.g.: Laws & Kelly, 2005; Laws, Taylor, Bennie, & Buckley, 1996; McDougall, DeWit, King, Miller, & Killip, 2004; Pijl, Frostad, & Flem, 2008). Para além disso, algumas vezes a aceitação pelos pares traduz-se em comportamentos de ajuda, isto é, têm por base a prestação de cuidados (Correia, 2005, p. 35), o que pode não significar, necessariamente, que haja o estabelecimento de relações próximas ou amizade, mas um tratamento “paternalista”. Isto faz com que alguns autores assinalem as atitudes e os comportamentos dos pares como uma das maiores barreiras à inclusão dos alunos com NEE (Bossaert, Colpin, Pijl, & Petry, 2011; Hogan, McLellan, & Bauman, 2000).

Neste particular, a literatura tende a assinalar atitudes mais favoráveis entre as raparigas (e.g.: Krajewski, Hyde, & O’Keefe, 2002; Martinez & Carspecken, 2006; Rosenbaum, Armstrong, & King, 1986; Vignes, Godeau, Sentenac, Coley, Grandjean, & Arnaud, 2009), e entre as crianças e adolescentes que possuem maior proximidade com pessoas com necessidades especiais, seja um familiar, amigo ou colega com quem tenham falado (Rosenbaum et al., 1986; Vignes et al., 2009; Wong, 2008). Embora não tenha sido encontrada relação com a idade (Vignes et al., 2009), parece existir uma relação positiva com a informação (Laws & Kelly, 2005; Vignes et al., 2009), podendo programas de sensibilização ter um impacto positivo nestas atitudes (ver revisão em Lindsay & Edwards, 2013). Embora os resultados entre estudos não sejam completamente coincidentes, algumas diferenças podem decorrer de variáveis pessoais ou contextuais, de características da própria amostra, mas também das medidas utilizadas nos estudos. A utilização de diferentes metodologias e instrumentos, tornam mais difícil uma comparação exacta entre os estudos. Considerando a literatura, podemos encontrar diversos instrumentos para avaliação destas dimensões, como sejam: o Shared Activities Questionnaire (Campbell, 2008), um instrumento com boas propriedades centrado nas intenções comportamentais relativamente a estudantes com autismo; a Peer Attitudes Towards the Handicapped Scale (Bagley, & Greene, 1981), um instrumento que considera três na avaliação das atitudes as subescalas, relativas a uma dimensão física, à aprendizagem e intenção comportamental, tendo demonstrado boa validade e fidelidade; e a Children’s Attitude Toward Handicapped Scale (Rapier, Adelson, Carey, & Croke, 1972), um instrumento mais que se baseia num conjunto de adjectivos para avaliar as atitudes dos pares, entre outros. A escassez de estudos psicométricos, e os poucos estudos de adaptação dos instrumentos para outros países, dificulta uma avaliação mais pormenorizada das características dos instrumentos. Contudo, a dificuldade desta análise não pode ser dissociada da própria dificuldade de avaliação deste construto hipotético que, apesar de ser dos mais avaliados nas ciências sociais (Lima, 2002), parte das respostas dos sujeitos, de expressões avaliativas gosto em relação a determinado objecto (Ajzen & Cote, 2008).

Num estudo de revisão sobre instrumentos de avaliação das atitudes dos pares em relação à inclusão, Céline Vignes e colaboradores (Vignes, Coley, Grandjean, Godeau & Arnaud, 2008) identificam o *Chedoke-McMaster Attitudes Towards Children with Handicaps* (Rosenbaum et al., 1986), como um dos mais completos na avaliação deste construto e com propriedades psicométricas mais apropriadas. Desenvolvido numa altura em que reconheciam algumas limitações no estudo das atitudes, o instrumento foi desenvolvido para avaliar as atitudes em relação à deficiência (*handicapped*) de crianças com 9 a 13 anos, embora tenha vindo a ser utilizado em estudos com adolescentes até aos 16 anos e até superiores (Bossaert & Petry, 2013; Vignes et al., 2008). Partindo de um modelo multidimensional, distingue três componentes das atitudes: afectivo, relativo aos sentimentos e reacções emocionais das crianças e

adolescentes relativamente a pares com NEE; uma dimensão cognitiva, relativa a crenças acerca das capacidades ou características de crianças com NEE; e um componente relativo à intenção comportamental de se relacionar com crianças e adolescentes com NEE. Nesse particular, é um dos instrumentos que se aproxima mais da conceptualização de Ajzen (1985, 2001). Com 36 itens, 12 relativos a cada um dos domínios, os autores apresentavam um instrumento com três factores com boa validade e uma consistência interna total de .90, variando entre .91 e .65 nas dimensões específicas (Rosenbaum et al. 1986). Na adaptação para outros países, contudo, algumas dúvidas ou inconsistências foram encontradas. Por exemplo, na adaptação para o Canadá e para Israel uma estrutura bi-factorial foi considerada mais adequada aos dados (Tirosh, Schanin, & Reiter, 1997), distinguindo entre uma dimensão cognitiva e a afectiva-comportamental. Também num estudo mais recente, na Bélgica, com uma amostra de 2396 estudantes, os autores encontraram resultados insatisfatórios em termos de validade, optando pela manutenção de apenas uma dimensão a partir de sete itens (Bossaert & Petry, 2013).

Face à escassez de instrumentos para avaliação destas atitudes no contexto português, e a importância de estudar e promover estas atitudes, parece-nos particularmente pertinente encontrar e adaptar instrumentos bem estabelecidos e utilizados na investigação internacional para promover estas linhas no nosso contexto. Na literatura portuguesa, alguns estudos têm sido realizados junto dos estudantes. Um número considerável tem-se centrado em disciplinas específicas, como na educação física (e.g.: Amaral, 2009; Godinho, 2009; Nobre, 2009; Pires, 2013), junto de um determinado ciclo (Morgado, Castro Silva, & Pereira, 2008; Santos, 2014) ou de algum grupo com necessidades específicas (e.g.: Lima, 2001; Matos, 2000; Martins, 2012; Mendes, 2009; Rêgo, 1998; Serra, 2008). Embora alguns estudos apontem claramente os instrumentos utilizados, a maioria dos trabalhos apresenta dados insuficientes sobre as medidas, os procedimentos de adaptação e propriedades psicométricas na população portuguesa. Dada a escassez de instrumentos para avaliar as atitudes dos estudantes em relação aos seus pares com necessidades especiais, este trabalho pretende apresentar o processo de adaptação de um dos instrumentos mais citados na literatura internacional, explorando os seus contributos para a compreensão deste fenómeno.

### **O presente estudo**

O presente estudo pretende, neste contexto, analisar as propriedades psicométricas da tradução da *Chedoke-McMaster Attitudes towards Children with Handicaps* para a população portuguesa (Rosenbaum et al., 1986). Com base nesses dados, pretende-se perceber melhor as atitudes das crianças e adolescentes portuguesas em relação aos seus pares com NEE. Assim, o primeiro estudo pretende fazer uma exploração do construto na nossa realidade. Seguindo as boas práticas nos procedimentos de adaptação e tradução de medidas (e.g.: DeVellis; 2003; Matsunaga, 2010), nomeadamente, o recurso à tradução e retro tradução, discussão falada dos itens, utilização de análises factoriais exploratórias e confirmatórias, o primeiro estudo recorre a uma análise factorial exploratória e ao alfa de Cronbach para avaliar a validade e fidelidade da medida. Com a análise factorial exploratória, espera-se encontrar uma solução que agrupe os itens da escala original nos mesmos componentes, com valores de saturação superiores a .40 (DeVellis, 2003; Matsunaga, 2010). A mesma versão da escala foi testada numa segunda amostra, para uma validação cruzada, com o recurso a uma análise factorial confirmatória que permitirá testar modelos concorrentes e avaliar o modelo teórico que obtém melhor ajustamento na nossa população. Na análise confirmatória, para que um modelo teórico possa ser considerado como tendo um ajustamento bom, deve obedecer a um conjunto de indicadores. De acordo com Kline (2010), deve apresentar um valor de  $\chi^2 / gl$  inferior a 3, um *Comparative Fit Index* (CFI) superior a .90, e *Root Mean Squared Error of Approximation* (RMSEA) inferior a .05. Em termos de fidelidade, nas dimensões devem ser obtidos valores superiores a .70 para se considerar a consistência interna boa (DeVellis, 2003). Com base nessas sólidas evidências sobre as propriedades da escala, um terceiro estudo pretende explorar especificamente o papel dos factores pessoais e relacionais nas atitudes dos pares em relação aos pares com NEE no ensino regular.

### **ESTUDO 1**

Neste estudo pretendia-se proceder a uma análise exploratória da escala de *Chedoke-McMaster* junto da população portuguesa.

#### **Participantes**

O estudo 1 foi realizado com uma amostra de conveniência, com 452 adolescentes, 58.1% rapazes, do ensino básico do segundo e terceiros ciclo (25.2% do 5.º ano; 23.9% do 6.º ano; 20.1% do 7.º ano; 18.1% do 8.º ano; e 12.6% do 9.º ano de escolaridade), com idades entre os 10 e os 16 anos.



### Instrumentos

Foi utilizada a *Chedoke-McMaster Attitudes towards Children with Handicaps* (Rosenbaum et al., 1986), uma escala com 36 itens que avalia as atitudes face às crianças com NEE, discriminando três componentes das atitudes: afectivo (1, 6, 10, 13, 15, 18, 21, 23, 26, 28, 31 e 34), comportamental (2, 4, 7, 9, 11, 16, 20, 22, 25, 29, 32 e 35) e cognitivo (3, 5, 8, 12, 14, 17, 19, 24, 27, 30, 33 e 36). Cada dimensão comporta 12 afirmações, que permitem o posicionamento dos adolescentes através de uma escala de resposta *likert*, desde discordo totalmente a concordo totalmente. Para a codificação de cada uma das dimensões, são somados os itens de cada uma delas, considerando-se uma atitude mais favorável à inclusão à medida que a pontuação é superior.

A escala foi acompanhada de uma ficha sociodemográfica para recolher dados sobre os sujeitos (género, idade, escolaridade).

### Procedimento

Para a realização do estudo, foi contactado o autor principal da escala, no sentido de obter a autorização para a tradução e adaptação cultural. Essa versão experimental foi objecto de uma discussão falada junto de seis crianças com idades entre os 12 e os 13 anos, para avaliar a sua compreensão sobre os itens e o seu sentido, e administrada a uma amostra não probabilística, recolhida numa escola pública da zona norte do país. Para isso, foram pedidas autorizações aos órgãos de gestão da escola e aos pais, combinando-se, depois, com os professores, o melhor momento para a recolha de dados. Os instrumentos foram administrados no início de aulas cedidas pelos professores para esse efeito, por um elemento do grupo de investigação, referindo os objectivos, o carácter anónimo e voluntário da sua participação. Depois de recolhidos, os dados foram codificados e sujeitos a um conjunto de análises de dados com recurso ao programa *Statistical Package for Social Sciences* (SPSS) e o *Analysis of Moment Structures* (AMOS), para Windows, para a realização da análise factorial exploratória e estudo da fidelidade, e análise factorial confirmatória, respectivamente.

### Resultados

#### *Estudo das propriedades psicométricas da escala*

Na análise dos pressupostos, nomeadamente dos testes de esfericidade de *Bartlett* e de *Kaiser-Meyer-Olkin*, foi possível perceber que a base de dados era adequada para a análise factorial, dados os valores, respectivamente, de 6750.889 ( $p \leq .001$ ) e .932. Considerando estes dados, foi forçada a extracção de três factores, de acordo com a estrutura proposta na versão original, encontrando-se uma matriz que explica 44.071% da variância e com uma fidelidade total de .897, variando entre .854 no segundo factor, .804 no primeiro e .670 no terceiro factor.

Contudo, uma análise mais detalhada dos itens que saturam em cada factor (ver tabela 1) permite encontrar no primeiro componente itens da subescala afectiva (1, 13, 15, 21, 23 e 31) e comportamental (7, 9, 11, 25, 29 e 35), tal como acontece no segundo componente, onde encontramos itens da subescala afectiva (10, 18, 26, 28 e 34) e comportamental (2, 4, 16, 20, 22 e 32). Outros itens apresentam valor de saturação baixo em todos os componentes, comprometendo o seu poder discriminativo (itens 14, 17 e 30).

Perante os dados - genericamente bons em termos de fidelidade, mas com o baixo poder discriminativo de alguns itens, o que compromete a validade -, foram realizadas novas análises factoriais exploratórias, com a eliminação dos itens que apresentam saturação inferior a .4 e dos que saturam em factores teoricamente não relacionados com o seu conteúdo. A melhor solução foi encontrada com a escala reduzida a 17 itens, 5 relativos às dimensões afectiva, 6 relativos à dimensão comportamental e 6 relativos à dimensão cognitiva. Os dados foram submetidos a uma análise factorial confirmatória, com o recurso ao programa AMOS, testando os modelos. Se os indicadores da versão original eram claramente sofríveis, dados o  $\chi^2$  (591) = 2363.749,  $p < .001$ ,  $\chi^2 / gl = 4.000$ , CFI = .725 e RMSEA = .082 (com um intervalo de confiança de 90% = .078 - .085), os indicadores de ajustamento da versão revista, com 17 itens, foram os mais positivos  $\chi^2$  (116) = 246.026,  $p < .001$ ,  $\chi^2 / gl = 2.121$ , CFI = .954 e RMSEA = .050 (com um intervalo de confiança de 90% = .041 - .059) - e fidelidade - considerando um alfa total de .875, desde .765 na dimensão cognitiva (6 itens), .807 na dimensão comportamental (6 itens) até .871 na dimensão afectiva (5 itens).

**Tabela 1.** Validade e fidelidade da *Chedoke-McMaster Attitudes towards Children with Handicaps*.

	Componente		
	1	2	3
Item25 Convidaria uma criança com NEE para dormir em minha casa	.749		
Item21 Gostaria que uma criança com NEE me convidasse para ir a casa dela	.744	-.313	
Item15 Ficaria contente em ter uma criança com NEE como amigo especial	.742		
Item9 Convidaria uma criança com NEE para a minha festa de aniversário	.728		
Item31 Gostaria de estar com uma criança com NEE	.721		
Item29 Contaria os meus segredos a uma criança com NEE	.693		
Item35 Faltaria ao intervalo para fazer companhia a uma criança com NEE	.687		
Item23 Gostaria de fazer um trabalho para a escola com uma criança com NEE	.670		
Item13 Gostaria de ter uma criança com NEE a viver perto de mim	.667		
Item7 Ficaria ao lado de uma criança com NEE que estivesse a ser arrelhiada	.541		
Item11 Falaria a uma criança com NEE desconhecida	.520		
Item1 Não me preocuparia se uma criança com NEE se sentasse ao meu lado na aula	.519	-.422	
Item33 As crianças com NEE conseguem fazer novos amigos	.482		.438
Item19 As crianças com NEE sabem como se portar bem	.466		
Item17 As crianças com NEE são tão felizes como eu	.391		
Item26 Assusta-me estar perto de uma criança com NEE		.791	
Item16 Tentaria ficar longe de uma criança com NEE	-.335	.713	
Item20 Na aula, não me sentaria ao lado de uma criança com NEE	-.315	.712	
Item22 Tento não olhar para as crianças com NEE		.661	
Item28 Ficaria envergonhado se uma criança com NEE me convidasse para a sua festa de aniversário		.644	
Item18 Não gostaria tanto de um amigo com NEE como dos outros		.611	
Item32 Não iria a casa de uma criança com NEE para brincar	-.344	.603	
Item34 Fico chateado quando vejo uma criança com NEE		.601	
Item10 Tenho medo de uma criança com NEE		.589	
Item24 Crianças com NEE não se divertem muito		.489	
Item2 Não apresentaria uma criança com NEE aos meus amigos		.484	
Item4 Não saberia o que dizer a uma criança com NEE		.450	
Item12 Crianças com NEE não gostam de fazer amigos		.415	-.377
Item14 As crianças com NEE têm pena delas próprias		.330	.259
Item8 Crianças com NEE requerem muita atenção dos adultos			.687
Item5 As crianças com NEE gostam de brincar			.658
Item36 As crianças com NEE precisam de ajuda para muitas coisas			.622
Item6 Sinto pena das crianças com NEE			.521
Item27 As crianças com NEE interessam-se por muitas coisas	.490		.517
Item3 Crianças com NEE conseguem fazer muitas coisas por elas próprias	.390		.402
Item30 As crianças com NEE estão muitas vezes tristes		.360	.390
<b>Valor próprio</b>	10.596	3.240	2.030
<b>% da variância</b>	29.433	8.999	5.639

## Discussão

A revisão da literatura permitiu perceber indicações positivas sobre o potencial deste instrumento na avaliação das atitudes dos pares em relação a crianças com NEE (Vignes et al., 2008), apesar de alguns estudos apontarem, também, para algumas dúvidas, especialmente em termos de validade de construto (Bossaert & Petry, 2013; Tirosh et al., 1997). Os resultados encontrados no nosso estudo apresentam algumas semelhanças com os reportados na adaptação em Israel e Canadá (Tirosh et al., 1997), com a saturação elevada de itens da dimensão afectiva e comportamental nos mesmos factores (seja no primeiro ou segundo). Estes dados podem criar constrangimentos em termos de validade interna das medidas, o que nos levou a considerar estruturas alternativas, seja eliminando itens com saturação baixa nos componentes, seja considerando uma solução que permita aliar a validade empírica com a natureza multidimensional das atitudes (p. ex.: Ajzen & Cote, 2008; Ajzen & Fishbein, 2005). Considerando ainda a natureza multidimensional das atitudes, segundo a qual a escala foi desenvolvida (Rosenbaum et al., 1986), pretendíamos evitar a redução do instrumento a uma escala unidimensional, ou manter uma estrutura tridimensional com itens de dimensões distintas nos mesmos factores (por exemplo, itens de dimensões afectivas e comportamentais com saturação elevada nos mesmo factores, seja no factor um ou factor dois). Uma solução adequada foi encontrada com três factores, com um total de 17 itens, cada um a reunir afirmações unidimensionais com saturação apenas nas dimensões das atitudes avaliadas, e com indicadores de ajustamento que podem ser considerados bons (Kline, 2010). Conforme se apresenta nos

resultados, todos os indicadores de ajustamento foram superados, o que atesta que o modelo teórico apresentado é empiricamente sustentado. Também em termos de fidelidade das dimensões, os valores podem ser considerados bons, todos eles superiores a .70 (DeVellis, 2003).

## ESTUDO 2

Para a análise confirmatória dos modelos, foi realizada um segundo estudo com o recurso ao mesmo instrumento junto de uma segunda amostra. Para avançar um pouco no conhecimento sobre as atitudes das crianças e jovens em relação aos pares com NEE, adicionou-se um conjunto de questões fechadas sobre a proximidade com crianças com NEE.

### Participantes

O segundo estudo, com o recurso a uma amostra de conveniência, foi realizado junto de 475 adolescentes, 52.0% rapazes, do ensino básico do segundo e terceiros ciclo (20.8% do 5.º ano; 17.1% do 6.º ano; 24.6% do 7.º ano; 18.3% do 8.º ano; e 19.2% do 9.º ano de escolaridade), com idades entre os 10 e os 16 anos.

### Instrumentos

No segundo estudo, foi mantida a versão da *Chedoke-McMaster Attitudes towards Children with Handicaps* (Rosenbaum et al., 1986), com 36 itens e resposta *likert*, acompanhada de uma ficha sociodemográfica para recolher dados sobre a amostra (género, idade, escolaridade), e uma afirmação, de tipo fechado, sobre a proximidade com crianças com NEE.

### Procedimento

Para o segundo estudo foi contactada outra escola pública da zona norte do país, com características semelhantes à primeira. Depois de recolhido o consentimento dos pais, foi combinado com os professores a recolha de dados em contexto de sala de aula, no início do tempo lectivo, por um elemento da equipa de investigação, que explicitou os objectivos do estudo e salientou o carácter anónimo e voluntário da recolha de dados. A informação recolhida foi inserida numa base de dados e analisada com o recurso aos mesmos programas de tratamento estatístico.

### Resultados

#### *Estudo das propriedades psicométricas da escala*

A versão original do instrumento, com 36 itens, foi testada junto da nova amostra, traduzindo-se, de novo, numa solução com uma validade sofrível, como se percebe da tabela seguinte (tabela 2). No teste da solução revista, com 17 itens, foram encontrados indicadores de validade que se podem considerar muito bons, dados os  $\chi^2(116) = 239.074$ ,  $p < .001$ ,  $\chi^2 / gl = 2.061$ , CFI = .952 e RMSEA = .047 (com um intervalo de confiança de 90% = .039 - .056). Também em termos de fidelidade, encontramos valores adequados, com um valor de consistência para os 17 itens de .819, desde .715 na dimensão cognitiva (6 itens), .748 na dimensão comportamental (6 itens) até .839 na dimensão afectiva (5 itens).

**Tabela 2.** Indicadores de ajustamento dos modelos.

	$\chi^2$	gl	p	$\chi^2 / gl$	CFI	RMSEA
Modelo Original (36 itens)	1886.683	591	.000	3.192	.781	.068 (.065 - .071)
Modelo Revisto (17 itens)	239.074	116	.000	2.061	.952	.047 (.039 - .056)

#### *Atitudes em relação aos pares com NEE*

Como se percebe pela tabela 3, verificam-se diferenças significativas nas dimensões das atitudes, e na pontuação total, em função do género. As raparigas apresentam pontuações superiores em relação à inclusão na dimensão afectiva [ $t(456) = -2.219$ ,  $p = .027$ ], cognitiva [ $t(458) = -4.549$ ,  $p < .01$ ] e na pontuação total [ $t(429) = -2.800$ ,  $p = .005$ ], sendo mais elevada a pontuação média na dimensão comportamental entre os rapazes [ $t(447) = 1.971$ ,  $p = .049$ ].

Explorando as atitudes em função da idade, não encontramos uma relação com a pontuação total ou na dimensão cognitiva. No entanto, percebeu-se que ao longo da idade os adolescentes apresentavam sentimentos e reacções emocionais mais negativas em relação aos pares com NEE ( $r = -.218$ ,  $p < .01$ ) apesar de uma maior intenção de se relacionar com crianças e adolescentes com NEE ( $r = .150$ ,  $p = .001$ ). A mesma linearidade foi encontrada em função da idade, com os estudantes com escolaridade mais elevada a apresentarem uma pontuação na dimensão afectiva menos positiva ( $rs = -.223$ ,  $p < .01$ ), apesar de maior intenção comportamental em relação aos pares com NEE ( $rs = .164$ ,  $p < .01$ ).

Já quando se exploram as atitudes dos pares em função da sua proximidade com crianças e jovens com NEE (tabela 3), os alunos que referem ter tido colegas ou amigos com NEE apresentam pontuações mais elevadas na dimensão cognitiva [ $t(430.458) = -1,977, p = .049$ ], enquanto na intenção comportamental e no total da escala, os alunos sem contacto com crianças com NEE apresentam uma pontuação média superior ( $p < .05$ ).

**Tabela 3.** Atitude em função do género e proximidade face às crianças com NEE.

		Masculino (n = 201)		Feminino (n = 203)		t	gl	p
		M	DP	M	DP			
<b>Género</b>	Afectiva	15.706	3.936	16.482	3.514	-2.219	456	.027
	Comportamental	12.871	4.539	11.982	5.018	1.971	447	.049
	Cognitiva	23.789	3.885	25.341	3.397	-4.549	458	.000
	Total	52.426	5.161	53.798	5.001	-2.800	429	.005
		Não (n = 288)		Sim (n = 187)		t	gl	p
		M	DP	M	DP			
<b>Proximidade</b>	Afectiva	15.989	3.928	16.217	3.479	-.633	456	.527
	Comportamental	13.142	5.016	11.403	4.244	3.828	447	.000
	Cognitiva	24.273	3.961	24.951	3.328	-1.977	430.458	.049
	Total	53.473	5.665	52.515	4.141	2.027	425.797	.043

### Discussão

O segundo estudo pretendia clarificar algumas dúvidas suscitadas pela primeira aplicação do instrumento. Os resultados confirmam a boa validade do instrumento, dados os valores de referência  $\chi^2$ -fit/gl inferior a 3, CFI superior a .90 e RMSEA inferior a .05 (Kline, 2010). Também os valores de fidelidade superiores a .70, em linha com os dados do estudo anterior, atestam a boa fidelidade da medida (DeVellis, 2003). Para além dos indicadores estatísticos, os resultados permitem confirmar uma solução que mantém os três factores, correspondentes às dimensões afectiva, emocional e comportamental das atitudes, de acordo com o modelo original (Rosenbaum et al., 1986) e o racional teórico das atitudes (e.g.: Ajzen & Cote, 2008; Ajzen & Fishbein, 2005). Com base nessa versão, foram efectuados alguns estudos diferenciais e correlacionais. Embora os dados estejam, genericamente, em linha com a literatura, no que diz respeito à atitude mais favorável das raparigas em relação aos pares com NEE (e.g. Krajewski et al., 2002; Martinez & Carspecken, 2006; Rosenbaum et al., 1986; Vignes et al., 2009) e uma independência das atitudes em função da idade (Vignes et al., 2009), encontram-se alguns dados que importa analisar mais em detalhe, nomeadamente a maior pontuação média dos rapazes na intenção comportamental e a relação da idade e escolaridade, com a dimensão afectiva e comportamental. Também na proximidade se encontraram diferenças na dimensão cognitiva, o que valoriza o papel da experiência e eventualmente da informação nas atitudes em relação com pares com NEE (Laws & Kelly, 2005; Vignes et al., 2009), embora na intenção comportamental e na pontuação total da escala os valores sejam mais elevados junto dos sujeitos com menor proximidade. Dados algo contraditórios que são aprofundados no estudo seguinte.

### ESTUDO 3

O terceiro estudo pretendia aprofundar o papel diferencial das variáveis pessoais nas atitudes em relação aos pares com NEE, considerando também o papel da escolaridade dos pais e a proximidade com pares com NEE.

### Participantes

A amostra do estudo foi constituída por 150 adolescentes, 53.3% raparigas, com idades entre os 13 e os 16 anos. Estes alunos frequentam o 8.º ano (81.3%) e o 9.º ano (18.7%) de escolaridade. A escolaridade dos pais varia entre o 4.º ano e o 12.º, sendo que a maior percentagem nos pais com o 4.º ano (45.3%) e mães com o 6.º ano (34.7%).

### Instrumentos

Foi utilizada a versão revista da escala de atitudes em relação aos pares com NEE, com 17 itens, com resposta *likert*, mantendo a avaliação em três dimensões das atitudes: afectiva, comportamental e cognitiva. A escala foi acompanhada de uma ficha sociodemográfica para recolher dados sobre o género, idade, escolaridade e escolaridade dos pais, e um conjunto de afirmações, de tipo fechado, sobre a proximidade com crianças com NEE (tens algum familiar, amigo/a ou colega na turma com NEE).

## Procedimentos

No estudo três, foi contactada uma terceira escola, a quem foi pedida a devida autorização e o consentimento dos pais. Com a colaboração dos professores, foram encontrados momentos para a recolha de dados, em contexto de sala de aula, por um elemento do grupo de investigação. Os objectivos do trabalho, o carácter anónimo e voluntário da sua participação, foram salientados antes da administração dos instrumentos. Estes, recolhidos e analisados com o recurso aos programas SPSS e AMOS.

## Resultados

### *Atitudes em relação aos pares com NEE*

Genericamente em linha com o estudo anterior, as raparigas apresentam atitudes mais favoráveis à inclusão, seja na dimensão afectiva [ $t_{(148)} = 3.442, p = .001$ ] como na dimensão cognitiva [ $t_{(148)} = 2.351, p = .020$ ], apesar de os rapazes reportarem maior intenção comportamental [ $t_{(148)} = -3.519, p = .001$ ]. Já no que diz respeito à idade, à medida que avança parecem mais ajustadas as cognições relativamente às capacidades e características dos pares com NEE ( $r = .175, p = .035$ ). Já a escolaridade dos pais, não pareceu relacionada com as atitudes dos inquiridos ( $p > .05$ ).

Por fim, analisando os resultados em função do contacto e da proximidade (tabela 4), os resultados permitem perceber que os adolescentes que têm um familiar com NEE, apresentam sentimentos e reacções emocionais ( $Z = -2.244, p = .025$ ), cognições ( $Z = -2.062, p = .039$ ) e, no total da escala, atitudes mais adequadas das crianças e adolescentes relativamente a pares com NEE ( $Z = -3.111, p = .002$ ). O mesmo acontece entre os adolescentes que referem ter um amigo com necessidades especiais, com pontuações mais elevadas na dimensão afectiva [ $t_{(148)} = -3.290, p = .001$ ] e cognitiva [ $t_{(148)} = -2.110, p = .037$ ]. Na intenção de se relacionar com os pares com NEE, os alunos que não tem amigos com NEE apresentam uma pontuação superior [ $t_{(148)} = 3.752, p < .01$ ], tal como os que têm um amigo com NEE pela primeira vez na sua turma ( $Z = -2.712, p = .006$ ), apesar de sentimentos e reacções emocionais menos adequados à inclusão ( $Z = -2.2863, p = .004$ ).

**Tabela 4.** Atitude das crianças sem NEE em função do género e da proximidade com crianças com NEE.

		Masculino (n = 70)		Feminino (n = 80)		p
		M	DP	M	DP	
<b>Género</b>	Afectiva	16.429	3.586	18.288	3.028	.001
	Comportamental	11.586	3.929	9.450	3.504	.001
	Cognitiva	24.333	3.390	25.532	2.810	.020
	Total	52.391	4.230	53.317	3.999	.174
		Não		Sim		p
		M	DP	M	DP	
<b>Tem um familiar com NEE</b>	Afectiva	17.090	3.348	18.857	3.407	.025
	Comportamental	10.451	3.607	10.429	4.834	.502
	Cognitiva	24.717	3.179	26.071	2.761	.039
	Total	52.308	3.910	55.357	4.147	.002
<b>Tem um amigo NEE</b>	Afectiva	16.268	3.250	18.106	3.346	.001
	Comportamental	11.911	4.282	9.575	3.288	.000
	Cognitiva	24.273	3.188	25.387	3.054	.037
	Total	52.509	4.476	53.108	3.902	.395
<b>Amigo com NEE frequenta a tua turma</b>	Afectiva	17.628	3.557	16.784	2.907	.233
	Comportamental	10.434	4.101	10.487	2.987	.396
	Cognitiva	25.018	3.277	24.833	2.710	.615
	Total	53.107	4.214	52.194	3.786	.316
<b>Primeira vez na mesma turma</b>	Afectiva	17.852	2.143	14.546	3.417	.004
	Comportamental	9.593	2.546	12.546	2.945	.006
	Cognitiva	25.154	2.709	24.273	2.687	.402
	Total	52.731	3.639	51.364	4.226	.384

## Discussão

O presente trabalho pretendia conhecer as atitudes de crianças e adolescentes em relação aos pares com NEE, a partir da adaptação de um dos instrumentos mais citados na investigação neste âmbito. Só com a existência de medidas válidas e fiáveis, teórica e empiricamente, poderemos avançar no conhecimento dos determinantes das atitudes dos pares e avaliar o impacto de intervenções específicas neste sentido (Rosenbaum et al., 1986). Apesar das alterações efectuadas nos estudos anteriores, que levou ao

ajustamento da estrutura da escala com a redução do número de itens, o terceiro estudo confirmou os bons indicadores de ajustamento apresentados anteriormente. Ressalta neste estudo, a diminuição do valor da consistência interna da dimensão cognitiva, que já era a que apresentava valores inferiores nos estudos anteriores e nos estudos já referidos (Rosenbaum et al., 1986). Tais dados podem indicar, algum nível de conhecimento distinto em função das informações recolhidas (expressas nos itens). Embora a resposta *likert* permita aos sujeitos posicionarem-se num ponto de um contínuo, itens que são relativos ao que pensam sobre as características ou comportamentos dos pares com NEE podem ser mais sensíveis à maior ou menor informação dos inquiridos, em linha com outros estudos que salientam o papel desta componente (Laws & Kelly, 2005). Esses dados têm também algum suporte em alguns trabalhos já realizados no nosso contexto, que encontram atitudes genericamente positivas (Amaral, 2009; Serra, 2008), embora ocorram também algumas posições menos positivas e que devem merecer a nossa atenção e intervenção específica (Amaral, 2009).

Também na linha dos estudos anteriores, verificou-se uma atitude genericamente mais positiva das raparigas (Krajewski, Hyde, & O'Keefe, 2002; Martinez & Carspecken, 2006; Rosenbaum et al., 1986; Vignes et al., 2009) embora os rapazes pareçam distinguir-se na intenção comportamental, como no estudo anterior. Estes dados podem fazer supor, apesar de tudo, maior retraimento das raparigas, ao contrário dos rapazes, mais externalizadores e, eventualmente, abertos à colaboração e ao contacto social com os seus colegas com NEE.

Os resultados sublinham ainda a diferença nas atitudes em função da proximidade de crianças com NEE (Rosenbaum et al., 1986; Vignes et al., 2009; Wong, 2008), seja de familiares ou amigos. Contudo, parece interessante notar que essas diferenças não se percebem, pelo menos nas respostas dos indivíduos à escala, na dimensão comportamental. Isto poderá querer dizer, eventualmente, a disponibilidade e abertura dos adolescentes aos seus pares com NEE, independentemente de terem maior ou menor contacto com familiares ou amigos com estas necessidades. Estes dados são reforçados até por uma diferença significativa na dimensão comportamental entre os alunos que não têm amigos com NEE. Sendo esta uma faixa etária marcada pela interação social e pela abertura aos pares, pode ser um momento propício para a intervenção de professores e educadores no sentido do envolvimento e inclusão dos pares com NEE.

## CONCLUSÕES

No presente trabalho, pretendemos conhecer as atitudes dos pares sem NEE em relação à inclusão, uma vez que elas predizem os seus comportamentos, seja na sala de aula como fora dela, em relação aos seus pares com NEE. Este é um tópico particularmente importante na investigação educacional, assumindo uma visão de escola inclusiva, em que a proximidade e o envolvimento entre todos os estudantes permitem a discussão de valores, ao mesmo tempo que promovem o desenvolvimento de competências sociais resultantes da aceitação e consciencialização dos pares para a diferença (Correia, 2010). Considerando o papel decisivo dos pares no processo de inclusão, e a falta de medidas para avaliar as suas atitudes em relação à inclusão de crianças e adolescentes com NEE nas escolas regulares, este estudo tentou dar um pequeno contributo.

Com a realização dos três estudos, os autores acreditam ter contribuído para a adaptação de uma escala de avaliação das atitudes em relação aos pares com NEE. Embora este processo tenha envolvido a eliminação de alguns itens, tal processo permitiu melhorar as propriedades psicométricas da medida, mantendo os objectivos e a estrutura dimensional. Espera-se, portanto, que possa servir como uma referência a adoptar em próximos estudos que nos permitam conhecer mais sobre os factores determinantes das atitudes dos pares em relação à inclusão, sejam as mensagens, explícitas e implícitas, como as acções e práticas dos pais e professores, pelos *media* e pelas escolas, assim como o papel de experiências anteriores ou a eficácia de intervenções preventivas desenvolvidas especificamente com este propósito. Percebem-se, portanto, linhas de investigação que se podem reflectir em propostas promotoras das práticas inclusivas. Com a adaptação deste instrumento, novas linhas se podem abrir, tanto quanto possível, usando métricas com propriedades robustas que garantam a comparabilidade dos resultados. Naturalmente que, sendo um instrumento mais pequeno e que avalia um processo menos explorado na investigação inclusiva, são expectáveis também novos estudos que contribuam para aumentar a robustez psicométrica desta medida e o aparecimento de novas medidas para avaliar processos relacionados.

Para além disso, tão ou mais importante como os resultados da adaptação da escala, foi possível compreender as atitudes de crianças e adolescentes em relação aos seus pares com necessidades especiais. Os resultados permitem perceber atitudes genericamente mais favoráveis entre as raparigas, à excepção da dimensão comportamental, que é mais favorável entre os rapazes, e o papel do contacto e da proximidade com crianças com NEE nas atitudes dos estudantes. Embora algumas indicações possam

parecer algo contraditórios, os dados parecem apontar para pistas a explorar no futuro, nomeadamente, promovendo o contacto com pares com NEE e promovendo intervenções que contemplem mensagens claras e conhecimentos mais adequados sobre as necessidades especiais como forma de envolver todos os alunos numa escola inclusiva.

Apesar dos contributos, devem ainda ser consideradas algumas limitações ao presente trabalho, com amostras que poderiam ser mais diversificadas e representativas da população portuguesa. Para além disso, seria importante complementar o estudo com questões de despiste ou alguma medida de desajustabilidade social, para perceber de que forma estas respostas podem ser mais ou menos enviesadas por este processo.

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