



Positive Youth Development in Portugal: A Tool towards Gender Equity?

Margarida Gaspar de Matos^{1,2,3}, Teresa Santos^{1,2,3*}, Marta Reis^{1,2}, Diego Gómez-Baya⁴, Adilson Marques^{1,2}

¹Faculdade de Motricidade Humana (Equipa Aventura Social), Universidade de Lisboa, Portugal.

²Instituto de Saúde Ambiental, Faculdade de Medicina, Universidade de Lisboa, Portugal.

³William James Center for Research, ISPA - Instituto Universitário, Lisboa, Portugal.

⁴Universidad de Huelva, Spain.

***Corresponding Author:** Teresa Santos, FMH, Universidade de Lisboa, Estrada da Costa 1495-688 Cruz Quebrada, Portugal, **Email:** gaudi_t@hotmail.com

Abstract: Positive Youth Development - PYD pointed out the need to strengthen internal/external developmental assets in youth's contexts. Literature suggests gender differences concerning health outcomes, with girls reporting poorer health outcomes, but higher quality in peer relationships, than boys. This chapter examines the associations of PYD and its dimensions with psychosocial variables, according to gender. Through an online survey, 2700 Portuguese college students (73.3% females), with a mean age of 21.3±2.79 years old were included. For both genders, the results showed significant differences and similarities with the PYD's total score and its dimensions. Such results reinforce the importance to study positive indicators for PYD, but taking into account gender issues. More knowledge in this area can help health/education professionals and policy-makers to better plan interventions/policies. It is aimed to improve an integral and gender-sensitive healthy perspective for youths, based on interdisciplinary and transdisciplinary work.

Keywords: academic achievement; anxiety; developmental assets; Five Cs; gender differences; Portugal; Positive Youth Development Short Form (PYD-SF); resilience; self-regulation.

1. INTRODUCTION

During the past century, youth's studies were mainly based on risk behaviours and on a "deficit perspective", which influenced policies, research and practice. In this approach, the concept of positive development was basically defined by the absence or decrease of problems (Geldhof et al., 2014). Over the past two decades, the study of positive indicators significantly improved (Lippman, Moore, & McIntosh, 2011), and it was largely recognized that focusing youth programs and interventions mostly on risks and vulnerabilities, would have limited impact. Thus, the interest in preventing youth problems and promoting healthy youth development led to the implementation of a strength-based model, that capitalized human plasticity (Lerner, 2017), and aimed to be empowering and effective in diverse contexts (Benson, Scales, Hamilton, & Sesma, 2006). Such approach was based on several theoretical frameworks (Small & Memmo, 2004), as for example the Positive Youth Development-PYD. PYD highlighted the importance of strengthening internal and external developmental assets comprised in the social ecology of youth's networks and opportunities

(Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Small & Memmo, 2004). Positive indicators such as the Model of the Search Institute's Developmental Assets (40, comprised on external and internal assets) (Benson, Leffert, Scales, & Blyth, 1998) and the Five Cs model of PYD (Competence, Confidence, Character, Connection and Caring) (Busseri & Rose-Krasnor, 2009; Lerner et al., 2005, 2011, 2013) were widely studied.

Although the worldwide growing focus on positive youth development among researchers and practitioners, global PYD perspectives in different countries and cultures vary and it is important to address its uniqueness (Koller & Verma, 2017; Petersen, Koller, Motti-Stefanidi, & Verma, 2017), to better develop and translate research knowledge into context-sensitive interventions and policies. Literature stated that when young people's developmental assets are in line with the human and structural resources in its context, positive development is facilitated.

Accordingly, an adaptive developmental regulation process takes place and youths can

contribute to the development of both themselves and the society (Lerner et al., 2005).

Adolescence and transition to adulthood are critical moments for the establishment of health behaviour *clustering* and health trajectories that implicate later well-being (Harris 2010; Bauldry et al., 2012). Men and women may differentially group health behaviours into clusters, relevant for long-term health and mortality patterns (Olson, Hummer, & Harris, 2017). Literature underlined a tendency for girls to report poorer health outcomes when compared to boys (Currie et al., 2012; Gaspar, Matos, Ribeiro, Leal, & Albergaria, 2014; Matos, 2000-2014). Different internalization and externalization patterns can play an important role to explain such findings (Cavallo et al., 2006; Olson, Hummer, & Harris, 2017), as well as social, demographic/environmental contexts, and the parents/peers influence (Olson, Hummer, & Harris, 2017).

Nevertheless, to achieve health behaviours and positive youth development, it is needed a growing sequence of various psychosocial variables since early childhood which need to remain relatively stable across the life span. Self-regulation has a pivotal role in human functioning, bringing psychological processes such as motivation or attention in a desired state, despite incentives towards a different one. It is a mechanism that helps to cope with everyday life demands and in the successful resolution of developmental crises, through activation, monitoring and inhibiting (Busch & Hofer, 2012). It also is positively associated with well-being (Baumeister & Vohs, 2003), positive adaptation (Mischel, 2014), and several positive outcomes in adulthood (Ng-Knight et al., 2017). In addition, it is considered a key psychosocial factor that may reduce future health risk behaviours across multiple domains (deBlois & Kubzansky, 2016), and lead to positive youth development, acting as a strong predictor (Schmid, Phelps, & Lerner, 2011). Furthermore, the ability to learn from mistakes (self-regulation) was pinpointed as a robust predictor for coping, confidence, tenacity, adaptation and tolerance to negative situations (resilience), and is it one of the most important protective factors in connection with resilience. Research on resilience refers to it as the management to adapt positively despite the experience of adversity, as a way to overcome a risk (González-Torres, & Artuch, 2014), and it is closely linked with the paradigm of PYD in the field for prevention (Lee et al., 2012; Lerner et al., 2011). Both variables have a significant and positive relationship (Artuch-Garde et al., 2017; Lerner et al., 2013). The literature also highlighted that self-control

strategies have an association with anxiety and academic achievement. They may predict less reactivity and more adaptive responses to stress in daily processes, suggesting positive effects (Galla & Wood, 2015). In addition, they are a major factor for academic achievement and this is rather relevant, once low academic achievement can lead to risk of social exclusion (Zimmerman, 1990), and it is a powerful predictor of well-being, linked to mental health (Koller & Verma, 2017). Yet, parenting styles, family structure, teacher and peer relations are also important as protective factors (Artuch-Garde et al., 2017). Youths that are involved in contexts that can provide positive resources such as family, schools and communities tend to show more likely evidence of positive development and less likely negative outcomes (Koller & Verma, 2017). Thus, no single factor promotes resilience in isolation (Artuch-Garde et al., 2017), nor a single program or strategy provides all youth development opportunities and support for being successful (Koller & Verma, 2017).

Facing this theoretical background, and taking into account the need to study country-specificities, the present study shows PYD Portuguese data on youths. Considering the lack of studies attempting to capture the dynamic relations between youth and their context (Conway, Heary, & Hogan, 2015), this study aims to examine the associations and the impact of psychosocial variables (Self-regulation, Resilience, Anxiety and Perceived school performance) in PYD-SF-PT total score and in its specific dimensions (Confidence, Competence, Connection, Caring and Character), with a gendered approach.

2. MATERIALS AND METHODS

2.1. Study Design, Participants and Procedure

The research was conducted simultaneously with the BePositive project (Matos, Santos & Reis, 2017), a cross-sectional study and a part of the local national survey Health Behaviour in School-aged Children (HBSC/WHO) (Matos & Equipa Aventura Social, 2000-2014) extended to Portuguese Universities (HBSC/JUnP). The HBSC/JUnP followed all the rules for research outlined in 2008 by the World Medical Association Declaration of Helsinki, and was approved by the Ethics Commission of the Medicine Academic Center of Lisbon of the Faculty of Medicine, University of Lisbon.

The BePositive study results from a Portuguese partnership with the Positive Youth Development cross-national project (<http://www.uib.no/en/rg/sipa/pydcrossnational>), which aims to: 1) examine the extent to which developmental

(internal and external) assets are accessible to young people in different national contexts; 2) understand how these assets can be related to positive youth outcomes, such as the “5 Cs” of PYD (i.e., confidence, competence, character, caring and connection) and thriving indicators (e.g., school success, values diversity, resists danger and exhibit leadership); 3) highlight how positive outcomes are associated to young people’s contribution to the development of the self and to the involving society.

In the present study, a total of 2700 youths (1979 women), aged from 16 to 29 years old (21.30±2.79) participated in the study. Data collection was performed using an online survey and the *Limesurvey* platform. Prior to data collection, the purpose of the study was informed to youths and informed consents were obtained. Informed consent from parents was sought as well, when necessary. Confidentiality of the

responses to the questionnaire and during the data process was assured to youths.

2.2. Measures and Instruments

All the measures were obtained in a single self-reported questionnaire, composed of several parts that took approximately 45 minutes to respond. The first one included the instructions and informed consent. The second part included the socio demographic characterization, namely age, gender, geographic region, nationality, and education level. Finally, the third part contained questions related to the youth himself and others, comprising the assessment of Positive Youth Development-PYD and psychosocial variables such as Resilience-RES, Self-regulation-SR, Anxiety-STAI-T, and Perceived School Performance-PSP.

Detailed information on these measures and instruments is described in **Table 1**.

Table 1. Measures and Instruments

Sociodemographic Variables		
Age		
Mín: 16 - Máx: 29 (Years Old)		
Gender		
1=Boy; 2=Girl		
Nationality		
1=Portuguese; 2=Others		
Educational Level		
1=Secondary; 2=Graduate; 3=Master		
Socio Economic Status - SES		
1=Low; 2=Middle; 3=High		
Psychosocial Variables		
Name	Psychosocial Measure	Short Description
Positive Youth Development-PYD, Short Form, Portuguese Reduced Version (PYD-SF-PT) (Geldhof et al., 2014; Jellic, Bobek, Phelps, Lerner, & Lerner, 2007; Lerner et al., 2005)	Positive Youth Development (5 Cs: Confidence, Competence, Connection, Caring and Character)	<ul style="list-style-type: none"> • The original version of PYD scale was developed using data from the 4-H Study in its different waves, which proposed and tested a higher-order measure of PYD, consisting of a five first-order latent constructs, each representing one of the Five Cs of PYD; • The 78 items from the original scale were drawn and adapted from several questionnaires. More recently, a shorter version of this scale (with 34 items) was developed - the Positive Youth Development Short Form (PYD-SF); • In the present study, the PYD-SF was translated from the original English version into Portuguese language (and back translation), and a reduced version (24 items) showing reasonable psychometric properties was used; • Higher scores indicate higher levels of PYD.
Healthy Kids Resilience Assessment Module (RES) (Constantine & Benard, 2001; Martins, 2007; Simões, Matos & Morgan, 2015)	Resilience (2 dimensions: external and internal resources).	<ul style="list-style-type: none"> • 18 items answered on a 4-point scale; • Ranges from 18 to 72; • Higher scores indicate higher levels of competences, protection and resilience to adversity; • In this study it was used the Portuguese Version of the questionnaire and it was only considered the internal resources dimension.
Adolescent Self-Regulatory Inventory-ASRI (SR) (Dias, Castillo, & Moilanen, 2014; Moilanen, 2007)	Self-regulation (2 dimensions: Short term-SR-ST and Long term-SR-LT).	<ul style="list-style-type: none"> • 36 items answered on a 5-point Likert scale; • Ranges from 36 to 180; • Higher values indicate better competences of self-regulation; • In this study the instrument was translated from the original English version into Portuguese language. It was then revised by a group of specialized experts within this field and a pre-test with a group of students was conducted in schools.

<p>State-Trait Anxiety Inventory (STAI-T) (Silva & Spielberger, 2007; Spielberger, Gorsuch & Lushene, 1970)</p>	<p>Anxiety (2 dimensions: state-anxiety and trait-anxiety).</p>	<ul style="list-style-type: none"> • Two subscales: Y-1 (state-anxiety) and Y-2 (trait-anxiety), each one comprising 20 items. State-anxiety reflects answers related to feeling anxiety in a specific moment, whereas trait-anxiety to usually feel anxiety. • 40 items answered on a 5-point scale; • In this study it was used the Portuguese Version of the questionnaire and only the items of the Trait dimension were included; • Higher scores indicate higher level of anxiety.
<p>Perceived School Performance (PSP) (WHO, 2016)</p>	<p>Perceived School Performance</p>	<ul style="list-style-type: none"> • Single item measure, where young people were asked about what, in their opinion, their class teacher(s) think(s) about their school performance compared to their classmates; • This measure is a consistent and strong predictor of health and well-being (Suldo, Riley, & Shaffer, 2006); • Respondents were asked to rate their answers on a rating scale from one to four (very good to below average).

2.3. Data Analysis

Data from *Limesurvey* was transferred to an electronic data file. All variables were checked for data inaccuracy by running SPSS frequencies, and afterwards, an analysis on missing values was conducted. Descriptive analysis (means, standard deviation and percentage) were used to characterize the sample. All data were tested for normality prior to any analyses using Kolmogorov-Smirnov tests, as well as Levene's test for the homogeneity of the variance. An independent T-test was conducted to determine differences between gender (men/women) for PYD-SF-PT (Total Score and its dimensions), and psychosocial variables in Portuguese youths. Due to the observed differences, and after testing and confirming an existent interaction effect between age and gender, the linear regression performed afterwards was conducted separated by gender. Thus, linear regression was performed to evaluate the impact of the psychosocial variables in PYD, separated for men and for women. All statistical analyses were completed using the SPSS 24.0 (Statistical Package for Social Sciences) and the significance level was set at $p < 0.05$.

3. RESULTS

The 2700 included adolescents (26.7% males; 73.3% female) had a mean age of 21.3 years ($SD=2.79$). Most of the participants had Portuguese nationality (96.8%), were born in Lisbon (33.4%), were living in an urban area (46.4%), were graduate students (63.5%) and had a middle socioeconomic status (SES) level (67.7%).

All the variables included in this study are presented in **Table 2**.

Table2. *Socio-demographic characteristics, psychosocial variables, PYD-SF-PT and its 5C/subscale dimensions for the total group of youth.*

	Total Group
	N=2700
Socio-demographic characteristics	
Age (years) (M±SD)	21.30±2.79
Gender (%)	
Male	26.7
Female	73.3
Socio-Economic Status-SES (%)	
Low	13.1
Medium	67.7
High	19.2
Psychosocial variables (M±SD)	
SR	143.80±18.18
RES	55.58±8.034
STAI-T	45.24±9.23
PSP	2.83±0.77
PYD-SF-PT and its dimensions (M±SD)	
PYD-CONFIDENCE	14.35±3.42
PYD-COMPETENCE	14.56±3.33
PYD-CONNECTION	13.57±2.91
PYD.CARING	16.73±2.50
PYD-CHARACTER	16.26±2.78
PYD-TOTAL SCORE	75.47±9.21

PSP: Perceived School Performance; PYD-SF-PT: Positive Youth Development-Short Form, Portuguese reduced Version; RES: Resilience; SR: Self-regulation; STAI-T: State-Trait Anxiety Inventory, Trait.

The differences between gender (men/women) for PYD-SF-PT (Total Score and its dimensions), and psychosocial variables in Portuguese youths are presented in **Table 3**. The results show that in the present study women had statistically significantly higher values when compared to men, for the Psychosocial variables Self-regulation (144.97±18.33 vs. 140.57±17.39), *t*

(2698) = -5.597, $p=0.000$, and Resilience (55.87±8.10 vs. 54.76±7.81), $t(2698)=-3.198$, $p=0.001$. In what concerns the PYD-SF-PT, women had statistically significantly higher values when compared to men, for the PYD-SF-

PT Total score (75.71±9.10 vs. 74.80±9.47), $t(2698)=-2.271$, $p=0.023$, and in its dimensions Caring (16.90±2.43 vs. 16.27±2.64), $t(2698)=-5.842$, $p=0.000$, and Character (16.38±2.79 vs. 15.93±2.73), $t(2698)=-3.805$, $p=0.000$.

Table3. Differences between gender (men/women) for PYD-SF-PT (Total Score and its dimensions), and psychosocial variables in Portuguese youths

	Gender		
	Men (N=721)	Women (N=1979)	<i>p</i>
Psychosocial variables (M±SD)			
AR¹	140.57±17.39	144.97±18.33	0.000***
RES¹	54.76±7.81	55.87±8.10	0.001***
STAIT-T¹	45.59±9.25	45.12±9.21	0.235
PSP¹	2.86±0.87	2.82±0.74	0.147
PYD-SF-PT and its dimensions (M±SD)			
PYD-SF-PT Total Score¹	74.80±9.47	75.71±9.10	0.023*
PYD-SF-PT Confidence¹	14.49±3.52	14.30±3.38	0.212
PYD-SF-PT Competence¹	14.63±3.42	14.53±3.30	0.509
PYD-SF-PT Connection¹	13.49±2.82	13.59±2.95	0.433
PYD-SF-PT Caring¹	16.27±2.64	16.90±2.43	0.000***
PYD-SF-PT Character¹	15.93±2.73	16.38±2.79	0.000***

¹Tested by Independent T-Test.

*** $p \leq 001$; ** $p \leq 01$; * $p \leq 05$

PSP: Perceived School Performance; PYD-SF-PT: Positive Youth Development-Short Form, Portuguese reduced Version; RES: Resilience; SR: Self-regulation; STAI-T: State-Trait Anxiety Inventory, Trait.

Table4 Shows the results of the linear regression analysis for PYD-SF-PT (Total Score and its dimensions) and psychosocial variables in Portuguese youths, separated by gender (and adjusted by age and Socio Economic Status - SES).

For men [F (6,714) =38.176, $p<0.001$, $R^2=.237$] and women [F (6,1972) =96.434, $p<0.001$, $R^2=.224$] a model was achieved for PYD-SF-PT Total score. For both genders, all the psychosocial variables, with the exception of Perceived School Performance, had a significantly association: men and women who had higher Self-regulation, higher Resilience and lower Anxiety tended to have a higher PYD-SF-PT Total score.

For men [F (6,714) =20.377, $p<0.001$, $R^2=.139$] and women [F (6,1972) =40.662, $p<0.001$, $R^2=.107$] a model was achieved for the dimension Confidence of PYD-SF-PT. For men, Self-regulation, Anxiety and Perceived School Performance had a significantly association: the men who had higher Self-regulation, higher Perceived School Performance and lower Anxiety tended to have a higher PYD-SF-PT in the dimension Confidence. For women, only Anxiety and Perceived School Performance had a significantly association: the women who had higher Perceived School Performance and lower Anxiety tended to have a higher PYD-SF-PT in the dimension Confidence.

For men [F (6,714) =14.938, $p<0.001$, $R^2=.104$] and women [F (6,1972) =27.401, $p<0.001$, $R^2=.074$] a model was achieved for the dimension Competence of PYD-SF-PT. For men, only Self-regulation and Anxiety had a significantly association: the men who had higher Self-regulation and lower Anxiety tended to have a higher PYD-SF-PT in the dimension Competence. For women, Resilience, Anxiety and Perceived School Performance had a significantly association: the women who had higher Resilience, higher Perceived School Performance and lower Anxiety tended to have a higher PYD-SF-PT in the dimension Competence.

For men [F (6,714) =47.626, $p<0.001$, $R^2=.280$] and women [F (6,1972) =123.702, $p<0.001$, $R^2=.271$] a model was achieved for the dimension Connection of PYD-SF-PT. For both genders all the psychosocial variables had a significantly association: the men and women who had higher Self-regulation, higher Resilience, higher Perceived School Performance and lower Anxiety tended to have a higher PYD-SF-PT in the dimension Connection.

For men [F (6,714) =6.803, $p<0.001$, $R^2=.046$] and women [F (6,1972) =39.441, $p<0.001$, $R^2=.104$] a model was achieved for the dimension Caring of PYD-SF-PT. For men, only Resilience and Anxiety had a significantly

association: the men who had higher Resilience and lower Anxiety tended to have a higher PYD-SF-PT in the dimension Caring. For women, all psychosocial variables had a significantly association: the women who had higher Self-regulation, higher Resilience, higher Perceived School Performance and lower Anxiety tended to have a higher PYD-SF-PT in the dimension Caring.

For men [F (6,714) =8.371, p<0.001, R²=.058] and women [F (6,1972) =46.736, p<0.001, R²=.122] a model was achieved for the

dimension Character of PYD-SF-PT. For men, Self-regulation, Resilience and Perceived School Performance had a significantly association: the men who had higher Self-regulation, Resilience and Perceived School Performance tended to have a higher PYD-SF-PT in the dimension Character. For women, all psychosocial variables had a significantly association: the women who had higher Self-regulation, higher Resilience, higher Perceived School Performance and lower Anxiety tended to have a higher PYD-SF-PT in the dimension Character.

Table 4. Summary of linear regression results for PYD-SF-PT (Total Score and its dimensions), and psychosocial variables in Portuguese youths, separated by gender

	MEN				WOMEN			
	Variables	B	SE B	β	Variables	B	SE B	β
PYD-SF-PT Total Score	AR	0.143	0.021	0.262***	AR	0.065	0.012	0.132***
	RES	0.188	0.046	0.155***	RES	0.307	0.025	0.273***
	STAIT-T	-0.157	0.038	-0.154***	STAIT-T	-0.180	0.023	-0.182***
	PSP	0.703	0.369	0.065	PSP	0.243	0.256	0.020
	R²			.237	R²			0.224
F			38.176***	F			96.434***	
PYD-SF-PT Confidence	AR	0.036	0.008	0.179***	AR	-0.002	0.005	-0.010
	RES	0.020	0.018	0.044	RES	0.019	0.010	0.046
	STAIT-T	-0.068	0.015	-0.180***	STAIT-T	-0.101	0.009	-0.275***
	PSP	0.371	0.146	0.092*	PSP	0.384	0.102	0.084***
	R²			0.139	R²			0.107
F			20.377***	F			40.662***	
PYD-SF-PT Competence	AR	0.031	0.008	0.159***	AR	0.003	0.005	0.016
	RES	0.019	0.018	0.044	RES	0.048	0.010	0.117***
	STAIT-T	-0.059	0.015	-0.158***	STAIT-T	-0.051	0.009	-0.143***
	PSP	0.123	0.144	0.031	PSP	0.323	0.102	0.072**
	R²			0.104	R²			0.074
F			14.938***	F			27.401***	
PYD-SF-PT Connection	AR	0.033	0.006	0.201***	AR	0.014	0.004	0.086***
	RES	0.044	0.013	0.122**	RES	0.069	0.008	0.189***
	STAIT-T	-0.080	0.011	-0.263***	STAIT-T	-0.107	0.007	-0.335***
	PSP	0.511	0.107	0.158***	PSP	0.323	0.081	0.081***
	R²			0.280	R²			0.271
F			47.626***	F			123.702***	
PYD-SF-PT Caring	AR	0.011	0.007	0.071	AR	0.022	0.003	0.166***
	RES	0.066	0.014	0.196***	RES	0.083	0.007	0.278***
	STAIT-T	0.038	0.012	0.134**	STAIT-T	0.054	0.007	0.207***
	PSP	0.068	0.115	0.022	PSP	-0.184	0.074	-0.056*
	R²			0.046	R²			0.104
F			6.803***	F			39.441***	
PYD-SF-PT Character	AR	0.032	0.007	0.202***	AR	0.029	0.004	0.189***
	RES	0.039	0.015	0.111**	RES	0.088	0.008	0.255***
	STAIT-T	0.011	0.012	0.039	STAIT-T	0.025	0.008	0.82**
	PSP	-0.371	0.118	-0.118**	PSP	-0.603	0.084	-0.160***
	R²			0.058	R²			0.122
F			8.371***	F			46.736***	

Note. B (unstandardized coefficient) and SE (standard error); β: standardized coefficients.

***p≤001; **p≤01; *p≤05

Analyses were adjusted for age and Socio Economic Status (SES).

PSP: Perceived School Performance; PYD-SF-PT: Positive Youth Development-Short Form, Portuguese reduced Version; RES: Resilience; SR: Self-regulation; STAIT-T: State-Trait Anxiety Inventory, Trait.

4. DISCUSSION

Overall, the present results have shown similarities and differences for the impact of the study psychosocial variables in the PYD between men and women. For the PYD-SF-PT Total score, the same psychosocial variables with significant impact were found for both genders: Self-regulation, Resilience and Anxiety. Also for the dimension Connection the significant psychosocial variables were the same for all genders: Self-regulation, Resilience, Perceived School Performance and Anxiety. In addition, Anxiety had significant impact for the majority of the PYD's dimensions for both genders. Such findings reinforce the relevance of these variables for Positive Youth Development (Baumeister & Vohs, 2003; Ng-Knight et al., 2017; Mischel, 2014; Schmid, Phelps, & Lerner, 2011; Lee et al., 2012; Lerner et al., 2011), and suggest a dynamic interdependence between Self-regulation, Resilience, Anxiety and Perceived School Performance (Artuch-Garde et al., 2017; Galla & Wood, 2015; Lerner et al., 2013; Koller & Verma, 2017). This interdependence is also in line with the idea proposed in the literature that no single factor promotes resilience in isolation, nor a single program or strategy provides all youth development opportunities and support for being successful (Artuch-Garde et al., 2017; Koller & Verma, 2017). In a general view, the linear regression models evidences that the promotion of self-regulation, resilience and perceived school performance, along with the reduction of anxiety can have a relevant impact for improving positive youth development for both genders. These findings reinforce the need to continue to study positive indicators, and to strengthen internal and external developmental assets (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Small & Memmo, 2004), as it is suggested in the literature for the last two decades (Lippman, Moore, & McIntosh, 2011). The present results are, as well, in line with more recent health recommendations, namely the need to include psychosocial factors in complement of health indicators (WHO, 2013). Furthermore, results are in accordance with literature, that pointed out the relevance of strength-approaches (as the PYD) and psychosocial factors for positive outcomes (Benson, Scales, Hamilton, & Sesma, 2006; Lerner et al., 2005; Small & Memmo, 2004).

However, for the psychosocial variables Self-regulation, Resilience and Perceived School Performance in the dimensions Confidence,

Competence, Caring and Character, more variability was observed between genders. For men, Self-regulation had a significant impact in Confidence, Competence and Character; Resilience had a significant impact in Caring and Character; Perceived School Performance had a significant impact for Confidence and Character. For women, Self-regulation had a significant impact for Caring and Character; Resilience had a significant impact for Competence, Caring and Character; Perceived School Competence had a significant impact for Confidence, Competence, Caring and Character. Such results are in line with the literature that outlined that men and women may differentially group health behaviours into clusters (Olson, Hummer, & Harris, 2017). From the present findings it is not possible to conclude that women report poorer outcomes, but it is shown that generally, women tend to have, simultaneously, more psychosocial variables impacting PYD, than men. Different internalization and externalization patterns can explain these findings (Cavallo et al., 2006), as well as social, demographic/environmental contexts, and the parents/peers influence (Olson, Hummer, & Harris, 2017), which were not the primary focus of this study.

Globally, it is expected that the findings of the present study can help researchers, educators and practitioners to better understand the interaction between the study psychosocial variables and PYD in men and women. These results may serve as a guide to plan interventions that could help youths in the construction of a supportive context, in order to decrease their anxiety, and to improve their competences of self-regulation, resilience, and perceived school performance. While planning interventions, it is highlighted that positive youth development is, basically, just an approach and not a particular curriculum or program. This means that it is a set of practices that can be additionally included in other programs designed to achieve, more likely, one or more positive outcomes (Moore, 2017). In this sense, it would be beneficial to work on certain essential aspects of these variables. Particularly, setting realistic goals and learning from mistake; increase self-control strategies (thoughts, emotions, impulses and behaviour); work on youth's strengths; decrease anxiety; and encourage positive adaptation, that can help to cope positively with adverse situations, so that an optimistic life plan can be built, and make it easy to attain a happy and healthy life (Mishel, 2014).

Lastly, it is highlighted that youths are the most important assets in the world, thus, it is crucial to

continue the study on the identification of indicators for positive youth development. When a positive development occurs, they can power to benefit themselves, families, communities and societies, and the consequent effects can last for generations. Thus, investments in youths can represent a highly cost-effective opportunity towards positive changes (Petersen, Koller, Motti-Stefanidi, & Verma, 2017).

5. LIMITATIONS AND STRENGTHS

This study shows some limitations and the results need to be interpreted with the following issues in mind. Recall bias might be introduced through self-report, and some youths may be under-represented, due to the group's heterogeneity. The cross-sectional design of the study precludes inferences concerning causality and longitudinal data would be needed. However, the present study has numerous strengths, namely including self-reports from a large sample of youths and with well-developmentally appropriate measures, based on both international projects, namely the Positive Youth Development cross-national project and the international survey Health Behaviour in School-aged Children (HBSC/WHO), in its extension to Portuguese Universities (HBSC/JUnP). In addition, it brings novelty bringing data to increase the understanding on the interaction of several relevant psychosocial variables reported in the literature, for positive youth development.

Implications for Research, Policy and Practice

In forthcoming studies it would be important to replicate the present study variables in specific populations and to include other clinical/psychosocial variables, aiming to increase the knowledge of such interactions for men and women. Also the replication in other countries would be interesting to better understand cultural sensitivity-issues.

Additionally, it can be suggested to work on the identification and development of cross-cultural and country-level adaptable measures of key skills and common indicators for positive youth development. This would allow an effective comparison across programs and countries, working towards a consensual international framework in this area, which is also stated in the literature (Catalano et al., 2012; Koller & Verma, 2017).

Considering the limitations described before, it would be also important to conduct longitudinal studies using mixed methods approaches, and to increase, as well, an evaluation of interventions in holistic youth programs, to better understand

success and areas needing improvement, and to bring evidenced-based research. The knowledge derived from these data may provide guidance and support to social policies and more effective programs, once the investigation of how holistic interventions can help further PYD needs, must be a priority for researchers, policymakers and practitioners.

To plan holistic interventions comprising several indicators and variables and taking into account gender specificities, it is needed an integrative perspective, within an interdisciplinary and transdisciplinary work. Beyond educators and practitioners, youths should be also included in the process, in order to hear their "voices" and because it is recognized that authorship promotes youth's self-regulatory capacities and the successful youths may be models and examples in their own communities. All contexts should be taken into account and services would benefit from links and reinforcements in the environments where youths spend their time, namely family, school and community settings (Koller & Verma, 2017).

6. CONCLUSION

This chapter aimed to examine the associations of PYD and its dimensions with psychosocial variables, according to gender. For both genders, the results showed significant differences and similarities with the PYD's total score and its dimensions. Such findings reinforce the relevance of studying positive indicators for youth development, taking into account gender specificities. In addition, it draws attention to potential protective factors for a positive youth development, such as the dynamic interdependence between psychosocial variables. More knowledge in this area can help health/education professionals and policy-makers to better plan interventions/policies. It is aimed to improve an integral and gender-sensitive healthy perspective for youths, based on interdisciplinary and transdisciplinary work.

FUNDING

The research leading to this publication was co-funded by different partial supports such as the Foundation for Science and Technology (FCT) (Grants: Teresa Santos - SFRH/BD/82066/2011/J51280474607; Marta Reis - SFRH/BPD/1109 05/2015), WJCR/ISPA, Instituto Universitário; ISAMB, FML/University of Lisbon; FMH/University of Lisbon.

The William James Center for Research, ISPA - Instituto Universitário is supported by a grant

from the Portuguese Foundation for Science and Technology (FCT) (Grant Number: UID/PSI/04810/2013).

ACKNOWLEDGEMENTS

A special thanks to all the universities, students, teachers and experts who participated in this study. To National experts for their collaboration in revising the methodology and the used instruments. To the HBSC/WHO network (www.hbsc.org) whose survey was partially used for this purpose. To Nora Wiium and the other colleagues from PYD international: <http://www.uib.no/en/rg/sipa/pydcrossnational> for all support and inspiration.

REFERENCES

- [1] Artuch-Garde, R., González-Torres, M., Fuente, J., Vera, M., Fernández-Cabezas, & López-García, M., (2017). Relationship between Resilience and Self-regulation: A Study of Spanish Youth at Risk of Social Exclusion. *Frontiers in Psychology*, 8(612). doi: 10.3389/fpsyg.2017.00612
- [2] Bauldry, Shawn, Shanahan, Michael J., Boardman, Jason D., Miech, Richard A., Macmillan, Ross. A Life Course Model of Self-Rated Health through Adolescence and Young Adulthood. *Social Science & Medicine*. 2012, 75(7), 1311–1320. doi: 10.1016/j.socscimed.2012.05.017.
- [3] Baumeister, R. F., & Vohs, K. D. (2003). Self-regulation and the executive functioning of the self. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 197–217). New York, NY: Guilford Press.
- [4] Benson, P. L., Leffert, N., Scales, P. C., & Blyth, D. A. (1998). Beyond the village rhetoric: Creating healthy communities for children and adolescents. *Applied Developmental Science*, 2, 138-159. doi: 10.1207/s1532480xads0203_3
- [5] Benson, P. L., Scales, P. C., Hamilton, S. F., & Sesma, A. (2006). Positive youth development: Theory, research and application. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology*, (pp. 894-941). New York: Wiley.
- [6] Busch, H., Hofer, J. (2012). Self-Regulation and Milestones of Adult Development: Intimacy and Generativity. *Developmental Psychology*, 48(1), 282-293. doi: 10.1037/a0025521
- [7] Bussèri, M. A., & Rose-Krasnor, L. (2009). Breadth and intensity: salient, separable, and developmentally significant dimensions of structured youth activity involvement. *British Journal of Development Psychology*, 27(Pt 4), 907-933.
- [8] Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Annals of the American Academy of Political and Social Science*, 591, 98-124.
- [9] Catalano, R. F., Fagan, A. A., Gavin, L. E., Greenberg, M.T., Irwin, C. E., Jr., Ross, D. A., & Shek, D. T. (2012). Worldwide application of prevention science in adolescent health. *Lancet*, 379, 1653–1664. doi: 10.1016/S0140-6736 (12) 60238-4
- [10] Cavallo, F., Zambon, A., Borraccino, A., Raven-Sieberer, U., Torsheim, T. and Lemma, P. (2006). Girls growing through adolescence have a higher risk of poor health. *Quality of Life Research*, 15(10), 1577–1585. doi: 10.1007/s11136-006-0037-5
- [11] Constantine, N.A., & Benard, B. (2001). *California Healthy Kids Survey Resilience Assessment Module: Technical Report*. Berkeley, CA: Public Health Institute.
- [12] Conway, R., Heary, C., & Hogan, M. (2015). An evaluation of the measurement properties of the Five Cs model of Positive Youth Development. *Frontiers in Psychology*, 6, 1941. doi: 10.3389/fpsyg.2015.01941
- [13] Currie, C., Zanotti, C., Morgan, A., Currie, D, De Looze, M., Roberts, C., Samdal, O., Smith, O. and Barnekow, V. (2012). *Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) Study: International Report from the 2009/2010 Survey*. Copenhagen: WHO Regional Office for Europe.
- [14] deBlois, M.E., & Kubzansky, L.D. (2016). Childhood self-regulatory skills predict adolescent smoking behavior. *Psychology, Health & Medicine*, 21(2), 138-51. doi: 10.1080/13548506.2015.1077261.
- [15] Dias, P., Castillo, J.A., & Moilanen, K. (2014). The Adolescent Self-Regulatory Inventory (ASRI) Adaptation to Portuguese Context. *Paidéia*, 24(58), 155.163. doi: 10.1590/1982-43272458201403
- [16] Galla, B.M., & Wood, J.J. (2015). Trait self-control predicts adolescents' exposure and reactivity to daily stressful events. *Journal of Personality*, 83(1), 69-83. doi: 10.1111/jopy.12083.
- [17] Gaspar, T., Matos, M.G., Ribeiro, J.P., Leal, I., & Albergaria, F. (2014). Psychosocial Factors Related to Bullying and Victimization in Children and Adolescents. *Health Behavior & Policy Review*, 1(6), 452-459. doi: 10.14485/HBPR.1.6.3
- [18] Geldhof, G. J., Bowers, E. P., Boyd, M. J., Mueller, M. K., Napolitano, C. M., Schmid, K. L., . . . Lerner, R. M. (2014). Creation of short and very short measures of the five Cs of positive youth development. *Journal of*

- Research on Adolescence*, 24(1), 163-176. doi: 10.1111/jora.12039
- [19] González-Torres, M. C., & Artuch, R. (2014). Resilience and coping strategy profiles at university: contextual and demographic Variables. *Electronic Journal of Research in Educational Psychology*, 12(3), 621–648. doi: 10.14204/ejrep.34.14032
- [20] Harris, K. (2010). An Integrative Approach to Health. *Demography*, 47(1), 1-22.
- [21] Jelacic, H., Bobek, D. L., Phelps, E., Lerner, R. M., & Lerner, J. V. (2007). Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H study of positive youth development. *International Journal of Behavioral Development*, 31(3), 263-273.
- [22] Koller, S., & Verma, S. (2017). Commentary on Cross-Cultural Perspectives on Positive Youth Development With Implications for Intervention Research. *Child Development, Special Section is Positive Youth Development in Diverse and Global Contexts*, 88(4), 1178-1182. doi: 10.1111/cdev.12873
- [23] Lee, T., Cheung, C, & Kwong, W. (2012). Resilience as a positive youth development construct: a conceptual review. *The Scientific World Journal*, 390450. doi: 10.1100/2012/390450
- [24] Lerner, R. (2017). Commentary: Studying and Testing the Positive Youth Development Model: A Tale of Two Approaches. *Child Development, Special Section is Positive Youth Development in Diverse and Global Contexts*, 88(4), 1183-1185. doi: 10.1111/cdev.12875
- [25] Lerner, J. V., Bowers, E. P., Minor, K., Boyd, M. J., Mueller, M. K., Schmid, K. L., . . . Lerner, R. M. (2013). Positive youth development: processes, philosophies, and programs. In R. M. Lerner, M. A. Easterbrooks & J. Mistry (Eds.), *Handbook of psychology, volume 6: Developmental Psychology* (pp. 365-392). Hoboken, NJ: Wiley.
- [26] Lerner, R., Lerner, J., Almerigi, J., Theokas, C., Phelps, E., Gestsdottir, S., . . . von Eye, A. (2005). Positive Youth Development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence*, 25(1), 17-71.
- [27] Lerner, R., Lerner, J., & Benson, J. (2011). Positive Youth Development research and applications for promoting thriving in adolescence. In *Advancing Child Development and Behavior*, eds R. M. Lerner, J. V. Lerner, and J. Benson (West Lafayette, IN: Elsevier Inc.), 1-17.
- [28] Lerner, R., Lerner, J., Lewin-Bizan, S., Bowers, E., Boyd, M., Mueller, M., . . . & Napolitano, C. (2011). Positive youth development: Processes, programs, and problematics. *Journal of Youth Development*, 6(3), 40-64.
- [29] Lippman, L. H., Moore, K. A., & McIntosh, H. (2011). Positive Indicators of Child Well-Being: A Conceptual Framework, Measures, and Methodological Issues. *Applied Research in Quality of Life*, 6(4), 425-449.
- [30] Martins, M.H. (2007). *Resiliência: para além da diversidade e do risco. [Resilience: beyond diversity and risk]*. Actas do II Congresso Família, Saúde e Doença, Modelos, Investigação e Prática em diversos contextos de Saúde. Universidade do Minho: Braga.
- [31] Matos, M.G., & Equipa Aventura Social. (2000-2014). *Aventura Social & Saúde, A saúde dos adolescentes portugueses - Relatórios Nacionais do Estudo HBSC 2000, 2002, 2006, 2010, 2014 [Social Adventure & Health: Portuguese Adolescents's Health - Final report from HBSC 2000, 2002, 2006, 2010, 2014 Study]*. Lisboa: Centro Malária e Outras Doenças Tropicais/IHMT/UNL, FMH/UTL.
- [32] Matos, M.G., Santos, T., & Reis, M. (2017). *BePositive project: Positive Youth Development (PYD) in adolescents. Portuguese report*. Saarbrücken: Lambert Academic Publishing.
- [33] Moilanen, K. L. (2007). The Adolescent Self-Regulatory Inventory: The development and validation of a questionnaire of short-term and long-term self-regulation. *Journal of Youth and Adolescence*, 36, 835-848. doi: 10.1007/s10964-006-9107-9
- [34] Mischel, W. (2014). *The Marshmallow Test: Mastering Self-Control*. New York, NY: Brilliance Corp.
- [35] Moore, K. (2017). Commentary: Positive Youth Development Goes Mainstream. *Child Development, Special Section is Positive Youth Development in Diverse and Global Contexts*, 88(4), 1175-1177. doi: 10.1111/cdev.12874
- [36] Ng-Knight, T., Shelton, K.H., Riglin, L., McManus, I.C., Frederickson, N., & Rice, F. (2016). A longitudinal study of self-control at the transition to secondary school: Considering the role of pubertal status and parenting. *Journal of Adolescence*, 50, 44-55. doi: 10.1016/j.adolescence.2016.04.006.
- [37] Olson, J., Hummer, R., & Harris, K. (2017). Gender and Health Behavior Clustering among U.S. Young Adults. *Biodemography and Social Biology*, 63(1), 3–20. doi:10.1080/ 19485565. 2016.1262238.
- [38] Petersen, A., Koller, S., Motti-Stefanidi, F., & Verma, S. (2017). *Positive youth development in global contexts of social and economic change*. Abington, UK: Taylor & Francis Group.

- [39] Schmid, K.L., Phelps, E., & Lerner, R.M. (2011). Constructing positive futures: modeling the relationship between adolescents' hopeful future expectations and intentional self-regulation in predicting positive youth development. *Journal of Adolescence*, 34(6), 1127-35. doi: 10.1016/j.adolescence.2011.07.009.
- [40] Silva, D., Spielberger, C.D. (2007). *Manual do Inventário de Estado-Traço de Ansiedade (STAI)*, [Manual for the State-Trait Anxiety Inventory]. Consulting Psychologists Press, Inc.
- [41] Simões, C., Matos, M.G., & Morgan, A. (2015). Facing the adversity: The role of internal assets on well-being in adolescents with special needs. *Spanish Journal of Psychology*, 18(e56), 1-14. doi: 10.1017/sjp.2015.41
- [42] Small, S., & Memmo, M. (2004). Contemporary models of youth development and problem prevention: Toward an integration of terms, concepts, and models. *Family Relations*, 53(1), 3-11.
- [43] Spielberger, C., Gorsuch, R., Lushene, R. (1970). *Manual for state-trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- [44] Suldo, S.M., Riley, K.N., & Shaffer, E.J. (2006). Academic correlates of children and adolescents' life satisfaction. *School Psychology International*, 27, 567-582. doi: 10.1177/0143034306073411
- [45] Zimmerman, B. J. (1990). Self regulated learning and academic achievement. *Educational Psychologist*, 25, 3-17. doi: 10.1207/s15326985ep2501_2
- [46] WHO (2016). Health Behaviour in School-aged Children (HBSC) Study: International Report from the 2013/2014 Survey. Growing up unequal: gender and socioeconomic differences in young people's health and well-being. WHO Regional Office for Europe. Copenhagen, Denmark.
- [47] WHO (2013). Health 2020: A European Policy Framework and Strategy for the 21st Century. Geneva, Switzerland: World Health Organization.

Citation: Margarida Gaspar de Matos, Teresa Santos, Marta Reis, Diego Gómez-Baya, Adilson Marques. *Positive Youth Development in Portugal: A Tool towards Gender Equity?*. *ARC Journal of Pediatrics*. 2018; 4(1): 25-35. doi:dx.doi.org/10.20431/2455-5711.0401004.

Copyright: © 2018 Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.