



# Positive youth development in Portugal: Interactions with psychosocial variables

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## Abstract

**Objectives:** Positive Youth Development - PYD perspective has highlighted the need to strengthen internal/external developmental assets in youth's contexts. Literature suggests the importance for several psychosocial variables for the improvement of positive outcomes in youths, crucial for later in adulthood. The present study examined the associations of PYD and its dimensions with psychosocial variables.

**Methods:** Through an online survey, 2700 Portuguese youths (73.3% females), with a mean age of 21.3±2.79 years old were included.

**Results:** The results showed that, generally, there is a tendency for psychosocial variables, such as Resilience, Self-regulation, Anxiety, Perceived School Performance, Goals and Aspirations, and Life Events Scale, to have a significant impact on PYD Total score and its five dimensions: Confidence, Competence, Connection, Caring and Character (with exceptions in specific sub-dimension of scales).

**Conclusion:** Such findings reinforce the relevance of studying positive indicators for youth development and draws attention to potential protective factors, 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, aiming an integral healthy perspective for youths, based on interdisciplinary and transdisciplinary work. Thus, different contexts are suggested to be taken into account and services would benefit from reinforcements in the environments where youths spend their time, namely family, school and community settings.

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**Keywords:** Developmental assets; Five Cs; Positive youth development short form (PYD-SF); Psychosocial variables



## Introduction

During the past century, youth's studies were mainly based on risk behaviours and on a "deficit perspective" and the concept of positive development was basically defined by the absence or decrease of problems [1]. However, focusing youth programs and interventions mostly on risks and vulnerabilities may have limited impact, and the study of positive indicators for youth development has significantly improved [2]. Strength-based models that capitalized human plasticity began to be implemented [3], aiming to be empowering and effective in diverse contexts [4]. Such models were based on several theoretical frameworks [5], as for example the Positive Youth Development-PYD, which highlighted the importance of strengthening internal and external developmental assets comprised in the social ecology of youth's networks and opportunities [5,6]. Positive indicators such as the Model of the Search Institute's Developmental Assets (40, comprised on external and internal assets) [7] and the Five Cs model of PYD (Competence, Confidence, Character, Connection and Caring) [8-11] were extensively studied.

The worldwide growing focus on positive youth development among researchers and practitioners implies that global PYD perspectives in different countries and cultures vary. And, it is important to address its uniqueness [12,13], to better develop and translate research 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 [9]. Adolescence and transition to adulthood are critical moments for the establishment of health behaviour *clustering* and health trajectories that implicate later well-being [14,15].

Nevertheless, to achieve health behaviors 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 [16]. It is positively associated with well-being [17], positive adaptation [18], and several positive outcomes in adulthood [19]. In addition, it is considered a key psychosocial factor that may reduce future health risk behaviours across multiple domains [20], and lead to positive youth development, acting as a strong predictor [21]. 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 [22], and it is closely linked with the paradigm of PYD in the field for prevention [23,24]. Both variables have a significant and positive relationship [11,25]. 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 [26]. 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 [27], and it is a powerful predictor of well-being, linked to mental health [12]. Yet, parenting styles, family structure, teacher and peer relations are also important as protective factors [25]. 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 [12]. Thus, no single factor promotes resilience in isolation [25], nor a single program or strategy provides all youth development opportunities and support for being successful [12].

Taking into account this theoretical background, the need to study country-specificities and considering the lack of studies attempting to capture the dynamic relations between youth and their context [28], the present study was carried out in the scope of a broader research conducted on Portuguese youths in the area of PYD. This specific one aims to examine the associations and the impact of psychosocial variables (Self-regulation, Resilience, Anxiety, Perceived school performance, Life Events and Goals/Aspirations) and in PYD-SF-PT total score and in its specific five dimensions (Confidence, Competence, Connection, Caring and Character).

## Materials and methods

### Study design, participants and procedure

The research was conducted simultaneously with the Be Positive project [29], a cross-sectional study and a part of the local national survey Health Behaviour in School-aged Children (HBSC/WHO) [30] 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 Be Positive 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 "5Cs" 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 participated a total of 2700 youths (26.7% males; 73.3% females) had a mean age of 21.3 years ( $SD=2.79$ ), ranging from 16 to 29 years old. 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%). Table 1 presents with more detail the socio-demographic characteristics of the participants.

Data collection was performed using an online survey and the *Lime survey* 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.

## 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, Perceived School Performance-PSP, Goals and Aspirations-GA, and Life Events Scale-LES.

Detailed information on these measures and instruments is described in Table 2.

## Data analysis

Data from *Lime survey* 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. A linear regression was performed to evaluate the impact of the psychosocial variables in PYD, for the total group of youths. All statistical analyses were completed using the SPSS 24.0 (Statistical Package for Social Sciences) and the significance level was set at  $p < 0.05$ .

## Results

The 2700 included adolescents (26.7% males; 73.3% female) had a mean age of 21.3 years ( $SD = 2.79$ ).

The descriptives for all the psychosocial variables included in this study are presented in Table 3. Higher scores indicate higher levels of Positive Youth Development, Resilience, Self-regulation, Anxiety, Perceived School Performance, Goals and Aspirations, and Life Events Scale (taking into account each specific minimum and maximum score of the scale or its dimension) (Table 3&4).

For PYD-SF-PT Total score [ $F(16,2683) = 54.527$ ,  $p < 0.001$ ,  $R^2 = .241$ ] a model was achieved. All the psychosocial variables had a significant association, with the exception of Self-Regulation Short Term, Resilience-Self-awareness and Life Events Scale.

What concerns the dimension Confidence of PYD-SF-PT [ $F(16,2683) = 27.450$ ,  $p < 0.001$ ,  $R^2 = .136$ ] a model was achieved. All the psychosocial variables had a significant association, with the exception of Self-Regulation Short Term, Resilience-Self-awareness and Negative Life Events.

For the dimension Competence of PYD-SF-PT [ $F(16,2683) = 20.283$ ,  $p < 0.001$ ,  $R^2 = .103$ ] a model was achieved. All the psychosocial variables had a significant association, with the exception of Goals and Aspirations and Negative Life Events.

In relation to the dimension Connection of PYD-SF-PT [ $F(16,2683) = 71.750$ ,  $p < 0.001$ ,  $R^2 = .295$ ] a model was achieved. All the psychosocial variables had a significant association, with the exception of Self-Regulation Long Term, Resilience-Empathy, Resilience-Cooperation/Communication, Resilience-

Self-awareness and Resilience-Objectives/Aspirations.

For the dimension Caring of PYD-SF-PT [ $F(16,2683) = 71.750$ ,  $p < 0.001$ ,  $R^2 = .212$ ] a model was achieved. All the psychosocial variables had a significant association, with the exception of Self-Regulation Long Term, Resilience-Empathy, Resilience-Cooperation/Communication, Resilience-Self-awareness and Resilience-Objectives/Aspirations.

What concerns the dimension Character of PYD-SF-PT [ $F(16,2683) = 30.819$ ,  $p < 0.001$ ,  $R^2 = .150$ ] a model was achieved. In this dimension only the psychosocial variables Self-regulation long and short term, Resilience-Empathy, Perceived School Performance, Goals and Aspirations, and Positive Life events shown a significant association.

## Discussion

Overall, the present results have shown that generally, psychosocial variables have a significant impact for PYD-SF-PT total score and its dimensions, with the exception of the dimension Character, where less significant variables. There is a tendency for higher self-regulation, resilience, perceived school competence, goals/aspirations and positive events to be significantly associated with higher PYD. On other side, less anxiety and negative life events seems to be significantly associated with lower results of PYD. Such findings reinforce the relevance of these variables for Positive Youth Development [10,17-19,21,23], and suggest an dynamic interdependence between them [11,12,25,26]. This interdependence is in agreement with the suggestions 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 [12,25]. In a general view, the linear regression models evidences that the promotion of self-regulation, resilience perceived school performance, to pursuit goals and aspirations, along with the reduction of anxiety and negative life events, can have a relevant impact for improving positive youth development in youths. Such findings support the need to continuously studying positive indicators, and to fortify internal and external developmental assets [5,6], as it is proposed in the literature for the last two decades [2]. The present results are also in line with recent health recommendations, namely the need to include psychosocial factors in complement of health indicators [31]. Moreover, results are, as well in accordance with literature, pointing out the relevance of strength-approaches (as the PYD) and psychosocial factors to improve positive outcomes [4,5,9].

Globally, it is expected that the present findings can help researchers, educators and practitioners to better understand the interaction between the study psychosocial variables and PYD in youths. Additionally, these results may serve as a guide to plan interventions that could help the construction of a supportive context for youths, aiming to decrease their anxiety, and to improve their competences of self-regulation, resilience, perceived school performance and to better attain goals and expectations. However, while planning interventions, it must be taken into account that positive youth development is, basically, just an approach and not a particular curriculum or program. This means that such practices can be added to programs designed to achieve, more likely, one or more positive outcomes [32]. Therefore, it would be valuable to work on essential aspects of these variables, namely to set realistic goals and learning from mistakes; to increase self-control strategies (thoughts, emotions, impulses and behaviour); to work on youth's strengths; to 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 achieve a happy and healthy life [18].

Lastly, it is crucial to remind that youths are the most important assets in the world and it is important to continue the studies for the identification of indicators for positive youth development. Because, when a positive development occurs, youths can power themselves, families, communities and societies, and these effects can have potential benefits for the next generations. Thus, to invest in youths can represent a highly cost-effective opportunity towards positive changes [13].

### 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 in youths. 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 [12,33].

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/variables, within an interdisciplinary and transdisciplinary work and an integrative perspective is needed. 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 [12].

### Conclusion

This study examine the associations of PYD and its dimensions with psychosocial variables in Portuguese youths. Results showed that, generally, there is a tendency for psychosocial variables to have a significant impact on PYD. Such findings reinforce the relevance of studying positive indicators for youth development. 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, aiming an integral healthy perspective for youths, based on interdisciplinary and transdisciplinary work.

### Author's contributions

MGM and TS conceived the study, participated in its design and coordination, draft and authored the manuscript. MR conducted the online survey and the data collection. AM and DG helped to perform statistical analyses, participated in the study design, interpretation of data and helped to draft manuscript revisions. All authors have read and approved the final manuscript.

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### Tables

**Table 1:** Socio-demographic characteristics for the total group of youth.

	Total Group
	N=2700
<b>Socio-demographic characteristics</b>	
<b>Age (years) (M±SD)</b>	21.30±2.79
<b>Gender (%)</b>	
Male	26.7
Female	73.3
<b>Socio-Economic Status-SES (%)</b>	
Low	13.1
Medium	67.7
High	19.2

**Table 2:** 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
<b>Positive Youth Development-PYD, Short Form, Portuguese Reduced Version (PYD-SF-PT)</b> [1,9,34]	Positive Youth Development (5 Cs: Confidence, Competence, Connection, Caring and Character)	<ul style="list-style-type: none"> <li>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;</li> <li>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);</li> <li>In the present study, the PYD-SF was translated from the original English version into Portuguese language (and back translation), and a reduced version (20 items) showing reasonable psychometric properties was used;</li> <li>Higher scores indicate higher levels of PYD.</li> </ul>
<b>Healthy Kids Resilience Assessment Module (RES)</b> [35-37]	Resilience (2 dimensions: external and internal resources).	<ul style="list-style-type: none"> <li>18 items answered on a 4-point scale;</li> <li>Ranges from 18 to 72;</li> <li>Higher scores indicate higher levels of competences, protection and resilience to adversity;</li> <li>In this study it was used the Portuguese Version of the questionnaire and it was only considered the internal resources dimension.</li> </ul>
<b>Adolescent Self-Regulatory Inventory-ASRI (SR)</b> [38,39]	Self-regulation (2 dimensions: Short term-SR-ST and Long term-SR-LT).	<ul style="list-style-type: none"> <li>43 items answered on a 5-point Likert scale;</li> <li>Ranges from 36 to 180;</li> <li>Higher values indicate better competences of self-regulation;</li> <li>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.</li> </ul>
<b>State-Trait Anxiety Inventory (STAI-T)</b> [40,41]	Anxiety (2 dimensions: state-anxiety and trait-anxiety).	<ul style="list-style-type: none"> <li>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.</li> <li>40 items answered on a 5-point scale;</li> <li>In this study it was used the Portuguese Version of the questionnaire and only the items of the Trait dimension were included (ranging from 20 to 100);</li> <li>Higher scores indicate higher level of anxiety.</li> </ul>
<b>Perceived School Performance (PSP)</b> [42]	Perceived School Performance	<ul style="list-style-type: none"> <li>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;</li> <li>This measure is a consistent and strong predictor of health and well-being [44];</li> <li>Respondents were asked to rate their answers on a rating scale from 1to 4(very good to below average).</li> </ul>
<b>Goals and Aspirations (GA)</b> [42]	Goals and Aspirations	<ul style="list-style-type: none"> <li>Single item measure, where young people were asked about their aspiration and goals for the future;</li> <li>Respondents were asked to rate their answers on a rating scale from 1to 4(very good to below average).</li> </ul>
<b>Reduced and adapted version of the Life Events Scale (LES)</b> [37,43]	Life Events (Negative and Positive)	<ul style="list-style-type: none"> <li>For each event, the respondents are invited to indicate: (a) if they have experienced each event in the past year; (b) whether they classified the event as a good or a bad one; (c) the effect or impact of the event in ones' life (scored in a point-Likert scale ranging from 1=None to 4=A lot);</li> <li>In the present report only 12 events were selected, tendentiously reflecting 6 positive situations and 6 negative situations, that were separately summed and a score for each one was used.</li> </ul>

**Table 3:** Descriptive of the psychosocial variables and PYD-SF-PT (Total Score and its dimensions) in Portuguese youths.

<i>Psychosocial variables</i>	YOUTHS	
	<b>M±SD</b>	<b>Range Minimum-Maximum (Number of items)</b>
SR <sup>1</sup> - Total	143.80±18.18	43-215 (43)
SR <sup>1</sup> - Long Term	84,21±12.62	24-120 (24)
SR <sup>1</sup> - Short Term	59.59±9.21	19-95 (19)
RES <sup>2</sup> - Total	55.58±8.03	18-72 (18)
RES <sup>2</sup> - Empathy	9.16±1.89	3-12 (3)
RES <sup>2</sup> - Problem Solving	8.41±2.38	3-12 (3)
RES <sup>2</sup> - Self-efficacy	9.22±1.94	3-12 (3)
RES <sup>2</sup> - Cooperation/Communication	8.81±1.83	3-12 (3)
RES <sup>2</sup> - Self-awareness	9.54±1.88	3-12 (3)
RES <sup>2</sup> - Objectives and Aspirations	10.44±1.80	3-12 (3)
STAI-T-State-Trait Anxiety Inventory,Trait	45.24±9.23	20-100 (20)
PSP - Perceived School Performance	2.83±0.77	1-4 (1)
GA - Goals and Aspirations	3.32±0.74	1-4 (1)
LES - Life Events, Negatives	1.40±1.34	1-4 (1)
LES - Life Events, Positives	1.78±1.74	1-4 (1)
<i>PYD-SF-PT<sup>3</sup> and its dimensions</i>	<b>M±SD</b>	<b>Range Minimum-Maximum (Number of items)</b>
PYD-SF-PT <sup>3</sup> - Total Score	75.47±9.21	20-100 (20)
PYD-SF-PT <sup>3</sup> - Confidence	14.35±3.42	4-20 (4)
PYD-SF-PT <sup>3</sup> - Competence	14.56±3.33	4-20 (4)
PYD-SF-PT <sup>3</sup> - Connection	13.57±2.91	4-20 (4)
PYD-SF-PT <sup>3</sup> - Caring	16.73±2.50	4-20 (4)
PYD-SF-PT <sup>3</sup> - Character	16.26±2.78	4-20 (4)

<sup>1</sup>SR: Self-Regulation; <sup>2</sup>RES: Resilience; <sup>3</sup>PYD-SF-PT: Positive Youth Development-Short Form, Portuguese reduced Version.

**Table 4:** Summary of linear regression results for PYD-SF-PT (Total Score and its dimensions), and psychosocial variables in Portuguese youths, controlling by gender, age and Socio Economic Status - SES.

	YOUTHS			
	Variables	<i>B</i>	<i>SE B</i>	<i>β</i>
<b>PYD-SF-PT<sup>3</sup>Total Score</b>	SR <sup>1</sup> - Long Term	0.101	0.015	0.139***
	SR <sup>1</sup> - Short Term	0.024	0.020	0.024
	RES <sup>2</sup> - Empathy	0.551	0.093	0.113***
	RES <sup>2</sup> - Problem Solving	0.460	0.079	0.119***
	RES <sup>2</sup> - Self-efficacy	0.364	0.116	0.077**
	RES <sup>2</sup> -Coop/Communication	0.435	0.102	0.086***
	RES <sup>2</sup> - Self-awareness	-0.031	0.135	-0.006
	RES <sup>2</sup> - Object/Aspirations	-0.753	0.190	-0.147***
	STAI-T - Anxiety	-0.201	0.020	-0.202***
	PSP - Perc. School Perf	0.640	0.212	0.054**
	GA - Goals and Aspirations	1.822	0.471	0.146***
	LES - Life Events, Negatives	0.118	0.131	0.017
	LES - Life Events, Positives	0.136	0.107	0.026
		<i>R</i> <sup>2</sup>		
	<i>F</i>			54.527***
<b>PYD-SF-PT<sup>3</sup> Confidence</b>	SR <sup>1</sup> - Long Term	0.006	0.083	3.670***
	SR <sup>1</sup> - Short Term	-0.001	0.008	-0.001
	RES <sup>2</sup> - Empathy	-0.134	0.037	-0.074***
	RES <sup>2</sup> - Problem Solving	0.102	0.031	0.071**
	RES <sup>2</sup> - Self-efficacy	0.149	0.046	0.085**
	RES <sup>2</sup> -Coop/Communication	0.150	0.040	0.080***
	RES <sup>2</sup> - Self-awareness	-0.022	0.054	-0.012
	RES <sup>2</sup> - Object/Aspirations	-0.394	0.075	-0.207***
	STAI-T - Anxiety	-0.090	0.008	-0.242***
	PSP - Perc. School Perf	0.341	0.084	0.078***
	GA - Goals and Aspirations	0.583	0.187	0.126**
	LES - Life Events, Negatives	0.077	0.052	0.030
	LES - Life Events, Positives	-0.189	0.042	-0.096***
		<i>R</i> <sup>2</sup>		
	<i>F</i>			27.450***

<b>PYD-SF-PT<sup>3</sup>Competence</b>	SR <sup>1</sup> - Long Term	0.037	0.006	0.139***
	SR <sup>1</sup> - Short Term	-0.019	0.008	-0.051*
	RES <sup>2</sup> - Empathy	-0.106	0.037	-0.060**
	RES <sup>2</sup> - Problem Solving	0.164	0.031	0.117***
	RES <sup>2</sup> - Self-efficacy	0.134	0.046	0.078**
	RES <sup>2</sup> -Coop/Communication	0.171	0.040	0.094***
	RES <sup>2</sup> - Self-awareness	-0.115	0.053	-0.065*
	RES <sup>2</sup> - Object/Aspirations	-0.196	0.075	-0.106**
	STAI-T - Anxiety	-0.058	0.008	-0.159***
	PSP - Perc. School Perf	0.240	0.084	0.056**
	GA - Goals and Aspirations	0.311	0.185	0.069
	LES - Life Events, Negatives	0.041	0.052	0.016
	LES - Life Events, Positives	-0.153	0.042	-0.080***
		<b>R<sup>2</sup></b>		
	<b>F</b>			20.283***
<b>PYD-SF-PT<sup>3</sup> Connection</b>	SR <sup>1</sup> - Long Term	-0.005	0.005	-0.020
	SR <sup>1</sup> - Short Term	0.043	0.006	0.137***
	RES <sup>2</sup> - Empathy	0.016	0.028	0.011
	RES <sup>2</sup> - Problem Solving	0.135	0.024	0.111***
	RES <sup>2</sup> - Self-efficacy	0.081	0.035	0.054*
	RES <sup>2</sup> -Coop/Communication	0.021	0.031	0.13
	RES <sup>2</sup> - Self-awareness	0.035	0.041	0.023
	RES <sup>2</sup> - Object/Aspirations	-0.049	0.058	-0.031
	STAI-T - Anxiety	-0.089	0.006	-0.283***
	PSP - Perc. School Perf	0.370	0.065	0.099***
	GA - Goals and Aspirations	0.281	0.144	0.071*
	LES - Life Events, Negatives	-0.151	0.040	-0.069***
	LES - Life Events, Positives	0.232	0.033	0.138***
		<b>R<sup>2</sup></b>		
	<b>F</b>			71.750***
<b>PYD-SF-PT<sup>3</sup> Caring</b>	SR <sup>1</sup> - Long Term	0.027	0.004	0.137***
	SR <sup>1</sup> - Short Term	-0.021	0.005	-0.076***
	RES <sup>2</sup> - Empathy	0.422	0.026	0.319***
	RES <sup>2</sup> - Problem Solving	0.061	0.022	0.058**
	RES <sup>2</sup> - Self-efficacy	0.019	0.032	0.015
	RES <sup>2</sup> -Coop/Communication	0.075	0.028	0.055**
	RES <sup>2</sup> - Self-awareness	-0.011	0.037	-0.008
	RES <sup>2</sup> - Object/Aspirations	-0.124	0.053	-0.089*
	STAI-T - Anxiety	0.027	0.006	0.098***
	PSP - Perc. School Perf	0.100	0.059	0.031
	GA - Goals and Aspirations	0.319	0.130	0.094*
	LES - Life Events, Negatives	0.096	0.036	0.051**
	LES - Life Events, Positives	0.114	0.030	0.080***



	$R^2$			.212
	$F$			46.433***
PYD-SF-PT <sup>3</sup> Character	SR <sup>1</sup> - Long Term	0.020	0.005	0.089***
	SR <sup>1</sup> - Short Term	0.021	0.006	0.069**
	RES <sup>2</sup> - Empathy	0.352	0.030	0.240***
	RES <sup>2</sup> - Problem Solving	-0.002	0.025	-0.002
	RES <sup>2</sup> - Self-efficacy	-0.020	0.037	-0.014
	RES <sup>2</sup> -Coop/Communication	0.018	0.033	0.012
	RES <sup>2</sup> - Self-awareness	0.081	0.043	0.055
	RES <sup>2</sup> - Object/Aspirations	0.010	0.061	0.006
	STAI-T - Anxiety	0.009	0.007	0.029
	PSP - Perc. School Perf	-0.411	0.068	-0.115***
	GA - Goals and Aspirations	0.327	0.151	0.087*
	LES - Life Events, Negatives	0.056	0.042	0.027
	LES - Life Events, Positives	0.132	0.034	0.083***
	$R^2$			.150
	$F$			30.819***

**Note:**  $B$  (unstandardized coefficient) and  $SE$  (standard error);  $\beta$ : standardized coefficients.

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

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

<sup>1</sup>SR: Self-Regulation; <sup>2</sup>RES: Resilience; <sup>3</sup>PYD-SF-PT: Positive Youth Development-Short Form, Portuguese reduced Version.

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