

# BePositive

*Positive Youth Development (PYD) in Adolescents*

## PORTUGUESE REPORT



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Faculdade de Motricidade Humana/Universidade de Lisboa

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**NAME: THE POSITIVE YOUTH DEVELOPMENT CROSS-NATIONAL PROJECT****Project Partners:**

More than twenty countries across Europe, Africa, Asia, the US and Latin America (at the moment: Bulgaria, Greece, Italy, Norway, Portugal, Romania and Slovenia).

**Further information:** <http://www.uib.no/en/rg/sipa/pydcrossnational>

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## PREFACE

### The Positive Youth Development Cross-National Project

With project partners from more than twenty countries across Europe, Africa, Asia, the US and Latin America, the Positive Youth Development cross-national project seeks to examine the extent to which developmental (internal and external) assets (proposed by Peter Benson and the Search Institute, Minneapolis) are accessible to young people in different national contexts and how these assets in turn relate 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).

In the project, we also examine how positive outcomes are related to young people’s contribution to the development of self and the society they are part of. Other topics that are taken up in the project are risk and health behaviours of young people and how they are related to the developmental assets and positive outcomes, together with topics related to job crafting in the school context, climate change and environmental sustenance that are currently being explored. The ultimate goal of the cross-national project is to influence programmes and policies to stimulate the developmental assets needed to facilitate positive development and contribution among young people in the participating countries.

Nora Wiium, associate professor of developmental psychology at the University of Bergen, Norway, is the principal investigator of the project. Project partners are from educational and research institutions and have expertise that are diverse and multidisciplinary, which includes health psychology, developmental psychology, social psychology, cross-cultural psychology, public health, environmental science, sociology, health promotion, speech therapy, and family studies.

The Portuguese dataset, with responses from 2700 young people between ages 16 and 29 forms a significant part of the cross-national project on positive youth development. Margarida Gaspar de Matos, a psychologist and a full professor of international health at the University of Lisbon, is the main partner researcher in Portugal.

For more information about the project and partner researchers, please see this link:  
<http://www.uib.no/en/rg/sipa/pydcrossnational>

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## RESUMO

**Enquadramento:** O presente relatório é o resultado de uma investigação baseada no conceito de **Positive Youth Development (PYD)** realizada pelo estudo nacional **Health Behaviour in School-aged Children (HBSC/WHO)**, na sua extensão aos Jovens Universitários Portugueses (**HBSC/JUnP**), e que procura avaliar os comportamentos de saúde em população jovem. Mais especificamente, foca-se na validação de um instrumento que procura avaliar o conceito de PYD, resultante da inclusão de Portugal na rede internacional **The Positive Youth Development cross-national project** (projecto transnacional PYD), que envolve actualmente mais de 20 países na Europa, África, Ásia, Estados Unidos e América Latina. Os países parceiros deste projecto são oriundos de diversas instituições educacionais e de investigação e são especialistas em várias áreas multidisciplinares, incluindo a psicologia da saúde, psicologia do desenvolvimento, psicologia social, psicologia transcultural, saúde pública, ciências ambientais, sociologia, promoção da saúde, terapia da fala e estudos sobre a família.

**Objectivos:** O projecto transnacional PYD procura **1)** examinar até que ponto os *assets* do desenvolvimento externos e internos (propostos por Peter Benson e o Search Institute, Minneapolis) são acessíveis aos jovens em diferentes contextos nacionais; **2)** compreender a forma como estes *assets* se relacionam com os resultados de desenvolvimento positivo, tais como os 5C do PYD (i.e. Confiança, Competência, Carácter, Cuidar e Conexão) e indicadores relevantes (como por exemplo, sucesso académico, diversidade de valores, resistência ao perigo e competências de liderança); e, **3)** salientar como resultados positivos podem estar associados à contribuição dos jovens para o desenvolvimento pessoal e à sociedade envolvente. Os comportamentos de risco/saúde dos jovens e a sua associação com *assets* do desenvolvimento e resultados positivos, assim como tópicos relativos ao desenvolvimento do trabalho no contexto escolar, alterações climáticas e sustentabilidade ambiental estão também em estudo neste projecto. O objectivo final é que seja uma inspiração para os programas e políticas para que possam motivar a necessidade do desenvolvimento de *assets*, de forma a facilitar o desenvolvimento positivo e uma maior contribuição entre os jovens dos países participantes. Em linha com estes objectivos, o presente relatório tem como objectivos **1)** avaliar o PYD de acordo com o género, idade, Estatuto Socioeconómico (ESE) e questões do HBSC/WHO (nomeadamente questões relacionadas com a escola e com características e comportamentos individuais); e **2)** correlacionar o PYD com variáveis adicionais tais como a resiliência, auto-regulação, ansiedade e eventos de vida.

**Methods:** Este estudo foi realizado no âmbito do projecto nacional HBSC/JUnP através de um questionário *online*, envolvendo estudantes universitários Portugueses. 2700 jovens foram incluídos (73.3% raparigas), com uma média de idades de 21.3 anos (SD=2.79), entre os 16 e os 29 anos de idade. Na sua maioria, os jovens tinham nacionalidade Portuguesa (96.8%), nasceram em Lisboa (33.4%), vivem actualmente numa zona urbana (46.4%), são alunos de Licenciatura (63.5%) e apresentam um nível socioeconómico médio (67.7%).

**Results:** Os jovens mais **novos** parecem ser mais confiantes, sobretudo no que diz respeito à aparência e à auto-consciência e sentem-se também mais competentes em situações sociais, em comparação com os mais velhos. Tendo em conta uma perspectiva de desenvolvimento, os resultados não foram os esperados e sugerem a ideia de que os jovens precisam de ter mais apoio e suporte no sentido de “como crescer sendo saudável, feliz e positivo”.

De uma forma geral, não foram encontradas diferenças de **género**, à excepção das raparigas que parecem mais preocupadas com questões sociais, do que os rapazes. Estes resultados foram igualmente inesperados e podem indicar que, globalmente, entre os jovens existem menos diferenças de género no “processo” (os 5Cs), do que nos “produtos finais” sociais e de saúde, considerando os comportamentos respectivos associados. Tais resultados salientam uma preocupação relevante acerca das desigualdades de género, com maior pressão social e falta de oportunidades para as raparigas.

No que diz respeito ao **estatuto socioeconómico (ESE)**, os jovens com estatuto mais elevado apresentam melhores resultados de PYD, sobretudo na percepção de confiança e de competência. Porém, uma associação negativa não esperada foi verificada entre o ESE e a dimensão dos Valores Pessoais (pertencente a um dos 5C, o Carácter).

Relativamente às **questões** associadas com a **escola/universidade**, os jovens que apresentam melhores resultados de PYD são também os que se sentem frequentemente menos aborrecidos na escola e que apresentam menor pressão com os trabalhos escolares. São ainda os que demonstram uma melhor auto-percepção de competência académica. Uma associação negativa inesperada foi também verificada entre a auto-percepção de competência académica e a dimensão dos Valores Pessoais (pertencente a um dos 5C, o Carácter), tal como tinha sido verificado no ESE. Ambas as associações negativas podem fazer surgir a ideia de que ter um ESE mais elevado e ser um estudante bem-sucedido podem ocorrer na ausência do desenvolvimento de valores pessoais adequados.

No que diz respeito ao **“tomar o pequeno-almoço”** (que é muitas vezes considerado como o melhor indicador único de saúde e bem-estar para a população jovem), aqueles que apresentam melhores resultados de PYD são os que tendem a reportar hábitos mais estáveis/frequentes de toma do pequeno-almoço.

Por fim, relativamente às **“preocupações”** (condição sub-clínica bastante prevalente e que pode prejudicar o bem-estar dos jovens), aqueles que evidenciam melhores resultados de PYD são os que reportam estar menos frequentemente preocupados e os que indicam que as suas preocupações são menos intensas. Contudo, uma associação positiva inesperada foi verificada entre o Cuidar e as duas dimensões Consciência Social e Valores Pessoais (pertencentes a um dos 5C, o Carácter) e a intensidade das preocupações.

***Em suma***, os resultados encontram-se de acordo com as indicações da literatura, à excepção da subescala CUIDADO (um dos 5C), que necessita de mais estudos para testar a sua validade cultural. De uma forma geral, alguns resultados controversos, tais como a associação de algumas dimensões do PYD ao ESE, à auto-percepção de competência académica e à intensidade das preocupações, implicam um estudo mais aprofundado.

O questionário total inicial incluiu também algumas questões relacionadas com comportamentos de risco que serão incluídas em futuras análises. Porém, presentemente os resultados preliminares sugerem a ideia de que por vezes, os comportamentos de risco estão de alguma forma associados à emancipação social, maturidade pessoal e adultez, e as correlações e implicações deste aspecto para as intervenções precisa de ser cuidadosamente considerado.

A realização de *focus groups* permitirá compreender melhor a percepção e ideias dos jovens acerca do significado destes resultados e também com o objectivo de incluir a sua participação activa no desenvolvimento de estratégias e de recomendações para as políticas públicas. Os *focus groups* pretendem ainda aumentar o PYD em jovens, com vista a promover a sua saúde e bem-estar.

Os resultados reforçam a necessidade de fortalecer os *assets* em jovens e de apoiar o seu envolvimento activo na sociedade, como forma de identificar e promover recursos pessoais e sociais e identificar encontrar soluções contextualizadas para os seus problemas de vida.

## ABSTRACT

**Background:** The present report is the result of the **PYD** research conducted as a part of the national survey **Health Behaviour in School-aged Children, extended to Portuguese University Youths (Jovens Universitários Portugueses) - HBSC/JUnP**, aiming to address health behaviours in young people. More specifically focuses on the validation of an instrument aiming to assess the concept of **Positive Youth Development (PYD)**, as a result of Portugal's partnership within **The Positive Youth Development cross-national project**, which involves more than twenty countries across Europe, Africa, Asia, the US and Latin America.

Project partners are from various educational and research institutions and have expertise that are diverse and multidisciplinary, comprising health psychology, developmental psychology, social psychology, cross-cultural psychology, public health, environmental science, sociology, health promotion, speech therapy, and family studies.

**Objectives:** The PYD cross-national project aims to **1)** examine the extent to which developmental (internal and external) assets (proposed by Peter Benson and the Search Institute, Minneapolis) 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); and, **3)** highlight how positive outcomes are associated to young people's contribution to the development of the self and to the involving society. In addition, risk/health behaviours of youths and its association with developmental assets and positive outcomes, as well as topics concerning job crafting in school context, climate change and environmental sustenance are currently being explored within this project. The ultimate goal of the cross-national project is to inspire programs and policies that can motivate the need of developmental assets, in order to facilitate the positive development and contribution among young people in the participating countries.

In line with this objectives, the present report intends to: **1)** to assess PYD by gender, age, Socio-economic Status (SES) and HBSC/WHO items (namely school-related ones and individual characteristics and behaviours); and **2)** to correlate PYD with additional psychosocial variables such as resilience, self-regulation, anxiety and life events.

**Methods:** This study was carried out in the context of the HBSC/JUnP national project, through an online survey including Portuguese college students. Were included 2700 youths (73.3% girls), with a mean age of 21.3 years old ( $SD=2.79$ ), ranging from 16 to 29 years old. Mostly of the youths had Portuguese nationality (96.8%), were born in Lisbon (33.4%), were currently living in an urban area (46.4%), were Graduate Students (63.5%) and had a middle Socio Economic Status (SES) level (67.7%).

**Results:** **Younger** youths seem to be more confident, especially regarding appearance and self-awareness. They also seem to feel more competent in social situations, than older youths. Taking into account a developmental point of view, the results were not expected and raised the idea that young people must be supported on "how to grow while being healthy, happy and positive".

**Gender** differences were in general not found, with the exception that girls seem more concerned with social issues. These results were also unexpected and raised the idea that in general among young people there is less gender differences in the "processes" (the 5C) than in the social and health "products" that is considering their social and health

behaviours. This findings highlighted a major concern about gender inequities with more social pressure and lack of opportunities for girls.

Regarding **Socio Economic Status (SES)**, wealthier young people tend to present higher PYD values, especially regarding the perception of Confidence and Competence. However, a rather unexpected negative association was surfaced between SES and the Personal Values dimension (one of the 5C, the Character).

Regarding **school/university** matters, the young people who report better PYD results tend to be also the ones that feel less frequently bored at school and also less pressure with school related work. They also tend to be the ones with better self-perceived academic competence. A rather unexpected negative association was surfaced between self-perceived academic competence and the Personal Values dimension (one of the 5C, the Character), just as it happened with SES. Both associations raise the idea that being wealthy and a successful student may occur in the absence of developing adequate personal values. Regarding **“having breakfast”** (sometimes considered the single best indicator of health and well-being among young people), those who report better PYD results tend to be also the ones who report a more steady habit of having breakfast.

Finally regarding **“worrying”** (a quite prevalent sub-clinical situation that can impair young people well-being), those who report better PYD results tend to be also the ones who report less frequently being worried and with less intense worries. However a quite unexpected positive association was surfaced between Caring and between the dimensions Social Conscience and Personal Values of Character (one of the 5C), and the intensity of “worrying”.

***In sum:*** The results are in line with the literature, with the exception of the Subscale Caring (one of the 5C), that will need further studies to test its cultural validity. Globally, some controversial results will be targeted for further in depth analysis such as the association of some dimensions of PYD to Socio Economic Status, to Perceived Academic Competence and to the Intensity of Worries.

The whole initial survey included a few risk behaviours that will also be considered in a future analysis. Preliminary results surfaced the idea that sometimes risks are anyhow associated to social emancipation, personal maturity and adulthood, and correlates and implications of this facts for intervention need to be carefully considered.

Focus groups will be carried out in order to get youths’ views on the meaning of the present results, and in order to incorporate their active participation on developing strategies and public policies recommendations, so as to increase PYD among young people, as a way to promote their health and well-being.

Results reinforce the need to strengthen youth’s assets, and to support their active engagement in society, as a way to identify and to promote personal and social resources and to identify and find solutions for their life problems.



**LIST OF ABBREVIATIONS AND ACRONYMS**

<b>ACS</b>	Alto Comissariado para a Saúde
<b>HBSC/JUnP</b>	Health Behaviour in School-aged Children in Portuguese University Youths (Jovens Universitários Portugueses)
<b>PYD</b>	Positive Youth Development
<b>HBSC</b>	Health Behaviour in School-aged Children
<b>RES</b>	Resilience
<b>STAI</b>	State-Trait Anxiety Inventory
<b>STAI-T</b>	STAI-Trait Anxiety
<b>SES</b>	Socio Economic Status
<b>SR</b>	Self-regulation
<b>SR-LT</b>	Self-regulation, Long Term
<b>SR-ST</b>	Self-regulation, Short Term
<b>UNICEF</b>	United Nations Children's Fund
<b>WHO</b>	World Health Organization
<b>WMA</b>	World Medical Association



## STRUCTURE OF THIS REPORT

Generally, the present report is the result of a research conducted as a part of the national survey **Health Behaviour in School-aged Children in Portuguese University Youths (Jovens Universitários Portugueses) - HBSC/JUnP**, aiming to address health behaviours in these population.

More specifically, the present report focuses on the validation of an instrument aiming to assess the concept of **Positive Youth Development (PYD)**, as a result of Portugal's partnership in *The Positive Youth Development cross-national project*, which involves more than twenty countries across Europe, Africa, Asia, the US and Latin America. Project partners are from various educational and research institutions and have expertise that are diverse and multidisciplinary, comprising health psychology, developmental psychology, social psychology, cross-cultural psychology, public health, environmental science, sociology, health promotion, speech therapy, and family studies.

This project aims to:

1. Examine the extent to which **developmental (internal and external) assets** (proposed by Peter Benson and the Search Institute, Minneapolis) 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 addition, risk/health behaviours of youths and its association with developmental assets and positive outcomes, as well as topics concerning job crafting in school context, climate change and environmental sustenance are currently being explored within this project.

The ultimate goal of the cross-national project is to inspire programs and policies that can motivate the need of developmental assets, in order to facilitate the positive development and contribution among young people in the participating countries.

The present report was supervised by **Margarida Gaspar de Matos**, Professor of International Health at Faculdade de Motricidade Humana/University of Lisbon; ISAMB, *Instituto Saúde Ambiental, Faculdade de Medicina/Universidade de Lisboa* (Environmental Health Institute, Medicine Faculty/University of Lisbon); *William James Center for Research, ISPA- Instituto Universitário*, Scientific coordinator of the **“Aventura Social”** research group and Principal investigator of the Portuguese Health Behaviour in School-aged Children - HBSC Portugal who is also the national representative researcher **at PYD International Network**. The research had the collaboration of Adilson Marques who will lead the future publications’ plan. Marta Reis carried out the the *online* questionnaire, data collection and database cleaning. Teresa Santos worked on the specific PYD database, carried out the revision of the methodology and organization of the present report as well as descriptive statistical analysis so far.

The body of the present report will be organized in four parts, herein described. **Part I (Introduction)** starts with a short description of the team *“Aventura Social”* and its relationship with the youth development concept. Then, it offers an overview of the current state of the art concerning the concepts and models related to youth development. It ends with the description of the research general and specific objectives. **Part II (Methods)** presents the conceptual/methodological aspects. **Part III (Results)** the most relevant results of the research. **Part IV (Discussion)** provides a summary and discussion of the main findings, where goals will be revisited within the conceptual framework. This part also presents the limitations and strengths of the study, as well as theoretical implications and potential future directions for research, practice and policy implementation. Bibliographic references will be presented in **Part V (References)** and annexes in **Part VI (Annexes)**.

## **PART I: INTRODUCTION**

### **1. THE TEAM “AVENTURA SOCIAL” AND YOUTH DEVELOPMENT**

The team “**Aventura Social\***” (<http://aventurasocial.com/index.php>) is coordinated by Prof. Dr. Margarida Gaspar de Matos (PhD) and began in 1987, at the Faculty of Human Kinetics/University of Lisbon (Faculdade de Motricidade Humana/Universidade de Lisboa - FMH/UL). This team has developed several investigations on health promotion and social behaviour and focuses on risk behaviour and related areas in Children and Adolescent Health, using surveys to collect data and develop field interventions (direct, with peers, in schools and with parents). It is involved in several international projects (HBSC/WHO; KIDSCREEN/EC; PeerDriveClean/EC; Leonardo; Socrates, Erasmus; RICHE/EU; TEMPEST/EU; MOCHA/EU) and regularly collaborates with Portuguese policy makers (Ministries of Education, Health and Justice) and the media. Members often participate in national and international congresses, and publish in international peer review journals. The four senior researchers belong to several scientific associations, peer review national and international journals, and policy commissions. From the 20 members, 2 are medical doctors, 6 are pedagogues and 12 are educational, clinical and health psychologists. The “*Aventura Social*” projects are included in three major areas, explained below. During the period of 2004-2014, most of the projects had the Centre of Malaria and Tropical Diseases Institute of Hygiene and Tropical Medicine as partners. Currently, it includes the partnership of 2 research centres (WJRC and ISAMB) and 3 universities (FMH and FM from University of Lisbon, Lusíada and ISPA)

The initial project, “*Aventura Social & Risco*” (Social Adventure & Risk), consisted on the preparation and evaluation of programs for the promotion of interpersonal relationship skills, in closed institutions (juvenile offenders centres, special educational need centres or centres to support vulnerable children and youth, psychiatric hospitals, programmes such as the “Find your own style”). It also included the training and supervision of professionals and young peers.

The project “*Aventura Social & Saúde*” (Social Adventure & Health) was integrated in several European/international networks: the Health Behaviour in School Aged Children-**HBSC/WHO\***; **Kidscreen/EU\***; **Tempest/EU\***; **RICHE/EU\***; **DICE/EU**; **YSAV/EU**; **JunP/HBSC**;

**MOCHA/EU\***. These are research and monitoring projects, which aim to have impact on the promotion and on health education policies. The objective is to have more understanding about health-related behaviours and their contexts, as well as development programs. The project “*Aventura Social na Comunidade*” (Social Adventure & Community) was developed based on the need to think of a service based on the activation of community resources and people’s participation.

Both projects “*Aventura Social & Saúde*” and “*Aventura Social na Comunidade*” included the training and supervision of technicians and young peers. A recent training project is **ES’COOL\*** aiming at training teachers to better cope with pupils mental health promotion and preventing mental health problems.

In 2014, the team “*Aventura Social*” (financed by the Fundação Calouste Gulbenkian-FCG and in collaboration with the Sociedade Portuguesa de Psicologia da Saúde - SPPS) was pioneer in the implementation process of a nationwide project called **DREAM TEENS\*** (DT), aiming to enhance young people's participation and active citizenship in the Portuguese context. The DT project used an innovative Positive Youth Development approach that engaged Portuguese youth (aged 11-18 years) through social media tools to facilitate their civic engagement and development. Participants from all over the country were empowered (1) to design and conduct research activities on topics of their choice and about their life contexts and (2) to create ways to improve youth civic participation in their communities, while developing supportive interactions with adults and peers. Overall, youth were engaged in their activities, felt their voices were heard, and felt that they were viewed as experts of their own well-being and living contexts. Youth research actions and preliminary findings were then compiled in a set of recommendations that was formally received by a high commissioner of the Ministry of Health (Frasquilho et al., 2016; Matos et al., 2015).

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**\* Links:**

- **Equipa Aventura Social:** <http://aventurasocial.com/>
- **HBSC/WHO:** <http://www.hbsc.org/membership/countries/portugal.html>
- **TEMPEST:** [http://aventurasocial.com/verartigo.php?article\\_id=123](http://aventurasocial.com/verartigo.php?article_id=123)
- **KIDSCREEN:** <http://www.kidscreen.org/english/language-versions/portugal/>
- **RICHE:** <http://www.childhealthresearch.eu/>
- **DREAM TEENS:** <http://dreamteens.aventurasocial.com/>
- **ES’COOL:** <http://www.escool.pt/index.php/pt/projeto-escool-pt/escool-pt/13-projeto-es-cool>
- **MOCHA:** <http://www.childhealthservicemodels.eu/>; <http://www.childhealthservicemodels.eu/partnerlisting/country-agents/>

## 2. EVOLUTION/CONCEPTS OF YOUTH DEVELOPMENT AND PROBLEM PREVENTION

### 2.1. Evolution

In the past century the study of adolescence has been essentially outlined by a “deficit perspective”, and within this approach, the concept of positive development was simply characterized by the absence or the decrease of problems (Institute for Applied Research in Youth Development, Tufts University, 2016). This perspective influenced policies, research and practice and it was reflected in the prevalence of measures used by programs and service organizations to assess youth functioning, mainly based on risk and problem behaviors. Therefore, youth development in the early years of this century could be characterized by the identification of what youths should avoid, rather than presenting pertinent indicators of positive development or wellbeing (Moore, Lippman, & Brown, 2004).

Therefore, over the past two decades, positive indicators of child well-being have significantly improved (Lippman, Moore, & McIntosh, 2011; O’Hare, 2012). Additionally, it was largely recognized in the literature that youth programs and interventions would have limited impact if they mainly focus on risks and vulnerabilities. Thus, strength-based approaches have been found to be empowering and effective in various contexts (Benson, Scales, Hamilton & Sesma, 2006) and the interest in preventing youth problems and promoting healthy youth development led practitioners, policy makers and researcher to develop a wide range of approaches relying on several theoretical frameworks (Small & Memmo, 2004).

### 2.2. Concepts

#### 2.2.1. Mental Health, Mental Illness and Healthy Development

**Mental health** and **mental illness** are separate and distinct constructs, but also complementary ones. In general, mental health is a fundamental component of health and healthy development, and it can therefore be defined as encompassing a variety of positive outcomes for adolescents, including emotional and behavioral health, school success, health-related behaviors, and quality of life (Kia-Keating, Dowdy, Morgan, & Noam, 2010). Thus, the **Healthy development** concept needs to use a cultural-ecological transactional perspective, taking into consideration the reciprocal interactions that occur between

adolescents and specific life events, family factors, or contexts such as school, community, and societal conditions or cultural beliefs (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 2006). These contexts may provide several levels of either risk or protection (Kia et al., 2010).

### 2.2.2. Developmental Assets, Risk/Protective Factors and Resilience

Within the literature on youth development and problem prevention, it is important to clarify that **risk** and **protective processes** seek to describe particular causal paths or mechanisms to explain the reason for increased risk or protection (Kirby & Fraser, 1997; Rutter, 1993); whereas **risk** and **protective factors** serve as probability individual or environmental markers for the likelihood of a problem to occur (Bronfenbrenner, 1979), thus more appropriated in predicting outcomes for populations than for individuals (Durlak, 1997).

**Risk factors** are typically related to an increased probability that a negative outcome will occur (Coie et. al, 1993; Kirby & Fraser, 1997), and are defined as probability markers, social address indicators, correlates, and causes that increase the likelihood of the onset or maintenance of a problem state or pathology (Bronfenbrenner, 1979; Coie et al. 1993; Masten, 2001). On the contrary, **protective factors** usually are defined as individual or environmental defenses that increase the personal ability to resist to a stressful life event, risk or threat, and can promote adaptation/competence. Protective factors can be moderators and affect the mediational chain between adversity and negative outcomes (Rutter, 1987; Sandler, 2001), and may help to decrease an individual's vulnerability to risk, even though they do not necessarily promote a person's potential in other areas (Rutter, 1987). Thus, protective factors have a direct path towards a healthy development regardless of levels of adversity and are not the same as the absence of a risk factor, nor as a developmental asset.

The terms protective factor and developmental assets are distinct, although they are often used interchangeably: a protective factor can only operate when a risk factor is present, whereas developmental assets do not require a dialectical relationship with risk (Kia et al., 2010). **Developmental assets** are responsible for enhancing suggestive outcomes of competence among youth, and assets can be defined as the crucial building blocks for promoting healthy youth development and well-being (Benson, 1997; Benson, Leffert,



Scales, & Blyth, 1998). **Assets** refer to internal and external strengths within an individual's social ecology that are predictive of positive outcomes, including health, mental health, and education (Kia et al., 2010). A lack of assets can be directly related to a person's failure to thrive, but only indirectly related to problem behaviors, *i.e.*, is the presence of risk that likely leads to problem behaviors (Small & Memmo, 2004).

Lastly, the concept of **Resilience** has primarily examined risk and protective factors, seeking to elucidate the process of healthy development in the face of significant life adversities (Luthar, Cicchetti, & Becker, 2000; Luthar, 2006; Rutter, 1987). The adaptation responses to those situations can be quite different among adolescents depending on specific individual/contextual factors, and literature has pointed out that the adaptation process, and quality of life, can be compromised when risks are cumulative, specifically when problems are 3/or more, compared to 2 (Rutter, 1979; Sawyer et al., 2002; Simões, Matos, Lebre & Antunes, 2014).

### **2.2.3. Positive Youth Development (PYD)**

Positive Youth Development has highlighted the importance of strengthening internal and external developmental assets comprised within the social ecology of an adolescent's networks and opportunities (Catalano, Berglund, Ryan, Lonczak & Hawkins, 2004; Lerner, Fisher, & Weinberg, 2000a,b; Roth & Brooks-Gunn, 2003a,b; Small & Memmo, 2004).

The term Positive Youth Development (PYD) has been used at least in three ways (Whitlock & Hamilton, 2001): 1) as a description of the natural developmental process of children and adolescents; 2) as a category of programs and organizations that provide activities to promote youth development; and 3) as a unifying philosophy characterized by a positive and asset-building orientation that is based on strengths rather than deficits to categorize youths.

The present report will rely on this last definition that according to the literature (Connell, Gambone, & Smith, 1998; Pittman, Irby, Tolman, Yohalem, & Ferber, 2003; Pittman & Zeldin, 1995; Roth et al., 1998) is grounded on the following assumptions:

- a) The best way to prevent youths from experiencing problems is to help them to **achieve** their **full potential**;
- b) In order to be succeed youths need **to experience various supports** and **opportunities**;
- c) **Communities** need to **activate** and build the **capacity** to **support** the positive development of youth;
- d) **Youth** must be **viewed as partners** to be **involved** and **developed**, and not just as problems to be fixed.

Generally, all youths need to have critical experiences, opportunities and supports to develop successfully into adulthood. Some critical “inputs” can be considered such as stable places; high-quality instruction and training; basic care/services; healthy relationships with peers/adults; high expectations and standards; role models; resources and networks; challenging experiences and opportunities to participate and contribute (Pittman, Irby, Tolman, Yohalem, & Ferber, 2003). In a simple perspective, these “inputs” can be reduced into safe places, challenging experiences, and caring people (Zeldin, Kimball, & Price, 1995).

### 3. MODELS OF YOUTH DEVELOPMENT AND PROBLEM PREVENTION

**Contemporary models** of youth development and problem prevention can be generally grouped into one of three types: **prevention**, **resiliency**, and **positive youth development**. Even though each approach gives a unique contribution to the knowledge on coping, development, and human adaptation, they all share several key features and a common vision focused on improving the life of youths. These approaches (described below) rely on the basic principles of risk, protection, assets, and outcomes, but differ with regard to the relative emphasis placed on each. Literature highlights that there is no single best approach and the knowledge is cumulative, since new insights are constructed upon the innovations of earlier ones. Each approach addresses a specific part of a comprehensive youth development strategy, and no single approach is fully satisfactory for the several challenges given the complexity of the human development, the diversity of youths and their families and the dynamic nature of life in community (Small & Memmo, 2004).

Whether a specific approach is appropriate will depend on the addressed issue, the target populations and the community context, but ultimately, a comprehensive strategy for youth development should include aspects of the all three of these approaches, because each one has strengths and weaknesses. Nevertheless, all three approaches can have a place in youth policy and practice, and a broad-based approach that comprises various strategies is suitable to have the best chance of improving the life chances of youth (Connell & Kubisch, 2001; Eccles & Gootman, 2002).

In the area of youth development, it is still necessary to develop a more integrated conceptual framework and increase the dialogue among practitioners and researchers (Small & Memmo, 2004).

#### **3.1. Prevention Approaches**

This approach was based on the idea that it is more cost-effective and efficient to initially prevent problems from occurring, than to treat them after they are established. Three types of prevention can be identified: primary, secondary, and tertiary (Caplan, 1964). Primary prevention is focused on the normal population; secondary prevention involves intervention with populations presenting early problems; and tertiary prevention is concerned to the reduction of a problem among a group of people who already are

experiencing it (Bloom, 1996). **Prevention** can be differentiated into **three intervention subcategories** (Gordon, 1987):

1. **Universal** (directed at the general public or an entire population);
2. **Selective** (directed at a subgroup of a population in risk of developing a problem, but not yet exhibiting any difficulties);
3. **Indicated** (targeted at high-risk individuals who show some signs or symptoms of a problem).

The prevention approach aims to reduce/eliminate risk factors and increase/promote protective factors, enhancing the strengths, skills, or competencies of the target group, so they are better able to cope with the stress or challenge, that may result in future problems (Durlak, 1997). Researchers view this approach within an ecological framework (e.g., Coie et al., 1993; Kelly, 1986), considering that risk and protective factors exist both within individuals and across the various surrounding settings (family, peer group, school and community). Additionally, there is also the idea that most problems are multiply determined (Small & Luster, 1994) and that risk factors often co-occur (Masten, Morison, Pellegrini, & Tellegen, 1990; Rutter, 1979). In fact, when risk factors accumulate up to three or four, the probability of occurring a problematic outcome may be substantially increased (Rutter, 1979), and individuals can be overwhelmed and unable to cope with the accumulated stress (Garbarino, 1995).

This approach has some limitations, such as it tends to be deficit-oriented emphasizing youth problems (Benson, 1997; Pittman & Cahill, 1991), takes limited attention to the importance of various risk and protective factors, and also gives less recognition that a risk or protective mechanism may not apply equally to all persons within a population (O'Connor & Rutter, 1996).

### ***3.2. Resilience Approaches***

The study of resilience emerged from the observation that most children who experienced developmental adversity were not destined to develop problematic outcomes (Garmezy, 1993). The primary aim of resilience research has been to identify and understand those factors that distinguish individuals who demonstrate good adaptation

when confronted with adversity from those who emerge with problem behaviors. Two conditions must exist for resilience to be demonstrated: the experience of extreme stress or multiple stressors and the manifestation of successful adaptation or competence despite such stress (Masten, 2001; Rutter, 1987; Werner, 1993).

Resilience often was characterized under the designation of stress and coping and coping was defined as the individual differences in children's responses to stressful events (Rutter, 1983). More recently, resilience can be distinguished from coping. Coping emphasizes the identification of the specific cognitive/behavioral efforts employed to manage a stressful situation (Ayers, Sandler, & Twohey, 1998), whereas resilience focuses on identifying stable characteristics in the child or in the environment, that help to deal with a stressful situations or to recovery/adapt after a period of disorganization (Masten, 2001).

Resilience is best demonstrated when an individual can avoid problem behaviors and attain developmental expectations, in spite to exposed to significant risks (Rutter, 1993; Masten, 1994). It results from the combination of separated four processes that allow retaining assets for the individual to be competent and thrive developmentally, and avoid problem behaviours despite their experience of risk. These processes may co-occur and are not mutually exclusive, and can be conceptualized in the following **conceptualization**:

- a) **Resilience may result from the successful operation of protective processes** that operate to eliminate risk before damage is done, and are often view as resulting from the actions of others or environmental conditions in the environment. Therefore, they can operate without the person's knowledge or active participation, contrary to coping that implies an individual's action. Nevertheless, protective processes must occur in conjunction with others that reinforce assets or promote asset building, in order for resilience to be expressed.
- b) **Resilience may occur as a result of certain exceptional personal characteristics** (e.g., intelligence or sociability) that are often associated with the individual's innate skills, personality and developmental history. Assets can help to enable the acquisition of additional resources and efforts can be done to develop these personal characteristics, however, this capacity can be limited. Particularly, strongly-based genetic characteristics, or for the result of a long developmental

history may be less amenable for intervention, still, more knowledge of how they operate can be used to develop complementary or compensatory strategies.

- c) Resilience also may be achieved by successfully recovering from a stressful situation or crisis event**, contrary to protective processes. Recovery may require several actions, such as: a) the elimination/reduction of the number and intensity of the demands created by the crisis; b) the acquisition of additional resources to help the individual or family, using coping strategies to deal with personal tension and stress; and, c) the reassessment of the situation-related meanings, in order to make it more constructive, manageable and acceptable (McCubbin et al., 1997).
- d) Resilience may occur through the process of steeling** that occurs when individuals overcome challenging experiences which strengthen their capacity to resist to subsequent stressful situations (Rutter, 1981; Rutter & Maughan, 1997). Contrasting to biologically base personal characteristics, steeling is developed in response to prior experiences that challenge, but do not overwhelm the resources of the individual.

The principal critics to the resilience approaches argue that they can result in a tendency to neglect environmental conditions (Tolan, 1996) and overemphasize the individual. Thus, it may reduce the effects of contextual risk, where typically practitioners and policy makers exert more influence. Additionally, if resilience is best conceptualized as a phenomenon strongly transversal to developmental domains or one that is more domain-specific, is another concern (Luthar, 1993). Yet, it has been pointed out that it is misleading to assume such transfer, because everyone is vulnerable to some degree of stress, and because the processes underlying resilience both exist in the social and individual context, they are likely to vary by context (Rutter, 1993).

### ***3.3. Positive Youth Development (PYD) Approach***

A recent approach that highlights the positive aspects of youth development and health has emerged among professionals and youth policy makers. Particularly popular in youth-services, educational programs and community wide initiatives, these approaches emphasize the promotion of positive development and the conditions contributing to

youth health and well-being, suggesting that preventing problems is not enough to prepare youth for adulthood (Roth, Brooks-Gunn, Murray, & Foster, 1998).

One of the most widespread and influential positive youth development frameworks is the **Search Institute's Developmental Assets model** (Benson, 1997). A later variant of positive youth development was The Community Youth Development approach (Hughes, & Curnan; 2000; Perkins, Borden, & Villarruel, 2001) that shifted from a dual focus on youth being problem-free and fully prepared, to a triadic perspective, adding the idea that they can be contributors to and active shapers of their communities, acting as engaged partners (Perkins et al., 2001).

The Search Institute's Developmental Assets model's findings showed significant factors for preventing/reducing risky behaviours or contributing for positive outcomes or resilience (Scales & Leffert, 1999; Benson et al., 2006). This framework identified and comprised 40 relevant developmental assets, defined as crucial building blocks for promoting healthy youth development and well-being (Benson, Leffert, Scales, & Blyth, 1998). Such assets seek to help young people to grow up healthy, caring and responsible, using the following criteria: research support; factors important for all youth; relationships and environments; and, power to mobilize. The **40 assets** were **organized in two major blocks**, each one comprising **4 categories**, respectively:

1. **External Assets** (*Categories: Support; Empowerment; Boundaries and Expectations; Constructive Use of Time*);
2. **Internal Assets** (*Categories: Commitment to Learning; Positive Values; Social Competencies; Positive Identity*). The main results of this framework brought evidence on the relationship between youth developmental assets and measures of wellbeing as a universal occurrence (and not cultural limited), supporting the efforts to globally build developmental assets as a positive youth development strategy (Scales, Roehlkepartain, & Fraher, 2012).

**The PYD approach** has several strengths, such as being generally relevant for all youth, rather than to just a specific target group, also identifying what it is right about youths, than to what is wrong to them. Thus, this broad, strengths-based and focus on positive focus perspective, can be an attractive conceptualization around which political

and institutional different groups, programs and organizations can unite, because it provide a common language that enables a more effective planning of interventions (Small & Memmo, 2004). However, some aspects must be taking into consideration, namely yet the likelihood of a problem behavior can decrease as the number of individual's assets increase, the presence of even one risk factor can double or triple the occurrence of a problem behavior, even among youth reporting various assets. Furthermore, all assets are not equally significant and some are more important than others. Its significance varies depending on the individual/contextual factors and the developmental outcome, so, all assets are not equally amenable to change (Memmo & Small, 2001).

The Search Institute's Developmental Assets model in comparison with others is more detailed, more widely written about, and includes a survey that allows the assessment of assets in specific communities. However, due to a broad operationalization of assets, this process can be often too inclusive, comprising protective factors, coping processes, recovery factors, developmental resources, the absence of risk factors and developmental outcomes; and such different concepts need to be distinguished and more research is needed (Small & Memmo, 2004).

In the continuation of the work on the study of responses to the "deficit perspective" another approach has emerged, based on a categorization of **5 Competences** (Lerner, Phelps, Forman, & Bowers, 2009; Lerner et al., 2013; Lerner et al., 2011), gathering the consensus of diverse authors (Busseri & Rose-Krasnor, 2009; Roth & Brooks-Gunn, 2003a,b; Lerner et al., 2006; Lerner, Almerigi, Theokas & Lerner, 2005; Lerner, Lerner, von Eye, Bowers & Lewin-Bizan, 2011; Perkins, Borden, & Villarruel, 2001; Schwartz, Pantin, Coatsworth, & Szapocznik, 2007). This is a strength-based approach that moves away from the negative and towards a vision that youth are resources to be developed and nurtured. It focus on the relation between youth's strengths and resources in their surrounding settings, as the key of promoting positive outcomes (Lerner et al., 2009; Pittman, Irby, Tolman, Yohalem, & Ferber, 2003). Various theoretical frameworks and conceptualizations on PYD have been conducted (Lerner et al., 2013), and recent studies have been done for the evaluation of this model (Dukakis, London, McLaughlin, & Williamson, 2009; Heck & Subramaniam, 2009). Several measures were used to index PYD (Lerner et al., 2005), operationalized through the assessment of **Five Cs**:



1. **Competence** (*in academics, social, emotional and vocational areas*);
2. **Confidence** (*in who the individual is becoming – own identity*);
3. **Character** (*related to positive values, integrity, and a strong sense of morality*);
4. **Connection** (*ties to self and others*);
5. **Caring** (*empathy and compassion*).

The Five Cs are hypothesized as a way of conceptualizing PYD, and to integrate its indicators, relying on the experiences of practitioners and on the literature reviews of adolescent's development (Eccles & Gootman, 2002; Lerner, 2004; Roth & Brooks-Gunn, 2003a, b). These five domains are interactive and a healthy development of all of them is required for PYD (Dukakis et al., 2009). Its manifestation through adolescence can increase a mutually-beneficial person/context relationship later in life's trajectory, which contributes to the individual, family, community and for the civil society; and a **sixth C** may emerge - **Contribution** (social engagement and social participation) (Lerner, 2004). On the other hand, a trajectory of risk/problem behaviors is less expected, because there is evidence suggesting that the rising of positive behaviors hypothesizes lower indicators of problematic behaviors (Benson, Mannes, Pittman, & Ferber, 2004; Pittman, Irby, & Ferber, 2001). These findings show a complex pattern of positive and negative development (Lewin-Bizan et al., 2010; Phelps et al., 2007) and PYD is associated with positive indicators such as contribution, school engagement, successful intentional self-regulation, and hope (Geldorf et al., 2014).

During childhood and adolescence the ability to regulate actions is progressively developing, which implies adjustments to the context and vice-versa, thus a bi-directional process (Gestsdottir & Lerner, 2008). In children/adolescents this term refers to various capacities, such as quickly switch between different tasks, focus attention or emotional control. PYD approaches can help youths to develop capacities for "intentional self-regulation", potential relevant as protectors from engagement in risk behaviours such as substance use and violence (Bonell et al., 2016). It enables youths to reflect on existing behaviour, select personal goals and apply the necessary resources to pursue them; including compensation or re-selection strategies, if goals are not achieved (Benson, 2007). Thus, PYD promotes positive interactions between individuals and their environments, affective relations and several opportunities for developing positive assets (Busseri & Rose-

Krasnor, 2009; Lerner, Lerner, von Eye, Bowers & Lewin-Bizan, 2011; Schwartz, Pantin, Coatsworth, & Szapocznik, 2007).

Effective youth programs include the designed **“Big Three” components** (that promote the development of PYD attributes for youth):

1. **Youth participation** (opportunities for youth participation in and leadership);
2. **Skills building** (emphasis on the development of life skills); and
3. **Adult mentorship** (a context of sustained and caring adult-youth relationships) (Lerner, Lerner, Almerigi, et al., 2006).

The Five Cs Model of PYD, compared to others, it is the most empirically supported framework to date (Heck & Subramaniam), thus, a valid and largely applicable measure for PYD deriving from this model could be a great benefit for professionals and researches who have adopted this approach (Geldorf et al., 2014).

The development of these positive attributes can promote improved **self-care**, greater **academic achievement**, higher **quality in interpersonal relationships** and overall improvements in **well-being**, not only in adolescence, but also in adult development and health care (Maslow & Chung, 2014) **adopting a lifespan approach, a participative focus, and an intergenerational perspective.**

## 4. TOWARDS NEW INTEGRATIVE AND CONCEPTUAL MODELS FOR HEALTHY DEVELOPMENT OF ADOLESCENTS

### *4.1. Integrative Model of Pathways toward Healthy Development*

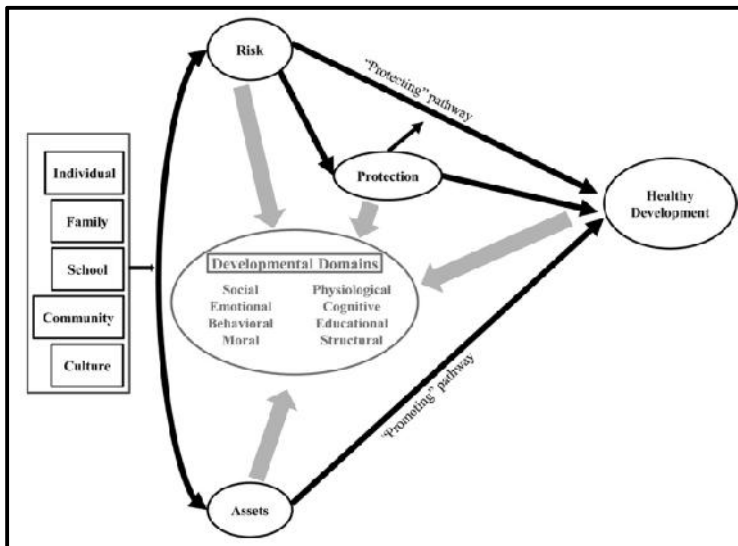
The study of risk and protection, and developmental assets has raised **two key approaches** to adolescent development:

1. **Resilience** (Rutter, 1987);
2. **Positive youth development** (Lerner, Lerner, Almerigi & Theokas, 2005; Lerner, Fisher & Weinberg, 2000a,b).

These approaches share the same principles, but have a different relative emphasis on each one. Historically, both have limitation in its point of view: risk and protection has tended to overemphasize negative outcomes and overlook positive ones. On other hand, the weaknesses of a developmental assets approach include neglecting the role of risk in healthy outcomes and inadequately attending to negative outcomes.

Relying on a growing empirical support, current literature on child and adolescent's mental health suggests a more holistic approach for an optimal development, consisting of integrating both the reduction of negative behaviors, and the promotion of positive ones (Guerra & Brashaw, 2008; Schwartz, Pantin, Coatsworth, & Szapocznik, 2007). Given that the concepts of **resilience** and **positive youth development** have substantial overlap and offer complementary perspectives on fostering healthy youth development, an **integrative model** attending to both research and practical applications was needed (Schwartz et al., 2007). Moreover, the overlapping features of these approaches, namely the importance of the potential for change in human development, and the focus on ecological processes as critical factors in adolescent developmental trajectories, could provide significant inputs for the rationale and foundation for such integrative conceptual model (Kia et al., 2010).

Thus, more recently, a model based on a unified approach of these concepts was developed, having the potential benefit of interconnectedness of risk, protection, and assets, within the ecological systems affecting adolescent development. This model is presented in **Figure 1**.



**Figure 1.** Integrative Model of Pathways toward Healthy Development (Kia et al., 2010, pp. 222).

The model presents **two pathways**:

1. **“Protecting”**: drawn from the resilience research and comprising risk and protection;
2. **“Promoting”**: drawn from the positive youth development research and including assets. Both pathways lead to a broad category of healthy development.

In the **first pathway**, *protection moderates the relationship between risk and healthy development*. In the **second pathway**, *assets lead directly to healthy development*, but also have a *reciprocal relationship with risk*. Therefore, it can be assumed that assets can prevent the occurrence of risk.

Within a **cultural-ecological transactional theoretical framework**, this model also combines resilience and positive youth development. To overlap contextual and cultural influences can shape developmental domains and individual-contextual transactions over time (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 2006). Therefore, individual, family, school, community, and cultural factors were included in this model and thought to influence the entire system. Integrating development into a conceptualization of adolescent health will additionally allow for research in both risk and resilience and positive youth development, to provide information to each other.

The present model delineates **eight developmental domains** useful for future research on underlying mechanisms associated with healthy outcomes, as well as prevention and intervention efforts (Kia-Keating et al., 2010). Seven of which are derived

from categories previously emphasized in applied research (Benson, 2003; Catalano et al., 2004; Eccles & Gootman, 2002; Lerner, Fisher & Weinberg, 2000a, 2000b), and an additional eighth domain (self-regulation) that has been highlighted as a potential target area in interventions (Blair & Diamond, 2008; Webster-Statton, Reid, & Stoolmiller, 2008), and an example of the transactions between adolescents and their social networks and ecological settings (Barber & Olsen, 1997; Bumbarger & Greenberg, 2002; Eccles, Early, Frasier, Belansky, & McCarthy, 1997; Jemmott, Jemmott, & Fong, 1998).

The 8 developmental domains can be conceptualized in terms of formulating **target areas for interventions** as well as **measuring key outcomes** to assess healthy development, being both predictors (i.e., intervention activities) and outcomes (Kia et al., 2010). They comprise the following domains (Kia, 2009; Kia et al., 2010):

1. **Social:** promoting social support, bonding, and sense of belonging; it is characterized by a *continuum* between alienation and a sense of belonging;
2. **Emotional:** supporting self-efficacy and resilience-building; it is characterized by a sense of helplessness on one end of the *continuum*, and self-efficacy on the other;
3. **Behavioral:** involving youth in prosocial activities; it denotes a range of antisocial and prosocial behaviors or altruistic actions for which no compensation is expected;
4. **Moral:** character-building through the fostering of prosocial norms;
5. **Physiological:** building self-regulation skills; it signifies the importance of regulation in adolescent development as a key characteristic of the transaction between adolescents and their ecological contexts;
6. **Cognitive:** perspective-building by supporting youth to develop a broader awareness of meaning (e.g., their spiritual beliefs, or their hopes for their futures) in their lives; it refers to a *continuum* of hope;
7. **Educational:** competence-building through activities that provide youth with new skills; it represents the importance of school engagement for positive health outcomes;
8. **Structural:** ensuring structure and safety; it refers to a *continuum* of adult supervision and monitoring provided to adolescents.

These eight domains are comprised in **Figure 2**.

Developmental domain	Attributes of positive youth development programs <sup>a</sup>	Risk	Protection
Social	Social support, bonding, and sense of belonging	Alienation	Sense of belonging
Emotional	Self-efficacy and resilience-building	Helplessness	Self-efficacy
Behavioral	Prosocial activities	Antisocial behaviors	Prosocial behaviors
Moral	Character-building	Delinquent values	Prosocial values
Physiological	Self-regulation <sup>b</sup>	Dysregulation	Regulation
Cognitive	Perspective-building	Hopelessness	Hope
Educational	Competence-building	Disengagement	Engagement
Structural	Structure and safety	Unsupervised	Monitored

**Figure 2.** Indicators of Risk and Protection within eight developmental domains (Kia et al., 2010, pp. 223).

The use of a holistic approach can best conceptualize these eight domains. In terms of the school context, they can be targeted in school-based prevention and intervention activities for adolescents, and can also be used as categories for school-related outcomes, such as school readiness, motivation, agency, and academic achievement. In order to further take this model on integrative efforts towards a better understanding of healthy development, **five foundational principles** that can incorporate and build current formulations were offered (Kia et al., 2010):

- 1. There are a minimum of two main pathways** toward healthy development: (a) the **protecting** pathway, which, when risk is mediated or buffered by protection, support, or intervention, leads to positive outcome; and (b) the **promoting** pathway, by which assets lead directly to healthy development. A fundamental starting point is to consider the idea that risk is not simply the opposite of protection, nor is the converse of assets, converse of assets, is a fundamental starting point for a better understanding of the multiple levels of reciprocal influences and interactions leading to healthy development. Additionally, an integrative approach has the potential to be more comprehensive, practical, and effective in addressing the real “daily life” problems.

2. **Risk and protection are contextual** and engage in multiple levels of reciprocal interactions, thereby leading to continual change and development over time (Guerra, Boxer, & Kim, 2005).
3. **Protecting and promoting pathways** are part of interacting systems of **social ecology** (Bronfenbrenner, 1979). According to the Transactional-ecological model, the human development is driven by the transactions between self-agency and environmental influences (Benard, 2004). Therefore, interventions need to attend to multiple levels of an adolescent's social ecology and not just rely on building individual assets in isolation;
4. **Cultural definitions** of what constitute **risk, protection, or assets vary**. Even with individual variability within the cultural context, this is a relevant issue that constitutes a substantial challenge for intervention approaches (Guerra & Knox, 2008), since demographic variables (e.g., ethnicity, socioeconomic status, education, occupation) are related to different experiences of resilience (Luthar, 2006);
5. **Optimal programs need to be multifactorial, multisystem, and multilevel**, including multiple levels of reciprocal influences and interactions. Recognizing the interconnectedness within these systems could potentially lead to more successful outcomes for youth (Ellis, 1998).

The shift that occurred in schools, from a medical and deficit-based approach to a more strength-based emphasis, had extensive implications for both research and practice, pressing forward the field of adolescent research and positively affecting youth and families, through changes at school, community, and in policy levels. Given the importance of integrated developmental target areas to school-related outcomes, the translation of these research into school-based practice is crucial (Kia et al., 2010). It may be helpful to think of a public health model including **universal or primary prevention** approaches provided to all youth through a school- or district-wide implementation; **targeted or secondary prevention** approaches provided to youths who are at risk; and **intensive or tertiary prevention** approaches for the ones demonstrating the highest level of need or impairment (Durlak, 1997).

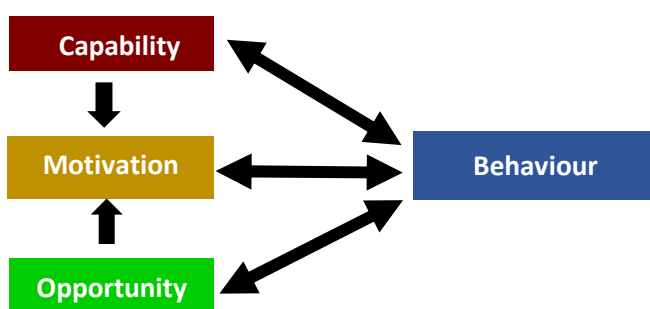
Although there are still several questions that need further research, this is a moving forward field and the need to integrate the concepts of resilience and positive youth development is becoming increasingly clear, as well as the importance to applying it to school-based practice. A focus of attention to this model is critical toward providing all adolescents with adequate support, in order to develop healthy and happy adults, valuable for the entire society (Kia et al., 2010).

#### **4.2. Behaviour Change Wheel Model**

Recently, a framework for understanding behaviour was proposed and designed as the **Behaviour Change Wheel Model (BCW)** (Michie, van Stralen & West, 2011). This model relies on a causal comprehensive analysis focusing on the following starting-point question: “Which internal individual conditions and social/environmental ones need to change in order to reach a certain behaviour?” (Michie, van Stralen & West, 2011, pp.9).

The BCW model was developed based on theoretical and evidenced-based instruments that allow the design and selection of interventions and policies, in agreement with 1) the analysis of behaviour nature; 2) the mechanisms for behaviour change; 3) the interventions and policies needed to change those mechanisms. In addition, this model grew from the need to identify effective interventions.

For that purpose, it is crucial to have a characterization system that can match those interventions with the specific behaviour to be achieved, the target-population and the context where it is going to be conducted. Authors state that this characterization system should be applied to any interventions and neither comprising too broad or too specific categories. Thus, the categories must be coherent and in relationship with the specific mechanisms for behavioural change. This system is the **COM-B system** and it is presented in **Figure 3**.



**Figure 3.** COM-B System: a framework for understanding behaviour (Michie, van Stralen & West, 2011, pp.4).



The COM-B system suggests that for behavioral change to happen, at least **three components** are needed:

1. **Capacity**, *i.e.*, physical and psychological skills for behaviour change, mainly knowledge and competence;
2. **Motivation**, *i.e.*, the intention to act, which include emotional and impulsive processes, as well as a reflexive process of decision making;
3. **Opportunity**, *i.e.*, that no external factors interfere with the behaviour action. In this system, there is a dual interaction between the three factors and the behaviour and a specific intervention can change one or more components of the system itself.

Moreover, it focuses on intra-individual psychological factors and external ones, with both assuming equal importance status for behaviour control; and it does not emphasize individual, and group or environmental perspectives.

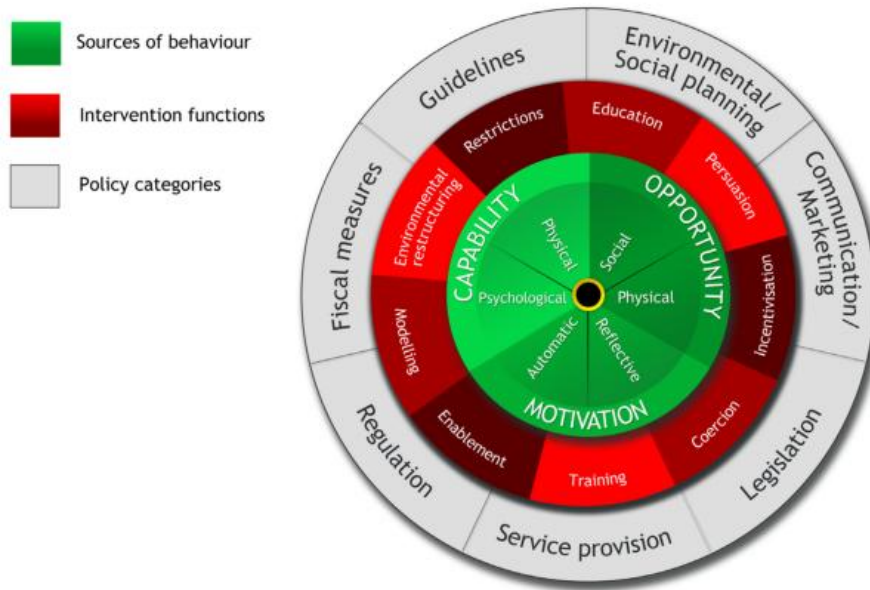
The authors (Michie, van Stralen & West, 2011) also highlight that the **three components can be divided into other dimensions**:

- **Capability** can be divided in physical and psychological;
- **Motivation** in automatic and reflexive;
- **Opportunity** in physical and social.

This is shown in the BCW model, presented in **Figure 4**, emphasizing a distinction between:

- **Interventions** (activities which aim to achieve behavioural changes);
- **Policies** (political actions that allow and support interventions).

**Nine interventions** are suggested within this model, namely Education, Persuasion, Incentivisation, Coercion, Training, Enablement, Modeling, Environmental restructuring and Restrictions. On the other hand, **seven policies** are comprised, specifically Communication/marketing, Legislation, Service Provision, Regulation, Fiscal measures, Guidelines and Environmental/Social planning.



**Figure 4.** The Behaviour Change Wheel (Michie, van Stralen & West, 2011, pp.7)

The BCW model reinforces the context (corresponding to the component Opportunity) as a key factor for the design and implementation of effective interventions. Therefore, behaviour can be only understood in the relationship with the context and both are the starting point for planning interventions.

## 5. A PORTUGUESE CASE STUDY – THE DREAM TEENS PROJECT

The **Dream Teens\*** (Branquinho, Matos & Equipa Aventura Social/Dream Teens, 2016; Frásquilho et al., 2016; Matos et al., 2015, 2016) began in May of 2014 and is a Youth Engagement Project focusing adolescents between 11 and 18 years old. It gives educational and support tools to empower youth “voices”, by promoting their social participation in a variety of contexts and scenarios related to health and active citizenship. The project disseminates the experiences of youths in participative research, in satisfaction and in feelings of *belonging*. In its final part a set of recommendations were comprised resultant from the research-actions of the adolescents in their communities.

Globally, this project aims to avoid social alienation and to promote social capital, health and well-being of adolescents (Morgan & Haglund, 2009). Additionally and in line with the **six components proposed by the World Health Organization** (WHO, 2014 a,b), it targets the following goals:

1. **To establish needs and priorities:** the project rises in Portugal, a country with few opportunities for young people to be heard and to actively participate in political public decisions, and mostly in questions and issues that affect their lives and surrounding communities;
2. **To provide a model/structure in order to plan actions:** the system COM-B System and the BCW model (Michie, van Stralen & West, 2011) reinforce the objective to promote the collaboration among youths, to increase their participation in peer activities (outside the family context and scholar environment), social/civic compromises, as well as in research areas and political public decision making processes. Generally, to develop more informed, responsible and effective “voices”, through their participation in the project, which provided formation, the use of new information technologies, training and supervision conducted by the seniors researchers of the “Aventura Social” team;
3. **To identify support structures and processes,** namely financial support entities, partnership with formal and informal institutions/entities/associations, at a regional, governmental (mostly municipalities and schools) and non-governmental level, as well as national and international consultants;

- 4. To facilitate evaluation and engagement:** the project included 121 youths in a single group, divided in six thematic areas and in three geographical regions, working in collaboration with the senior researchers of the team in daily tasks related to public policies, concerning health and social participation. In the evaluation results, the adolescents suggest that the project should grow and disseminate even more their interventions. In addition, it should continue to develop actions to increase awareness and events in the community (organized by the Dream Teens themselves in their schools, municipalities, cultural centers and others), as well as the opportunity to develop more individual works and to conduct public events;
- 5. To ensure supervision, evaluation and dissemination:** with the constant support of the senior research team, youths can benefit from the knowledge related to plan/conduct a research in their life contexts, report recommendations for actions that can empower their lives and act in a transformative perspective. As a result of this project, several scientific publications, communications and national/international events occurred. Also the governmental recognition, through the dissemination of the youth's recommendations in official websites and the Dream Teens book (existent in 3 languages: Portuguese, English and French, with direct contributions of the youths), was considered a Good Practice by the Health Behaviour in School-aged Children, a collaborative study of the WHO;
- 6. To empower:** the dream Teens project provided a scenario for the development of partnerships among researchers, civil society and public political stakeholders that allow the continuous process of commitment and empower. Through positive initiatives and results, the youths were empowered to take over their own actions and to lead the development of organizations and communities.

\*

- <http://dreamteens.aventurasocial.com/>
- <http://www.dreamteens2014-2015.blogspot.pt>
- <http://www.dreamteensaventurasocial.blogspot.pt/>

## 6. OBJECTIVES

The present report aims to present the assessment of the concept of Positive Youth Development (PYD). Specifically, this report intends to:

- **To report the prevalence of PYD** by gender, age, Socio-economic Status (SES) and HBSC/WHO items (namely school-related ones and individual characteristics and behaviours);
- **To correlate PYD** with additional psychosocial variables such as **resilience, self-regulation, anxiety and life events.**

For that purpose, the report will present the most relevant results of the Portuguese PYD protocol comprising several measures.

## **PART II: METHODS**

### **1. STUDY DESIGN**

The present **PYD-BePositive** study is a part of the local national survey **Health Behaviour in School-aged Children (HBSC/WHO)** extended to **Portuguese University Youths (Jovens Universitários Portugueses)- HBSC/JUnP**, aiming to address health behaviours in these population (Reis, Matos & Equipa Aventura Social, *in press*).

The HBSC/WHO is a World Health Organization (WHO) collaborative study that assesses school-aged children's health, well-being and their determinants in 44 countries in North America and Europe (Currie et al., 2012; Currie et al., 2014). The main goal of HBSC/WHO is to help inform policy makers on how to improve young people's lives and it is essentially descriptive, cross-sectional and correlational in nature, and pretended to assess children and adolescents mental and physical health (Currie, Samdal, Boyce, & Smith, 2001; Roberts et al., 2009). It also intends to better understand health behaviours and well-being among adolescents within their social context (Roberts et al., 2007), and provides a unique opportunity to assess the subjective health and well-being among children and adolescents using multiple indicators. All countries participating in the HBSC/WHO study followed a standardized research protocol (Griebler, Molcho, & Samdal, 2010). In Portugal, this survey is conducted every four years, since 1996 (Matos, & Equipa do Projecto Aventura Social, 2000-2014), by Aventura Social research team and is coordinated by its principal investigator Professor Dr. Margarida Gaspar de Matos from Faculdade de Motricidade Humana, University of Lisbon.

The HBSC /JUnP study is an extension of the international survey Health Behaviour in School-Aged Children (HBSC/WHO) ([www.hbsc.org/](http://www.hbsc.org/)) to university Portuguese students and the **PYD-BePositive study** was carried out in the context of **HBSC/ JUnP**, in 2016.

### **2. ETHICS**

The HBSC/JUnP followed all the rules for research outlined in the Declaration of Helsinki (WMA, 2008) and was approved by the Ethics Commission of the Medicine Academic Center of Lisbon (*Centro Académico de Medicina de Lisboa*), CHLN/FMUL/IMM

(Centro Hospitalar Lisboa Norte/Faculdade de Medicina de Lisboa/Instituto de Medicina Molecular). Individual and parental informed consent were obtained. Confidentiality was ensured with anonymous response to the questionnaire and access restricted to the research team members, regarding the work on computing and data analysis. These procedures are also in agreement with the international standard guidelines from the HBSC/WHO survey protocol (Griebler et al., 2010).

### 3. PARTICIPANTS

For each country of the PYD European network, it was set a goal to reach 500 participants in order to validate PYD in the different countries. (<http://www.uib.no/en/rg/sipa/pydcrossnational>)

The **Portuguese PYD-BePositive** study included students in the age group of **16 to 29 years old** through a convenient sampling country wide. This cross-sectional study comprised a sub-sample of **2700 youths** (73.3% girls), with a mean age of 21.3 years old ( $SD=2.79$ ), ranging from 16 to 29 years old. Mostly, the youths had Portuguese nationality (96.8%), were born in Lisbon (33.4%) and were currently living in an urban area (46.4%), were Graduate Students (63.5%) and had a middle Socio Economic Status (SES) level (67.7%).

### 4. PROCEDURE AND INSTRUMENT

Data collection was performed through an *online* survey, using the *Limesurvey* platform. Previously to data filling, the explanation of the study and the informed consents were completed. The questionnaire was composed of several parts, specifically:

- 1. Instructions and Informed Consent;**
- 2. Socio Demographic Characterization;**
- 3. HBSC/WHO Questions** (Currie et al., 2012; Matos & Equipa Aventura Social, 2000-2014) assessing both individual and contextual levels, through school-related items and other items regarding individual characteristics, such as having breakfast during weekdays (a general health measure) and current worries (Matos et al., 2016; Matos, Gaspar, Cruz & Neves, 2013; Matos, Gaspar, Tomé & Cruz,

2012). Other health-related behaviours included in this survey will be studied and presented in a future report due in July 2017.

4. **Questions related to the youth himself and others**, comprising the measures to assess **Positive Youth Development (PYD)** and additional questions on **Resilience (RES)**, **Self-regulation (SR)**, **Anxiety (STAI-T)** and **Life Events (LES)**.

## 5. MEASURES

For the purpose of the present study, selected variables were included from different parts of the questionnaire.

### 5.1. Socio-demographic Characterization and HBSC/WHO Questions

The variables comprised in the part 2 (Demographic Characterization) and part 3 (HBSC/WHO Questions included in the current report) are presented with more detail in

**Table 1.**

<b>Socio-Demographic Variables</b>	<b>Coding</b>
<b>Age</b>	Mín: 16 - Máx: 29 (Years Old)
<b>Gender</b>	1=Boy; 2=Girl
<b>Geographic Region</b>	1=North; 2=Center; 3=Lisboa; 4=Other regions (Algarve, Alentejo; Azores and Madeira)
<b>Nationality</b>	1=Portuguese; 2=Others
<b>Educational Level</b>	1=Secondary; 2=Graduate; 3=Master
<b>Socio Economic Status - SES</b>	1=Low; 2=Middle; 3=High
<b>Type of Habitational Area That Youths Grew Up</b>	1=Rural; 2=Sub-Urban; 3=Urban
<b>Type of Habitational Area That Youths Actually Live</b>	1=Same as in childhood; 2=Rural; 3=Sub-Urban; 4=Urban
<b>Type of Residence</b>	1=Apartment; 2=Habitation; 3=Shared apartment; 4=Rented room
<b>People that Youths are Currently Living With</b>	1=Alone; 2=Mother; 3=Father; 4=Sister, Brother; 5=Family Members; 6=Boyfriend, Girlfriend; 7=Colleagues, Friends; 8=Strangers
<b>HBSC/WHO Questions</b>	<b>Coding</b>
<b>WORRIES:</b>	
<b>Intensity of Worries</b>	1=Intense; 2=Moderated; 3=None
<b>Frequency of Worries</b>	1= Several times a day/Almost every day; 2= Several times a week; 3= Several times a month/Rarely or never
<b>SCHOOL-CONTEXT:</b>	
<b>Feeling Bored in School/University</b>	1= Never/Once in a while; 2= Sometimes; 3= Often/Always
<b>Feeling Pressure with Homework</b>	1= Not at all/A little; 2= Some; 3=A lot
<b>Self-Perception of Academic Performance</b>	1= Low; 2=Reasonable/Good; 3=Very good/Excellent
<b>NUTRITION</b>	
<b>How often do you have breakfast during week days?</b>	1=Never; 2=Between 1-6 days; 3=7 days

**Table 1:** Measures and coding.



## **5.2. Questions-related to the Youth Himself and Others**

The variables comprised in the part 4 (Questions related to the youth himself and others), included the measures to assess Positive Youth Development (PYD) and additional questions on Resilience (RES), Self-regulation (SR), Anxiety (STAI-T) and Life Events (LES).

### **5.2.1. Positive Youth Development Short Form (PYD-SF)** (Lerner et al., 2005; Geldorf et al., 2014)

This concept was assessed by the **Positive Youth Development Short Form (PYD-SF)**, which is a shorter version of a larger PYD scale.

The original version of the larger scale was obtained using data from the first wave (Grade 5) of the 4-H Study (Lerner et al., 2005) that 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. In a subsequent study, confirmatory factor analyses tested the validity of the Five Cs model (Jelicic, Bobek, Phelps, Lerner, & Lerner, 2007). Results suggested that the Five Cs could be assessed in terms of latent constructs, which in turn load on a higher-order PYD construct. Afterwards, the scale was extended from Grade 5 to Grade 7 of the 4-H Study (Phelps et al., 2009) and the authors aimed to determine whether there was evidence of a latent construct of PYD generalized across the early years of adolescent development, and operationalized by lower-order latent constructs representing the Five Cs. Results indicated that the Five Cs model of PYD continued to be a robust construct for Grades 6 and 7 as it was in Grade 5.

Finally, it was also examined if the structure of PYD in middle adolescence (Grades 8 through 10) was comparable to the structure of PYD, previous identified in early adolescence (Bowers et al., 2010). Using a hierarchy of second-order confirmatory factor analysis models, the results indicated that while the overall structure of PYD was maintained across Grades 8–10, the scales relevant to measuring the Five Cs were slightly different for two of the Cs during middle adolescence, comparing with the early adolescence: athletic competence was no longer a relevant indicator of competence during middle adolescence, whereas physical appearance significantly loaded on the latent construct of confidence. Thus, the structural definition of PYD has been confirmed within the 4-H Study data set from the beginning of the adolescent period through the middle portion of this time of life (i.e., from approximately 10–16 years) (Geldorf et al., 2014).

In the original scale, the items (almost 80) were drawn and adapted from different primary sources:

1. ***Search Institute Profiles of Student Life: Attitudes and Behaviors.*** /Copyright ©1996 Search Institute® Minneapolis, MN; [www.search-institute.org](http://www.search-institute.org). All rights reserved. Used by permission;
2. ***Self-Perception Profile for Adolescents (SPPA)*** (Harter, 1988);
3. ***Teen Assessment Project (TAP) Survey Question Bank*** (Small & Rodgers, 1995);
4. ***Eisenberg Sympathy Scale*** (Eisenberg et al., 1996);
5. ***Empathic Concern Subscale of the Interpersonal Reactivity Index*** (IRI; Davis, 1983).

The items for the “Competence” were retrieved from the primary source number 2; the items for the “Connection” from the primary sources numbers 1 and 3; the items for the “Confidence” and “Character” from the primary sources numbers 1 and 2; and the items for the “Caring” are a composite of modified items from the primary sources numbers 4 and 5. With the exception of the “Caring”, each C was composed by several subscales, respectively:

- **“Competence”**: Scholastic Competence; Social Acceptance; Physical Competence; Grades;
- **“Connection”**: Connected to Family; Connected to Neighborhood; Connected to School; Connected to Peer;
- **“Confidence”**: Self-worth; Positive Identity; Physical Appearance;
- **“Character”**: Social Conscience; Values Diversity; Conduct Morality; Personal Values.

However, the inclusion of almost 80 items on the original scale was a relevant limitation, because measures used by researchers and professionals must be practical for greater benefit and applied purposes. As the PYD perspective was more largely adopted by researchers of adolescent development, youth policy makers and youth-serving professionals, the need for an easily and a shortened scale to measure the Five Cs of PYD was necessary. Moreover, because it could be included on longitudinal surveys for

adolescent with ages 10 to 18 years old, and as a complement to other measures of youth development, used in several disciplines (Geldorf et al., 2014).

Therefore, more recently, using Exploratory Factor Analysis (EFA) and Bifactor Confirmatory Factor Analysis (CFA), a **shorter version of this scale was developed - the Positive Youth Development Short Form (PYD-SF)**. The conducted analysis examined the measure across more waves of measurement, reduced the length of the scale, scanned items rather than parcels and empirically tested the tenability of a higher-order factor structure. It was also emphasized a parsimonious representation of the Five Cs and created separate forms for early vs. middle/late adolescents (Geldorf et al., 2014).

However, the scale's bifactor structure is not as straightforward as the structure of other research instruments, despite the parsimony of the shortened scale and the psychometric benefits of having a strong conceptual overlap across forms. Still, this short version is best analyzed using the bifactor CFA technique and the Standard Error of the Mean (SEM) for relatively large data sets, and the authors encourage to also using an overall **PYD scale score** when the sophistication of a bifactor CGA model is unreasonable. Such scale score is easily computable and can provide a single number representing an individual's global level of positive development. However, for this score, the items from the physical competence, social competence, and physical appearance subscales should be omitted when computing, because they do not strongly reflect the general PYD construct. **Individual Cs scale scores** can be also obtained, by summing across all items that represent a given C and to include the items that do not strongly represent the residual C constructs in this model is justified, because they simply represent the component of each C that is also related to PYD. Nevertheless, one primary limitation of the short version is the fact that items come from multiple sources and are scored using different metrics. Thus, future research is needed to define if it is appropriate to administer all items using a similar format (e.g. using a 5-point Likert scale), or if the different scoring formats are integral to the structure of the several scales (Geldorf et al., 2014).

In the **PYD-SF**, the **5Cs were assessed by 34 items** distributed according to the information in **Table 2**. This table also presents the **scoring and internal consistency** (Alpha Cronbach) information.

<b>The Five Cs (Subscales)</b>	<b>Dimensions</b>	<b>Items</b>	<b>Scoring</b>	<b>Alpha Cronbach (for the total C)</b>
<b>“Competence”</b>	<ul style="list-style-type: none"> <li>• Academic</li> <li>• Social</li> <li>• Physical</li> </ul>	<ul style="list-style-type: none"> <li>- 1.hart07; 8.hart25</li> <li>- 2.hart08; 11.hart32</li> <li>- 4.hart15; 7.hart21</li> </ul>	<b>4 point-Likert</b> <ul style="list-style-type: none"> <li>• Ranging from 1=“Really true for me” and 4=“Sort of true for me”.</li> </ul>	Ranged from $\alpha=.80$ to $\alpha=.86$ across Grades 5 through 12.
<b>“Connection”</b>	<ul style="list-style-type: none"> <li>• Family</li> <li>• Neighborhood</li> <li>• School</li> <li>• Peer</li> </ul>	<ul style="list-style-type: none"> <li>- 29.fam4; 30.fam5</li> <li>- 31.neigh3; 32.neigh4</li> <li>- 27.clas05; 28.clas10</li> <li>- 33.peer6; 34.peer7</li> </ul>	<b>5-point Likert</b> <ul style="list-style-type: none"> <li>• Ranging from 1=“Strongly disagree”, to 5=“Strongly agree”, except for the connection to peers subscale;</li> <li>• Connection to peers ranged from 1=“Never true”, to 5=“Always true”.</li> </ul>	Ranged from $\alpha=.89$ to $\alpha=.92$ across Grades 5 through 12.
<b>“Confidence”</b>	<ul style="list-style-type: none"> <li>• Self-Worth</li> <li>• Positive Identity</li> <li>• Appearance</li> </ul>	<ul style="list-style-type: none"> <li>- 6.hart18; 10.hart30</li> <li>- 13.abme10; 14.abme13</li> <li>- 3.hart10; 12.hart34</li> </ul>	<b>4 point-Likert</b> <ul style="list-style-type: none"> <li>• Ranging from 1=“Really true for me” and 4=“Sort of true for me”, except for the Positive Identity subscale;</li> </ul> <b>5-point Likert</b> <ul style="list-style-type: none"> <li>• Positive identity items ranged from 1=“strongly disagree” to 5=“strongly agree”.</li> </ul>	Ranged from $\alpha=.80$ to $\alpha=.92$ across Grades 5 through 12.
<b>“Caring”</b>		<ul style="list-style-type: none"> <li>- 21.care2</li> <li>- 22.care4</li> <li>- 23.care6</li> <li>- 24.care7</li> <li>- 25.care8</li> <li>- 26.care9</li> </ul>	<b>5-point Likert</b> <ul style="list-style-type: none"> <li>• Ranged from 1=“Not well”, to 5=“Very well”.</li> </ul>	Ranged from $\alpha=.80$ to $\alpha=.88$ across Grades 5 through 12.
<b>“Character”</b>	<ul style="list-style-type: none"> <li>• Social Conscience</li> <li>• Values Diversity</li> <li>• Conduct Behaviour</li> <li>• Personal Values</li> </ul>	<ul style="list-style-type: none"> <li>- 15.abme21; 16.abme22</li> <li>- 19.abme40; 20.abme41</li> <li>- 5.hart17; 9.hart29*</li> <li>- 17.abme26; 18.abme29</li> </ul> <p style="text-align: center;">*To recode</p>	<b>4 point-Likert</b> <ul style="list-style-type: none"> <li>• Conduct Behaviour ranged from 1=“Really true for me” and 4=“Sort of true for me”.</li> </ul> <b>5-point Likert</b> <ul style="list-style-type: none"> <li>• Social Conscience ranged from 1=“Not important” to 5=“Extremely important”;</li> <li>• Values Diversity ranged from 1=“Not at all like me” to 5=“Very much like me”;</li> <li>• Personal Values ranged from 1=“Not important” to 5=“Extremely important”.</li> </ul>	Ranged from $\alpha=.89$ to $\alpha=.93$ across Grades 5 through 12.

**Table 2.** Five Cs subscales, respective dimensions/items and scoring metrics and reliability in the Positive Youth Development Short Form (PYD-SF) in the original scale.

In the **Portuguese version** of the questionnaire (Translation and adaptation: Matos, M.G., Ramiro, L., Galvão, D., Reis, M., Santos, T. & Aventura Social, 2016), the items were translated from the original English version into Portuguese language (and back translation), and was then revised by a group of specialized experts within the area. In the present report, the respective **scoring, items** and **internal consistency** information (Alpha's Cronbach) for this measure is presented in **Table 3**.

<b>The Five Cs (Subscales)</b>	<b>Dimensions</b>	<b>Items</b>	<b>Scoring</b>	<b>Alpha Cronbach</b>
<b>“Competence”</b>	• <b>Total Score</b>		<b>4 point-Likert*</b>	$\alpha=.86$
	• <b>Academic</b>	- 17-h.1; 17-h.5	• Ranging from 1=“Not true for me” to 4=“Very true for me”.	$\alpha=.47$
	• <b>Social</b>	- 17-h.4; 17-h.7		$\alpha=.74$
	• <b>Physical</b>	- 17-h.3; 17-h.21		$\alpha=.79$
<b>“Connection”</b>	• <b>Total Score</b>		<b>5-point Likert</b>	$\alpha=.80$
	• <b>Family</b>	- 17.3; 17.4	• Ranging from 1=“Strongly disagree”; to 5=“Strongly agree”, except the connection to peers scale.	$\alpha=.84$
	• <b>Neighborhood</b>	- 17.7; 17.8		$\alpha=.85$
	• <b>School</b>	- 17.5; 17.6		$\alpha=.85$
	• <b>Peer</b>	- 17-a.9; 17-a.10	• Connection to peers ranged from 1=“Never true”, to 5=“Always true”.	$\alpha=.91$
<b>“Confidence”</b>	• <b>Total Score</b>		<b>4 point-Likert*</b>	$\alpha=.77$
	• <b>Self-Worth</b>	- 17-h.6; 17-h.11	• Ranging from 1=“Not true for me” to 4=“Very true for me”.	$\alpha=.82$
	• <b>Positive Identity</b>	- 17.1; 17.2	<b>5-point Likert</b>	$\alpha=.75$
	• <b>Appearance</b>	- 17-h.2; 17-h.8	• Positive identity items ranged from 1=“Strongly disagree” to 5=“Strongly agree”.	$\alpha=.61$
<b>“Caring”</b>	• <b>Total Score</b>	From 17-b.11 to 17-b.16	<b>5-point Likert</b>	$\alpha=.77$
<b>“Character”</b>	• <b>Total Score</b>		<b>4 point-Likert*</b>	$\alpha=.67$
	• <b>Social Conscience</b>	- 17-c.17; 17-c.18	• Conduct Behaviour ranged from 1=“Not true for me” to 4=“Very true for me”.	$\alpha=.77$
	• <b>Values Diversity</b>	- 17-d.21; 17-d.22		$\alpha=.63$
	• <b>Conduct Behaviour</b>	- 17-h.10; 17-h.9**	<b>5-point Likert</b>	$\alpha=.60$
	• <b>Personal Values</b>	- 17-c.19; 17-c.20	• Social Conscience ranged from 1=“Not important” to 5=“Extremely important”;	$\alpha=.77$
		** (To recode)	• Values Diversity ranged from 1=“Not at all like me” to 5=“Very much like me”;	
			• Personal Values ranged from 1=“Not important” to 5=“Extremely important”.	
<b>Total Scale</b>	-----	(all items described above)	<b>4* and 5-point Likert</b>	$\alpha=.87$

\* The items with 4 point-Likert were transformed so that the question had only one direction and a recodification was conducted in order of having a standardized 5-point Likert score. These items were recoded in the following values: 1=Totally not similar; 2,3=Rather negative identification; 3,7=Rather positive identification; 5=Totally similar.

**Table 3.** Five Cs subscales, respective dimensions/items, scoring metrics and reliability in the sample of the present report, in the Positive Youth Development Short Form (PYD-SF) for the Portuguese sample.

### 5.2.2. Resilience (RES) (Martins, 2005, 2007; Simões et al., 2012; Simões, Matos & Morgan, 2015)

This concept was assessed by the Portuguese version (Martins, 2005, 2007) of the **Healthy Kids Resilience Assessment Module** (versão 6.0) (Constantine & Benard, 2001; Constantine, Benard, & Diaz, 1999), of the California Healthy Kids Survey (CHKS) (<http://chks.wested.org/>) (CHKS, 2000). The CHKS was developed in 1997 under contract from the California Department of Education (CDE) by WestEd's Health and Human Development Program in collaboration with the Duerr Evaluation Resources. An advisory committee consisting of researchers, teachers, prevention and health program practitioners and public agency representatives assisted on its development (Furlong, Ritchey, & O'Brennan, 2009; Hanson & Kim, 2007). CHKS is easily tailored, comprehensive self-reported youth survey, assessing all major areas of health-related risk behaviour and resilience, that emphasizes the promotion of a positive youth development and well-being.

The Healthy Kids Resilience Assessment Module was designed to measure protective factors among youth in terms of their internal assets and external resources, using **58 items in 3 subscales**:

- A. External resources;**
- B. Internal resources;**
- C. Response-set breakers** (Constantine, et al., 1999).

The **subscale A.** is composed by the School Environment, Home Environment, Community Environment and Peer Environment, whereas the **subscale B.** comprises Cooperation/Communication, Empathy, Problem Solving, Self-efficacy, Self-awareness and Goals/Aspirations. Theoretically, external resources (such as support from teacher, involvement in school-based activities) help to suit the adolescent's developmental needs, which, in turn, promote the enrichment of internal assets (e.g., ability to problem solving and empathize with others). Ideally, these internal resources assess protective factors and personal resilience strengths, critical to healthy development (Austin, Bates & Duerr, 2013; Benard & Slade, 2009). This assessment module was based on Benard's resilience model, focused on the primary youth's needs, such as safety, love, belonging, respect, mastery, challenge, power and meaning (Benard, 1991, 1995, 2004; Benard & Slade, 2009).

In the original study, the reliability and validity was confirmed and the coefficient of internal consistency (Cronbach' alpha) was  $\alpha=.94$  for the total scale;  $\alpha=.82$  for the subscale A. (external resources); and  $\alpha=.81$  for the subscale B. (internal resources). The **Portuguese version** also comprises external and internal resources and a good internal consistency was obtained with a Cronbach alpha of  $\alpha=.93$  for the total scale,  $\alpha=.90$  for the subscale A. (external resources) and  $\alpha=.84$  for subscale B. (internal resources). Responses were answered on a 4-point scale (1=Not all true; 4=Very much true); the scale ranges from 18 to 72, and higher scores indicate higher levels of competences, protection and resilience in facing adversity (Martins, 2005, 2007). Total and individual subscales scores are obtained by the summation of the corresponding items/subscales in the questionnaire and dividing them by the number of items/subscales, respectively. The Healthy Kids Resilience Assessment Module was first an optional module of the broad CHKS survey, but recently, due to changes in prior versions it was included in the Core Module and referred as the Resilience & Youth Development Module (RYDM) (Austin, Bates & Duerr, 2013).

In the **present report** it was only used the **subscale B. (internal resources)**. This choice was based on the author's suggestions that more than the total score, the partial scores of the subscales allow a specific analysis of potential intervention domains, in order to promote higher resilience skills. In this subscale, Cooperation/Communication, Empathy and Problem Solving are related to the assets of social competence; Self-efficacy and Self-awareness are related to the assets of autonomy and sense of self; Goals/Aspirations are related to the assets of sense of meaning and purpose (Constantine, Benard, & Diaz, 1999). The coefficient of internal consistency (Cronbach's alphas), both in the original study and in the Portuguese version were for Cooperation/Communication  $\alpha=.65$  vs.  $\alpha=.57$ , Empathy  $\alpha=.73$ ; vs.  $\alpha=.62$ , Problem Solving  $\alpha=.72$ ; vs.  $\alpha=.76$ , Self-efficacy  $\alpha=.70$ ; vs.  $\alpha=.66$ , Self-awareness  $\alpha=.55$ ; vs.  $\alpha=.71$ , and Goals/Aspirations  $\alpha=.71$ ; vs.  $\alpha=.61$ , respectively. Generally, the values were quite similar in the original study ranging from  $\alpha=.55$  to  $\alpha=.73$ , and in the Portuguese version ranging from  $\alpha=.57$  to  $\alpha=.76$  (Martins, 2005, 2007).

In the present report, the respective **scoring** and **internal consistency** information (Alpha's Cronbach) for this measure is presented in **Table 4**.

<b>Resilience</b>	<b>Subscale</b>	<b>Items (Sentences)</b>	<b>Scoring</b>	<b>Alpha Cronbach</b>
<b>Internal Resources</b>	<b>Total Score</b>	- 1-18	<b>4 point-Likert</b> Ranging from "1= Totally False for me" to 4="Totally True for me".	$\alpha=.87$
<b>Internal Resources</b>	<b>Communication/ Cooperation</b>	- 8; 10; 11	<b>4 point-Likert</b> Ranging from "1= Totally False for me" to 4="Totally True for me".	$\alpha=.62$
<b>Internal Resources</b>	<b>Empathy</b>	- 1; 2; 12	<b>4 point-Likert</b> Ranging from "1= Totally False for me" to 4="Totally True for me".	$\alpha=.56$
<b>Internal Resources</b>	<b>Problem Solving</b>	- 3; 4; 5	<b>4 point-Likert</b> Ranging from "1= Totally False for me" to 4="Totally True for me".	$\alpha=.83$
<b>Internal Resources</b>	<b>Self-Efficacy</b>	- 6; 7; 9	<b>4 point-Likert</b> Ranging from "1= Totally False for me" to 4="Totally True for me".	$\alpha=.75$
<b>Internal Resources</b>	<b>Self-Awareness</b>	- 13; 14, 15	<b>4 point-Likert</b> Ranging from "1= Totally False for me" to 4="Totally True for me".	$\alpha=.74$
<b>Internal Resources</b>	<b>Goals/Aspirations</b>	- 16; 17; 18	<b>4 point-Likert</b> Ranging from "1= Totally False for me" to 4="Totally True for me".	$\alpha=.86$

**Table 4.** Internal Resources score and subscales, scoring metrics and reliability in in the sample of the present report, in the Resilience Scale (RES).

The total Portuguese validated instrument has been used in previous studies (Ferreira, Simões, Matos, Ramiro, & Diniz, 2012; Sereno & Simões, 2013; Simões et al., 2010a; Simões, Matos, Ferreira, & Tomé, 2010b), as well as only the subscale B. (internal resources) (Simões et al., 2012; Simões, Matos & Morgan, 2015).

### **5.2.3. Self-regulation (SR)** (Moilanen, 2007; Dias, Castillo, & Moilanen, 2014)

This concept was assessed by the Portuguese version (Dias, Castillo, & Moilanen, 2014) of **The Adolescent Self-Regulatory Inventory-ASRI** (Moilanen, 2007). This is a theoretically-based questionnaire that comprises two temporal aspects of self-regulation (short and long term), in accordance with the idea that adolescents self-regulate for longer periods of time than children, and in agreement with their own long-term goals (Demetriou, 2000). Self-regulation is an important protective factor that may help to prevent adolescents from engaging in risk behaviours (Jessor & Jessor, 1977) and it is "...the ability to flexibly activate, monitor, inhibit, persevere and/or adapt one's behaviour,



attention, emotions and cognitive strategies in response to direction from internal cues, environmental stimuli and feedback from others, in an attempt to attain personally-relevant goals” (Moilanen, 2007, pp.2). The ASRI’s items were also designed to represent the five self-regulatory functions of the hybrid model of self-regulation of Barkley (Barkley, 1997), including monitoring, activating, adapting, persevering, and inhibiting.

The original questionnaire is composed of **36 items (13 for short-term self-regulation; 14 for long-term self-regulation)** and respondents rate how true each item was for them, on a 5-point Likert scale, ranging from 1 (not at all true for me) to 5 (really true for me). The scores range from 36 to 180 and higher scores indicate higher levels of self-regulation. Confirmatory factor analyses of the original scale showed satisfactory internal consistency and validity with a Cronbach’s alpha of  $\alpha=.88$  for the total scale;  $\alpha=.75$  for the short-term subscale; and  $\alpha=.80$  for the long-term subscale (Moilanen, 2007).

The original scale was adapted to the **Portuguese context** and new items were tested and included, resulting in the questionnaire ASRI-2 with 43 items (19 for short-term regulation: items 2, 4, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 25, 29, 31, 36 and 43; and 24 for long-term self-regulation: items 1, 3, 5, 6, 14, 20, 21, 22, 23, 24, 26, 27, 28, 30, 32, 33, 34, 35, 37, 38, 39, 40, 41 and 42). Items 1, 2, 4, 7, 9, 10, 11, 12, 13, 15, 16, 18, 19, 22, 25, 31, 33, 37, 38, 40, 41, 42 and 43 need to be recoded and afterwards three sums can be obtained: short-term regulation score, long-term regulation score and self-regulation total score, and the highest the score, the highest is the individual’s self-regulation. In the present report the items were recoded and summed according to the author’s suggestions. Currently, research is under way in the stability of its structure, validity, and particularly temporal reliability for the Portuguese population (Dias, Castillo, & Moilanen, 2014).

In the present report, the respective **scoring** and **internal consistency** information (Alpha’s Cronbach) for this measure is presented in **Table 5**.

Self-Regulation	Subscale	Items*	Scoring	Alpha Cronbach
Self-Regulation	• Total Score	From 18.1 to 18.43	<b>5 point-Likert</b> • Ranging from 1="Not true for me" to 5= "Very true for me".	$\alpha=.88$
Self-Regulation	• Short-Term (ST)	18.2; 18.4; 18.7-18.13; 18.15-18.19; 18.25; 18.29; 18.31; 18.36; 18.43.	<b>5 point-Likert</b> • Ranging from 1="Not true for me" to 5= "Very true for me".	$\alpha=.79$
Self-Regulation	• Long-Term (LT)	18.1; 18.3; 18.5; 18.6; 18.14; 18.20-18.24; 18.26-18.28; 18.30; 18.32-18.35; 18.37-18.42.	<b>5 point-Likert</b> • Ranging from 1="Not true for me" to 5= "Very true for me".	$\alpha=.87$

\*Items 18.1; 18.2; 18.4; 18.7; 18.9-18.13; 18.15; 18.16; 18.18; 18.19; 18.22; 18.25; 18.31; 18.33; 18.37; 18.38; 18.40-18.43 were recoded.

**Table 5.** Self-regulation score and subscales, scoring metrics and reliability in the sample of the present report, in the Self-Regulation Scale (SR).

#### 5.2.4. Anxiety (STAI) (Spielberger, Gorsuch & Lushene, 1970; Santos & Silva, 1997; Silva & Campos, 1998; Silva, 2003)

The State-Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch & Lushene, 1970; Spielberger, 1983) is a self-evaluation questionnaire composed by two subscales: **Y-1** (measuring **state-anxiety**) and **Y-2** (measuring **trait-anxiety**), each one comprising 20 items. In the form Y-1 participants are invited to answer to the way they "are feeling at that specific moment", whereas form Y-2 to the way "they usually fell". Responses are scored in a 4 point-Likert scale, ranging from 1="Almost never" and 4="Almost always" and several items need to be recoded (form Y-1: items 1,2,5,8,10,11,15,16,19 e 20; and in form Y-2: items 21,23,26,27,30,33,34,36 e 39). The questionnaire can be done in group or individually, and the total score can vary from 20 to 80 points in both forms. When applying both forms, the Y-1 should be before the Y-2.

Originally targeting adults, afterwards this questionnaire also demonstrated to be adequate for the evaluation of other population, such as university students, or psychiatric patients. The form Y-2 (trait-anxiety) can be used as a research instrument aiming to identify individuals more predisposition to give state-anxiety responses to stressful events. The form Y-1 (state-anxiety) can be helpful to determine effective levels of state-anxiety intensity (Spence & Spence, 1975).

Literature suggests that trait-anxiety can have a direct influence on individual performance, beyond state-anxiety and trait-anxiety is more stable in time, than state-anxiety (King, Heinrich, Stephenson & Spielberger, 1976).

This questionnaire was adapted, translated and standardized for the **Portuguese** population and the studies showed a good internal consistency with Cronbach's alpha above  $\alpha=.87$  on both forms, and temporal appropriate stability with correlations of  $r=.59$  for state-anxiety and  $r=.80$  for trait-anxiety. Internal consistency was reinforced by item-total corrected correlations within three normative samples (secondary school students, university students, and military population) (Santos & Silva, 1997; Silva & Campos, 1998; Silva, 2003; Silva & Spielberger, 2007).

In the present report it was only used the **form Y-2** (STAI-Trait Anxiety: STAI-T) and in the present report, the respective **scoring** and **internal consistency** information (Alpha's Cronbach) for this measure is presented in **Table 6**.

<b>Anxiety</b>	<b>Subscale</b>	<b>Items (Sentences)</b>	<b>Scoring</b>	<b>Alpha Cronbach</b>
<b>Trait Anxiety</b>	<b>Total Score</b>	- 1*; 2; 3*; 4; 5; 6*; 7*; 8; 9; 10*; 11; 12; 13*; 14*; 15; 16*; 17; 18; 19*; 20.	<b>4 point-Likert</b> • Ranging from 1="Almost never" to 4= "Almost always".	$\alpha=.88$
(*To recode)				

**Table 6.** Trait Anxiety total score, scoring metrics and reliability in the sample of the present report, in the STAI-Trait Anxiety Inventory (STAI-T).

### **5.2.5. Reduced and adapted version of the Life Events Scale (LES)** (Johnson, 1986; Simões, Matos, & Morgan, 2015)

This concept was assessed by the **Life Events Scale** (Johnson, 1986) composed by 41 life events list and 4 open questions (e.g. moving to a new home, death of close friend, failing a grade). 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 (Simões, Matos, & Morgan, 2015).

In the present report only 12 events were selected, tendentiously reflecting 6 positive situations ("...reinforcement for good grades"; "... less discussions with parents"; "...have a new boyfriend/girlfriend"; "...having a new and exciting experience"; "...getting emotionally close to someone"; "...improving health of physical condition") and 6 negative situations ("...sickness or serious accident in the family"; "...the death of a family member"; "...parents have less money than before"; "...loss of a friend"; "...breaking up with a

boyfriend/girlfriend”). The 6 positive and the 6 negative events were separately summed and a score for each one was used, as well as a summed score for the classification and the impact of both the negative and positive events. In this specific sample the internal consistency was reasonable with Cronbach’s alpha of  $\alpha=.71$  for the total 12 selected life events.

In the present report, the respective scoring and internal consistency information (Alpha’s Cronbach) for this measure is presented in **Table 7**.

<b>Life Events</b>	<b>Subscale</b>	<b>Items*</b>	<b>Scoring</b>	<b>Alpha Cronbach</b>
<b>Life Events</b>	<b>Negative</b>	22.1-22.3; 22.5; 22.8; 22.9	0=“No”; 1=“Yes”	$\alpha=.52$
	<b>Positive</b>	22.4; 22.5; 22.6; 22.10-22.12	0=“No”; 1=“Yes”	$\alpha=.71$

**Table 7.** Life Events Negative and Positive score, scoring metrics and reliability in the sample of the present report, in the Life Events Scale (LES).

## 6. STATISTICAL 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. In what concerns to the Short Form of the Positive Youth Development Scale, the items with 4 point-Likert were transformed so that the question had only one direction and a recodification was conducted in order of having a standardized 5-point Likert-score. These items were recoded in the following values: 1=Totally not similar; 2,3=Rather negative identification; 3,4=Rather positive identification; 5=Totally similar.

In the Reduced Life Events Scale two total scores were composed: one for the sum of all 6 negative life events and another for the sum of all 6 positive life events. In the sum of the Negative Life Events, two groups were additionally generated in order to have a cumulative risk index, typically tabulated by summing the number of dichotomized risk factors (Sameroff, Seifer, & McDonough, 2004). These groups comprise a *Low Risk Group* (0 to 3 negative life events) and a *High Risk Group* (4 or more negative life events). These groups were created in line with the cumulative risk literature stating that the child's internalizing and externalizing problems increase, as the number of contextual risk factors accumulate (Ackerman, Izard, Schoff, Youngstrom, & Kogos, 1999; Jones, Forehand, Brody, & Armistad, 2002); and that an additional multiplicative increase at the level of four or more risks (Rutter, 1979).

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. Psychometric analyses were also performed through an analysis of the coefficient of internal consistency (Cronbach's alpha). ANOVA (followed by comparisons using the Bonferroni Post Hoc Test) and Student T-Test were performed to evaluate significant differences in the analyzed variables among the total group of youths. All statistical analyses were completed using the SPSS 22.0 (Statistical Package for Social Sciences) and the significance level was set at  $p < 0.01$ .



## **PART III: RESULTS**

### **1. DESCRIPTIVE DATA**

#### ***1.1. Socio-demographic Variables***

The group of adolescents in the present sample is mostly composed by **girls**, having **Portuguese** nationality, with a **Graduate** Educational level, and with **middle** SES. Additionally, the majority grew up in an **apartment**, in an **urban** habitational area. The socio-demographic variables included in the present report for the total group of youths are presented in **Table 8**.

<b><i>Socio-Demographic Variables</i></b>	<b>Total Group</b>
<b>Age (years) (M±SD)</b>	21.3±2.79
<b>Gender (%)</b>	
Boy	26.7
Girl	73.3
<b>Geographic Region (%)</b>	
Lisbon	33.4
North	21.5
Center	16.6
Rest of the Country (Alentejo, Algarve, Madeira and Azores)	28.5
<b>Nationality (%)</b>	
Portuguese	96.8
Others	3.2
<b>Educational Level (%)</b>	
Secondary Level (10 <sup>th</sup> -12 <sup>th</sup> Grades)	6.5
Graduate Level	63.5
Master Level	30.0
<b>Socio Economic Status - SES (%)</b>	
Low	13.1
Middle	67.7
High	19.2
<b>Type of Habitational Area That Youths Grew Up (%)</b>	
Rural	24.4
Sub-Urban	29.1
Urban	46.4
<b>Type of Habitational Area That Youths Actually Live (%)</b>	
Same as in childhood	32.9
Rural	6.7
Sub-Urban	16.5
Urban	44.0
<b>Type of Residence (%)</b>	
Apartment	80.2
House	7.1
Shared Apartment	8.5
Rented Room	4.2
<b>People that Youths are Currently Living With (%)</b>	
Alone	4.9
Mother	64.7
Father	50.2
Sister/Brother	41.1
Family Members	11.9
Boyfriend/Girlfriend	7.0
Colleagues/Friends	15.2
Strangers	3.6

**Table 8.** Participant's socio-demographic variables.

### 1.2. HBSC/WHO Questions related to Worries, School Context and Nutrition

The group of adolescents in the present sample is mostly worried several times a week, but in a moderate way that allows them to keep doing their daily life (and friends are ones preferred to speak about it, if they need to).

Concerning the school-context, although the majority of youths feel some pressure with homework, they never felt bored at the University and they self-perceive themselves as reasonable/good students with grades between 10 and 15.

The majority of the adolescents have breakfast in the 7 days of the week.

The HBSC/WHO variables included in the present report for the total group of youths are presented in **Table 9**.

	<b>Total Group</b>
<b>HBSC Variables</b>	
<b>WORRIES</b>	
<b>Worries Frequency (%)</b>	
Several times a day/Almost every day	26.9
Several times a week	37.0
Several times a Month/Almost never	36.1
<b>Worries Intensity (%)</b>	
“So strong that I cannot think of nothing else” (Intense)	13.6
“Moderated worry that doesn’t interfere in my daily life” (Moderated)	82.9
“I’m not worried with anything” (None)	3.5
<b>SCHOOL-CONTEXT</b>	
<b>Feeling Bored in School/University (%)</b>	
Never/Once in a while	49.7
Sometimes	28.3
Often/Always	22.1
<b>Feeling Pressure with Homework (%)</b>	
Not at all/A little	12.3
Some	49.8
A lot	37.8
<b>Self-Perception of Academic Performance (%)</b>	
Low	4.5
Reasonable/Good	81.1
Very good/Excellent	14.4
<b>NUTRITION</b>	
<b>Usually how often do you have breakfast during week days? (%)</b>	
Never	8.4
Between 1-6 days	28.7
7 days	62.8

**Table 9.** HBSC/WHO variables related to Worries, School Context and Nutrition.

### 1.3. Questions-related to the Youth Himself and Others

The group of adolescents reported moderate to high results for the total score, correspondent 5C/subscales scores and dimensions of the PYD-SF, and also for the total score and respective subscales of Self-regulation, Resilience and State-Trait Anxiety, taking



into account the minimum and maximum range of each one. For the Life Events Scale a low result was obtained for both scores of Negative and Positive Events.

The Questions related to the Youth Himself and Others included in the present report for the total group of youths are presented in **Table 10**.

<b>Positive Youth Development Short Form (PYD-SF Study Variables (M±SD)</b>	<b>Mín.</b>	<b>Máx.</b>	<b>Total</b>
<b>Total Score, Correspondent 5C/Subscales Scores and Dimensions</b>			
<b>PYD - TOTAL</b>	64	170	126.68±14.12
<b>PYD - CONFIDENCE/TOTAL</b>	6	30	21.84±4.07
PYD - CONFIDENCE/Positive Identity	2	10	7.49±1.57
PYD - CONFIDENCE/Appearance	2	10	7.16±1.82
PYD - CONFIDENCE/Self-awareness	2	10	7.19±1.90
<b>PYD - COMPETENCE/TOTAL</b>	6	30	21.88±4.61
PYD - COMPETENCE/Academic	2	10	7.47±1.54
PYD - COMPETENCE/Physical	2	10	7.25±1.81
PYD - COMPETENCE/Social	2	10	7.16±1.91
<b>PYD - CONNECTION/TOTAL</b>	8	40	27.83±4.85
PYD - CONNECTION/Family	2	10	7.25±1.82
PYD - CONNECTION/School	2	10	6.92±1.72
PYD - CONNECTION/Neighborhood	2	10	5.76±1.92
PYD - CONNECTION/Peers	2	10	7.89±1.53
<b>PYD - CARING/TOTAL</b>	6	30	24.43±3.77
<b>PYD - CHARACTER/TOTAL</b>	16	40	30.71±4.08
PYD - CHARACTER/Social Conscience	2	10	7.81±1.69
PYD - CHARACTER/Personal Values	2	10	8.45±1.41
PYD - CHARACTER/Values Diversity	2	10	7.00±1.53
PYD - CHARACTER/Conduct Behaviour	2	10	7.44±1.81
<b>Self-Regulation (SR) - Total Score and Correspondent Subscales Scores</b>			
<b>SR - TOTAL</b>	78	203	143.80±18.18
SR - Long-term	43	118	84.21±12.61
SR - Short-term	31	88	59.59±9.21
<b>Resilience (RES) - Total Score and Correspondent Subscales Scores</b>			
<b>RES - TOTAL</b>	21	72	55.58±8.03
RES - Empathy	5	12	9.16±1.89
RES - Problem Solving	3	12	8.41±2.38
RES - Self-efficacy	3	12	9.22±1.94
RES - Cooperation/Communication	3	12	8.81±1.83
RES - Self-awareness	3	12	9.54±1.88
RES - Objectives/Aspirations	3	12	10.44±1.80
<b>STAI-Trait Anxiety Inventory (STAI-T)</b>			
<b>STAI-T - TOTAL</b>	23	74	45.24±9.23
<b>Life Events Scale (LES) - Correspondent Scores</b>			
<b>LES – LIFE NEGATIVE EVENTS TOTAL<sup>1</sup></b>	0	6	1.40±1.34
LES - NEG Low Risk Group (0-3 Life Events) <sup>2</sup> (%)	1	2	91.7
LES - NEG Higher Risk Group (4 or > Life Events) <sup>2</sup> (%)	1	2	8.3
<b>LES – LIFE POSITIVE EVENTS TOTAL<sup>3</sup></b>	0	6	1.78±1.74

<sup>1</sup>Sum of Negative Life Events

<sup>2</sup>Risk groups composed taking into account the literature on cumulative risks.

<sup>3</sup>Sum of Positive Life Events

**Table 10.** Variables related to the Youth Himself and Others (PYD-SF, Self-regulation, Resilience, State-Trait Anxiety and Life Events Scale).



## 2. CORRELATIONAL DATA

### 2.1. Within Positive Youth Development Short Form - PYD-SF

Within the PYD-SF, the majority of the variables (total score, the correspondent 5C/subscales scores and dimensions) show a significant positive linear association. The correlations are presented in **Table 11** (significance set at  $p < 0.01$ ).

SF-PYD: Total Score, Correspondent 5C/Subscales Scores and Dimensions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<b>1. TOTAL</b>	-----																			
<b>2. CONF/TOTAL</b>	0.740**	-----																		
3. CONF/PI	0.432**	0.575**	-----																	
4. CONF/APP	0.620**	0.830**	0.158**	-----																
5. CONF/SW	0.633**	0.873**	0.255**	0.688**	-----															
<b>6. COMP/TOTAL</b>	0.715**	0.737**	0.138**	0.771**	0.725**	-----														
7. COMP/AC	0.584**	0.567**	0.079**	0.613**	0.561**	0.842**	-----													
8. COMP/PHY	0.655**	0.743**	0.154**	0.753**	0.742**	0.900**	0.671**	-----												
9. COMP/SOC	0.634**	0.617**	0.124**	0.653**	0.593**	0.881**	0.590**	0.685**	-----											
<b>10. CONN/TOTAL</b>	0.661**	0.387**	0.511**	0.173**	0.241**	0.211**	0.139**	0.209**	0.199**	-----										
11. CONN/FAM	0.498**	0.435**	0.609**	0.174**	0.263**	0.176**	0.110**	0.191**	0.155**	0.721**	-----									
12. CONN/SCH	0.439**	0.255**	0.387**	0.105**	0.125**	0.129**	0.102**	0.125**	0.112**	0.692**	0.345**	-----								
13. CONN/NEIGH	0.492**	0.219**	0.237**	0.122**	0.157**	0.163**	0.086**	0.170**	0.164**	0.769**	0.401**	0.375**	-----							
14. CONN/PEER	0.393**	0.148**	0.166**	0.070**	0.114**	0.108**	0.086**	0.080**	0.116**	0.571**	0.206**	0.187**	0.286**	-----						
<b>15. CARI/TOTAL</b>	0.500**	0.022	0.034	0.015	0.005	0.080**	0.101**	0.040	0.073**	0.215**	0.070**	0.126**	0.193**	0.214**	-----					
<b>16. CHAR/TOTAL</b>	0.667**	0.250**	0.125**	0.230**	0.212**	0.287**	0.245**	0.225**	0.280**	0.277**	0.169**	0.182**	0.207**	0.213**	0.441**	-----				
17. CHAR/SC	0.427**	0.026	0.091**	-0.020	0.000	0.018	0.021	0.015	0.012	0.224**	0.104**	0.182**	0.182**	0.153**	0.447**	0.753**	-----			
18. CHAR/PV	0.362**	0.020	0.101**	-0.025	-0.016	-0.002	0.063**	-0.021	-0.036	0.179**	0.124**	0.092**	0.105**	0.185**	0.338**	0.709**	0.600**	-----		
19. CHAR/VD	0.394**	0.128**	0.132**	0.063**	0.104**	0.084**	0.061**	0.080**	0.077**	0.237**	0.170**	0.162**	0.161**	0.165**	0.241**	0.636**	0.345**	0.294**	-----	
20. CHAR/CD	0.492**	0.417**	0.007	0.505**	0.404**	0.562**	0.434**	0.444**	0.585**	0.075**	0.045	0.031	0.078**	0.052**	0.109**	0.460**	0.002	0.009	0.037	-----

CARI=Caring; CHAR=Character; CHAR/CB=Character, Conduct Behaviour; CHAR/PV=Character, Personal Values; CHAR/SC=Character Social, Conscience; CHAR/VD=Character, Values Diversity; COMP=Competence; COMP/AC=Competence, Academic; COMP/PHY=Competence, Physical; COMP/SOC=Competence, Social; CONF=Confidence; CONF/APP=Confidence, Appearance; CONF/PI=Confidence, Positive Identity; CONF/SW=Confidence, Self-Worth; CONN=Connection; CONN/FAM= Connection, Family; CONN/NEIGH=Connection, Neighborhood; CONN/PEER=Connection, Peer; CONN/SCH=Connection, School; TOT=Total.

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Table 11.** Pearson Correlation between the total score, correspondent 5C/subscale scores and dimensions of the Positive Youth Development Short Form (PYD-SF).

## ***2.2. Between Positive Youth Development Short Form - PYD-SF and other Scales***

The correlations between the PYD-SF and the other scales are presented in **Table 12**, (significance set at  $p < 0.01$ ) and the majority of the variables show a significant positive linear association.

A rather unexpected significant negative linear association was found between the Short-term self-regulation score and PYD CARING-Subscale score and an expected significant negative linear association was found for the STAI-Trait Anxiety total score and PYD: total score, CONFIDENCE, COMPETENCE, CONNECTION and CHARACTER-subcales.

In addition, significant negative linear association was observed as expected between the Negative Life Events score and PYD COMPETENCE, CONNECTION and CARING-subcales scores.

PYD-SF AND OTHER SCALES	1	2	3	4	5	6
<b>1. PYD-TOTAL</b>	-----					
2. PYD-CONF/TOTAL	0.740**	-----				
3. PYD-COMP/TOTAL	0.715**	0.737**	-----			
4. PYD-CONN/TOTAL	0.661**	0.387**	0.211**	-----		
5. PYD-CARI/TOTAL	0.500**	0.022	0.080**	0.215**	-----	
6. PYD-CHAR/TOTAL	0.667**	0.250**	0.287**	0.277**	0.441**	-----
<b>7. Self-Regulation-TOTAL</b>	0.374**	0.293**	0.180**	0.377**	0.163**	0.199**
8. Self-regulation-Long Term	0.361**	0.233**	0.177**	0.294**	0.276**	0.211**
9. Self regulation –Short Term	0.243**	0.259**	0.112**	0.342**	-0.057**	0.103**
<b>10. RESILIENCE-TOTAL</b>	0.431**	0.299**	0.203**	0.382**	0.231**	0.295**
11. RES-EMPATHY	0.254**	0.001	0.029**	0.144**	0.417**	0.288**
12. RES-PROBLEM SOLVING	0.338**	0.231**	0.174**	0.340**	0.170**	0.180**
13. RES-SELF-EFFICACY	0.320**	0.311**	0.190**	0.301**	0.046	0.183**
14. RES-COOPERATION	0.283**	0.195**	0.165**	0.211**	0.149**	0.210**
15. RES-SELF-AWARENESS	0.321**	0.277**	0.152**	0.299**	0.106**	0.209**
16. RES- OBJECTIVES	0.243**	0.209**	0.113**	0.254**	0.058**	0.149**
<b>17. STAI-T – TOTAL (ANXIETY)</b>	-0.366**	-0.488**	-0.216**	-0.440**	0.059**	-0.108**
<b>18. LIFE EVENTS-TOTAL (Neg)</b>	-0.017	-0.103**	-0.049**	-0.069**	0.142**	0.052**
19. LIFE EVENTS-TOT (Neg) Risk Groups	-0.011	-0.041	-0.015	-0.086**	0.092**	0.037
<b>20. LIFE EVENTS-TOTAL (Pos)</b>	0.222**	0.028	0.024	0.240**	0.247**	0.200**

CARI=Caring; CHAR=Character; COMP=Competence; CONF=Confidence; CONN=Connection; LES=Life Events Scale; LES/NEG=Life Events Scale Negative Score; LES/POS=Life Events Scale Positive Score; SR=Self-regulation; SR-LT=Self Regulation, Long Term; SR-ST=Self Regulation, Short Term; STAI-T=STAI-Trait Anxiety; TOT=Total; RES=Resilience; RES/EMP=Resilience, Empathy; RES/COOP.COM=Resilience, Cooperation and Communication; RES/OBJ.ASP=Resilience, Objectives and Aspirations; RES/PS=Resilience, Problem Solving; RES/SAW=Resilience, Self-Awareness; RES/SEF=Resilience, Self-Efficacy.

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Table 12.** Pearson Correlation between the total score, correspondent 5C/subscale scores and dimensions of the Positive Youth Development Short Form (PYD-SF) and other study variables, namely Resilience, Self-regulation, Anxiety and Life Events (and their total and subscales scores). (Significance set at  $p < 0.01$ )

### 3. COMPARISONS BETWEEN PYD-SF, SOCIO DEMOGRAPHIC VARIABLES AND HBSC/WHO QUESTIONS

#### 3.1. PYD-SF and Socio Demographic Variables: Age, Gender, Socio-Economic Status

Significant differences were found for **age, gender, socio-economic status (SES)**

- **Age:** With respect to age, the younger *16-19 age group* reported higher results for CONFIDENCE-total score (including Appearance and Self-awareness dimensions) and for the COMPETENCE-Social dimension
- **Gender:** Regarding gender, *girls* reported higher results for the CHARACTER-Social Conscience dimension
- **Socio-economic Status (SES):** A *higher Socio-Economic Status (SES)* showed better results for the most of the all study variables, with the exception of the CHARACTER-Personal Values dimension, where the *Low SES* had a significant higher result.

The **comparisons for PYD-SF and socio demographic variables** are presented in **Table 13**. (Significance set at  $p < 0.01$ )

	Age <sup>1</sup>			Gender <sup>1</sup>			Socio Economic Status - SES <sup>2</sup>			
	16-19 Y Old N=737	20-29 Y Old N=1963	t	Boys N=721	Girls N=1979	t	Low N=354	Middle N=1828	High N=518	F
<b>SF-PYD: Total Score, Correspondent 5C/Subscales Scores and Dimensions</b>	M	M		M	M		M	M	M	
<b>PYD - TOTAL</b>	127.50	126.37	1.853	125.84	126.98	-1.858	125.53	126.44	<b>128.31</b>	<b>4.907**</b>
<b>PYD - CONFIDENCE/TOTAL</b>	<b>22.07</b>	21.75	<b>1.816**</b>	21.92	21.81	0.611	21.33	21.80	<b>22.32</b>	<b>6.542**</b>
PYD - CONFIDENCE/Positive Identity	7.34	7.54	-3.084	7.43	7.51	-1.135	7.20	7.49	<b>7.68</b>	<b>10.051***</b>
PYD - CONFIDENCE/Appearance	7.39	7.08	<b>3.933**</b>	7.26	7.12	1.747	7.17	7.12	7.29	1.771
PYD - CONFIDENCE/Self-awareness	<b>7.35</b>	7.13	<b>2.669***</b>	7.22	7.18	0.568	6.95	7.19	7.34	4.490
<b>PYD - COMPETENCE/TOTAL</b>	22.57	21.62	4.802	22.05	21.81	1.160	21.17	21.86	<b>22.43</b>	<b>8.047***</b>
PYD - COMPETENCE/Academic	7.68	7.39	4.415	7.49	7.47	0.309	7.24	7.48	<b>7.62</b>	<b>6.561**</b>
PYD - COMPETENCE/Physical	7.45	7.17	3.531	7.27	7.24	0.392	6.98	7.26	<b>7.39</b>	<b>5.430**</b>
PYD - COMPETENCE/Social	<b>7.44</b>	7.05	<b>4.671**</b>	7.29	7.11	2.178	6.95	7.12	<b>7.43</b>	<b>7.543**</b>
<b>PYD - CONNECTION/TOTAL</b>	27.43	27.98	-2.640	27.74	27.86	-0.572	27.06	27.86	<b>28.23</b>	<b>6.262**</b>
PYD - CONNECTION/Family	7.12	7.30	-2.293	7.10	7.31	-2.692	6.94	7.28	<b>7.35</b>	<b>6.354**</b>
PYD - CONNECTION/School	6.74	6.99	-3.425	6.94	6.92	0.393	6.75	6.91	7.09	4.416
PYD - CONNECTION/Neighborhood	5.66	5.80	-1.645	5.85	5.73	1.451	5.55	5.81	5.74	2.770
PYD - CONNECTION/Peers	7.91	7.89	0.272	7.85	7.91	-0.885	7.82	7.87	8.04	3.008
<b>PYD - CARING/TOTAL</b>	24.60	24.36	1.473	23.74	24.68	-5.763	24.84	24.37	24.36	2.381
<b>PYD - CHARACTER/TOTAL</b>	30.83	30.66	0.972	30.40	30.82	-2.381	<b>31.14</b>	30.55	30.97	4.550
PYD - CHARACTER/Social Conscience	7.72	7.85	-1.714	7.62	<b>7.88</b>	<b>-3.506**</b>	7.92	7.80	7.77	0.909
PYD - CHARACTER/Personal Values	8.42	8.46	-0.598	8.30	8.50	-3.284	<b>8.68</b>	8.45	8.30	<b>7.419**</b>
PYD - CHARACTER/Values Diversity	7.06	6.98	1.211	6.97	7.01	-0.570	7.07	6.91	<b>7.26</b>	<b>10.946***</b>
PYD - CHARACTER/Conduct Behaviour	7.63	1.760	3.251	7.50	7.42	0.952	7.48	7.38	7.64	4.169

\*\*\*p< .001; \*\*p< .01

<sup>1</sup> Tested by Independent T-Test.

<sup>2</sup> Tested by ANOVA.

**Table 13.** Differences between age, gender and socio-economic status for the total score, correspondent 5C/subscale scores and dimensions of the Positive Youth Development Short Form (PYD-SF). (Significance set at p< 0.01)

### 3.2. PYD-SF and HBSC/WHO Questions related to Worries, School Context and Nutrition

#### 3.2.1. School-related Items

Significant differences were found for PYD-SF with the HBSC/WHO items: **“Bored at school”**, **“Feeling pressure with homework”** and **“Self-perceived academic competence”** and the results are presented in **Table 14**. Significance set at  $p < 0.01$ .

- **“Bored at School”**: with respect to the item “Bored at school”, the group who was *Never/Once in a While* or *Sometimes* “...bored” reported the higher results for the majority of the PYD-SF dimensions.
- **“Pressure with Homework”**: the group of adolescents who indicated feeling *None/A little* or *Some* “...pressure with homework” showed higher results for the majority of the PYD-SF dimensions.
- **“Self-perceived academic competence”**: the groups who considered themselves as *Reasonable/Good* and *Good/Excellent* reported higher results for the majority of the PYD-SF (total score, 5C subscales and their dimensions), when compared with the ones who self-perceived as *Low*. In contrast, a rather unexpected result was found for the group of students who considered themselves as *Low* on Self Perceived academic competence, and who present higher scores for CHARACTER-Personal Values dimension.



	Bored at School <sup>1</sup>				Feeling pressure with homework <sup>1</sup>			Self-perceived Academic Competence <sup>1</sup>				
	Never/ Once in a while N=1324	Some Times N=754	Often/Always N=588	F	None/ A little N=333	Some N=1345	A lot N=1021	F	Low N=121	Reasonable/Good N=2189	Very Good/ Excellent N=390	F
<b>SF-PYD: Total Score, Correspondent 5C/Subscales Scores and Dimensions</b>	M	M	M		M	M			M	M	M	
<b>PYD - TOTAL</b>	<b>128.44</b>	127.49	121.46	<b>53.144***</b>	<b>128.77</b>	128.42	123.70	<b>37.670***</b>	<b>112.25</b>	<b>127.16</b>	<b>128.42</b>	<b>70.981***</b>
<b>PYD - CONFIDENCE/TOTAL</b>	22.109	<b>22.211</b>	20.620	<b>32.895***</b>	<b>22.890</b>	21.135	21.098	<b>32.361***</b>	<b>16.968</b>	<b>21.956</b>	<b>22.678</b>	<b>103.231***</b>
PYD - CONFIDENCE/Positive Identity	<b>7.70</b>	7.59	6.91	<b>55.004***</b>	7.44	<b>7.64</b>	7.30	<b>13.873***</b>	<b>5.40</b>	<b>7.54</b>	<b>7.86</b>	<b>130.236***</b>
PYD - CONFIDENCE/Appearance	7.15	<b>7.31</b>	6.91	<b>8.189***</b>	<b>7.66</b>	7.27	6.85	<b>29.967***</b>	<b>6.07</b>	<b>7.19</b>	<b>7.35</b>	<b>24.342***</b>
PYD - CONFIDENCE/Self-worth	7.26	<b>7.31</b>	6.80	<b>14.916***</b>	<b>7.79</b>	7.22	6.94	<b>26.347***</b>	<b>5.49</b>	<b>7.23</b>	<b>7.47</b>	<b>55.529***</b>
<b>PYD - COMPETENCE/TOTAL</b>	<b>21.92</b>	22.26	21.09	<b>11.222***</b>	<b>23.16</b>	22.11	21.15	<b>28.043***</b>	<b>18.50</b>	<b>22.03</b>	<b>22.07</b>	<b>34.953***</b>
PYD - COMPETENCE/Academic	7.48	<b>7.61</b>	7.23	<b>10.626***</b>	<b>7.69</b>	7.56	7.29	<b>13.119***</b>	<b>6.37</b>	<b>7.51</b>	<b>7.62</b>	<b>34.050***</b>
PYD - COMPETENCE/Physical	7.26	<b>7.41</b>	6.93	<b>11.976***</b>	<b>7.74</b>	7.32	6.98	<b>25.555***</b>	<b>6.04</b>	<b>7.29</b>	<b>7.40</b>	<b>29.525***</b>
PYD - COMPETENCE/Social	7.18	<b>7.25</b>	6.93	<b>4.833**</b>	<b>7.73</b>	7.23	6.88	<b>26.584***</b>	<b>6.09</b>	<b>7.24</b>	<b>7.06</b>	<b>21.686***</b>
<b>PYD - CONNECTION/TOTAL</b>	<b>28.91</b>	27.77	25.66	<b>97.742***</b>	28.06	<b>28.36</b>	27.05	<b>21.931***</b>	<b>22.40</b>	<b>27.92</b>	<b>29.00</b>	<b>93.423***</b>
PYD - CONNECTION/Family	<b>7.52</b>	7.27	6.66	<b>47.327***</b>	7.36	7.28	7.18	1.490	<b>5.43</b>	<b>7.30</b>	<b>7.53</b>	<b>69.599***</b>
PYD - CONNECTION/School	<b>7.30</b>	6.94	6.10	<b>106.870***</b>	6.86	<b>7.12</b>	6.69	<b>18.497***</b>	<b>5.18</b>	<b>6.95</b>	<b>7.34</b>	<b>77.585***</b>
PYD - CONNECTION/Neighborhood	<b>5.97</b>	5.80	5.32	<b>23.834***</b>	5.71	<b>5.92</b>	5.57	<b>9.550***</b>	<b>4.56</b>	<b>5.75</b>	<b>6.20</b>	<b>34.667***</b>
PYD - CONNECTION/Peers	<b>8.11</b>	7.76	7.58	<b>28.959***</b>	<b>8.13</b>	8.05	7.61	<b>29.066***</b>	<b>7.23</b>	<b>7.92</b>	<b>7.94</b>	<b>12.004***</b>
<b>PYD - CARING/TOTAL</b>	<b>24.60</b>	<b>24.60</b>	23.82	<b>9.741***</b>	24.06	<b>24.81</b>	24.05	<b>13.802***</b>	25.00	24.36	24.66	2.520
<b>PYD - CHARACTER/TOTAL</b>	<b>30.91</b>	30.65	30.27	<b>4.952**</b>	30.60	<b>31.00</b>	30.35	<b>7.678***</b>	<b>29.38</b>	<b>30.90</b>	<b>30.02</b>	<b>14.704***</b>
PYD - CHARACTER/Social Conscience	<b>7.95</b>	7.76	7.59	<b>9.617***</b>	7.59	<b>7.90</b>	7.76	<b>5.350**</b>	7.79	<b>7.88</b>	<b>7.45</b>	<b>10.776***</b>
PYD - CHARACTER/Personal Values	8.52	8.38	8.39	3.158	8.30	<b>8.55</b>	8.36	<b>7.766***</b>	<b>8.54</b>	<b>8.50</b>	<b>8.14</b>	<b>10.753***</b>
PYD - CHARACTER/Values Diversity	7.01	7.03	6.90	1.250	6.82	7.05	7.00	3.055	<b>6.64</b>	<b>7.03</b>	<b>6.97</b>	<b>3.848**</b>
PYD - CHARACTER/Conduct Behaviour	7.43	7.48	7.38	0.491	<b>7.89</b>	7.50	7.23	<b>18.339***</b>	<b>6.41</b>	<b>7.50</b>	<b>7.45</b>	<b>21.097***</b>

\*\*\*p<.001; \*\*p<.01;

<sup>1</sup> Tested by ANOVA

**Table 14.** Differences between the HBSC/WHO school-related items: “Bored at school”, “Feeling pressure with homework” and “Self-perceived academic competence” for the total score, correspondent 5C/subscale scores and dimensions of the Positive Youth Development Short Form (PYD-SF). (Significance set at p<0.01).

### 3.2.2. Individual Issues (current worries and “having breakfast”)

Significant statistical differences were found for the HBSC/WHO items: **“Having breakfast during weekdays”**, **“Worries frequency”** and **“Worries intensity”** and the results are presented in **Table 15**. Significance set at  $p < 0.01$ .

- **“Having breakfast during weekdays”**: young people that report higher PYD scores, tend to be those that report a more steady habit of getting breakfast every day.
- **“Worries-frequency”**: young people that report higher PYD scores tend to be those that worry less frequently.
- **“Worries-intensity”**: young people that report higher PYD scores tend to be those whose worries are less intense. Contrariwise, the group who has presented higher results for the CARING-total score, for the CHARACTER-Social conscience dimension and CHARACTER-Personal Values dimension tend to have more intense worries.

	Having breakfast <sup>1</sup>				Worries Frequency <sup>1</sup>				Worries Intensity <sup>1</sup>			
	None N=228	Between 1-6 days N=776	7 Days N=1696	F	Almost Every Day N=726	Several Times a week N=1000	Almost Never N=974	F	Intense N=368	Moderated N=2237	None N=95	F
<b>SF-PYD: Total Score, Correspondent 5C/Subscales Scores and Dimensions</b>	M	M	M		M	M	M		M	M	M	
<b>PYD - TOTAL</b>	120.54	126.22	<b>127.71</b>	27.023***	123.81	126.52	<b>128.97</b>	<b>28.505***</b>	121.49	<b>127.64</b>	124.15	<b>32.261***</b>
<b>PYD - CONFIDENCE/TOTAL</b>	20.365	21.560	<b>22.161</b>	22.483***	20.577	21.921	<b>22.689</b>	<b>58.818***</b>	19.658	22.159	<b>22.694</b>	<b>64.826***</b>
PYD - CONFIDENCE/Positive Identity	6.80	7.39	<b>7.62</b>	<b>29.922***</b>	6.88	7.53	<b>7.90</b>	<b>95.172***</b>	6.33	7.66	<b>7.83</b>	<b>127.193***</b>
PYD - CONFIDENCE/Appearance	6.85	7.07	<b>7.24</b>	5.979**	6.88	7.17	<b>7.36</b>	<b>14.365***</b>	6.88	7.20	<b>7.46</b>	<b>6.154**</b>
PYD - CONFIDENCE/Self-worth	6.71	7.09	<b>7.30</b>	11.073***	6.82	7.22	<b>7.43</b>	<b>22.390***</b>	6.45	7.30	<b>7.40</b>	<b>33.337***</b>
<b>PYD - COMPETENCE/TOTAL</b>	20.52	21.77	<b>22.11</b>	<b>12.348***</b>	21.02	22.00	<b>22.39</b>	<b>19.068***</b>	20.69	<b>22.08</b>	21.76	<b>14.494***</b>
PYD - COMPETENCE/Academic	7.05	7.48	<b>7.52</b>	9.499***	7.34	7.44	<b>7.60</b>	<b>6.403**</b>	7.19	<b>7.52</b>	7.39	<b>7.340***</b>
PYD - COMPETENCE/Physical	6.79	7.13	<b>7.36</b>	12.012***	6.92	7.31	<b>7.43</b>	<b>17.689***</b>	6.84	<b>7.31</b>	7.26	<b>10.615***</b>
PYD - COMPETENCE/Social	6.67	7.15	<b>7.23</b>	<b>8.461***</b>	6.77	7.25	<b>7.36</b>	<b>22.033***</b>	6.65	<b>7.24</b>	7.11	<b>15.364***</b>
<b>PYD - CONNECTION/TOTAL</b>	25.79	27.57	<b>28.22</b>	27.401***	26.20	27.75	<b>29.12</b>	<b>80.358***</b>	24.87	<b>28.29</b>	<b>28.29</b>	<b>84.116***</b>
PYD - CONNECTION/Family	6.48	7.01	<b>7.46</b>	<b>39.696***</b>	6.63	7.36	<b>7.61</b>	<b>66.699***</b>	6.05	<b>7.46</b>	6.91	<b>105.193***</b>
PYD - CONNECTION/School	6.40	6.88	<b>7.01</b>	13.323***	6.48	7.05	<b>7.12</b>	<b>34.438***</b>	6.13	7.05	<b>7.13</b>	<b>47.112***</b>
PYD - CONNECTION/Neighborhood	5.33	5.70	<b>5.84</b>	7.705***	5.45	5.62	<b>6.14</b>	<b>31.980***</b>	5.13	5.85	<b>5.99</b>	<b>23.507***</b>
PYD - CONNECTION/Peers	7.57	<b>7.98</b>	7.90	<b>6.330**</b>	7.65	7.72	<b>8.25</b>	<b>44.274***</b>	7.56	7.93	8.27	12.382***
<b>PYD - CARING/TOTAL</b>	24.21	<b>24.53</b>	24.42	0.666	<b>25.03</b>	24.32	24.09	<b>13.653***</b>	<b>25.57</b>	24.34	22.09	<b>36.743***</b>
<b>PYD - CHARACTER/TOTAL</b>	29.67	30.79	<b>30.81</b>	8.145***	30.98	30.54	30.68	2.523	30.70	<b>30.77</b>	29.31	<b>5.794**</b>
PYD - CHARACTER/Social Conscience	7.55	7.80	7.86	3.275	<b>8.00</b>	7.89	7.59	<b>14.145***</b>	<b>7.89</b>	7.84	7.01	<b>11.290***</b>
PYD - CHARACTER/Personal Values	8.22	8.36	<b>8.52</b>	<b>6.591**</b>	<b>8.69</b>	8.27	8.45	<b>18.594***</b>	<b>8.62</b>	8.45	7.73	<b>15.208***</b>
PYD - CHARACTER/Values Diversity	6.83	<b>7.13</b>	6.96	<b>4.746**</b>	6.97	6.95	7.08	2.177	7.08	6.98	7.14	1.045
PYD - CHARACTER/Conduct Behaviour	7.06	<b>7.50</b>	7.47	<b>5.718**</b>	7.32	7.43	7.56	3.719	7.12	<b>7.50</b>	7.44	<b>7.002***</b>

\*\*\*p< .001; \*\*p< .01;

<sup>1</sup> Tested by ANOVA

<sup>2</sup> Tested by Independent T-Test

**Table 15.** Differences between the HBSC/WHO Lifestyle and Worries related Items: “Having breakfast during weekdays”, “Worries frequency” and “Worries intensity” for the total score, correspondent 5C/subscale scores and dimensions of the Positive Youth Development Short Form (PYD-SF). (Significance set at p<0.01).



## PART IV: DISCUSSION

### 1. SYNOPTIC-TABLES OF THE PRINCIPAL RESULTS

#### 1.1. PYD-SF and Socio Demographic Variables: Age, Gender, Socio-Economic Status (SES) and Educational Level.

	Age	Gender	Socioeconomic Status (SES)
<b>SF-PYD:</b>			
<b>Total Score, Correspondent 5C/Subscales Scores and Dimensions</b>			
<b>PYD - TOTAL</b>			Higher SES ÷
<b>PYD - CONFIDENCE/TOTAL</b>	Younger ÷		Higher SES ÷
PYD - CONFIDENCE/Positive Identity			Higher SES ÷
PYD - CONFIDENCE/Appearance	Younger ÷		
PYD - CONFIDENCE/Self-awareness	Younger ÷		
<b>PYD - COMPETENCE/TOTAL</b>			Higher SES ÷
PYD - COMPETENCE/Academic			Higher SES ÷
PYD - COMPETENCE/Physical			Higher SES ÷
PYD - COMPETENCE/Social	Younger ÷		Higher SES ÷
<b>PYD - CONNECTION/TOTAL</b>			Higher SES ÷
PYD - CONNECTION/Family			Higher SES ÷
PYD - CONNECTION/School			
PYD - CONNECTION/Neighborhood			
PYD - CONNECTION/Peers			
<b>PYD - CARING/TOTAL</b>			
<b>PYD - CHARACTER/TOTAL</b>			
PYD - CHARACTER/Social Conscience		Girls ÷	.
PYD - CHARACTER/Personal Values			Lower SES ÷
PYD - CHARACTER/Values Diversity			Higher SES ÷
PYD - CHARACTER/Conduct Behaviour			

**Table 16.** Synoptic-table for significant associations between PYD-SF and Socio Demographic Variables: Age, Gender, Socio-Economic Status (SES).

## 1.2. PYD-SF and HBSC/WHO Questions

### 1.2.1. School-related Items

	<b>“Bored at school”</b>	<b>“Feeling pressure with homework”</b>	<b>“Self-perceived academic competence”</b>
<b>SF-PYD:</b>			
<b>Total Score, Correspondent 5C/Subscales Scores and Dimensions</b>			
<b>PYD - TOTAL</b>	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
<b>PYD - CONFIDENCE/TOTAL</b>	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CONFIDENCE/Positive Identity	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CONFIDENCE/Appearance	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CONFIDENCE/Self-awareness	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
<b>PYD - COMPETENCE/TOTAL</b>	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - COMPETENCE/Academic	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - COMPETENCE/Physical	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - COMPETENCE/Social	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
<b>PYD - CONNECTION/TOTAL</b>	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CONNECTION/Family	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CONNECTION/School	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CONNECTION/Neighborhood	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CONNECTION/Peers	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
<b>PYD - CARING/TOTAL</b>	LowerPYD ÷	LowerPYD ÷	
<b>PYD - CHARACTER/TOTAL</b>	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CHARACTER/Social Conscience	LowerPYD ÷	LowerPYD ÷	Higher PYD ÷
PYD - CHARACTER/Personal Values		LowerPYD ÷	LowerPYD ÷
PYD - CHARACTER/Values Diversity			Higher PYD ÷
PYD - CHARACTER/Conduct Behaviour		LowerPYD ÷	Higher PYD ÷

**Table 17.** Synoptic-table for PYD-SF and HBSC/WHO questions: school-related items.

### 1.2.2. Individual Issues (Current worries- frequency and intensity; and “having breakfast”)

	“Having breakfast during weekdays”	“Worries frequency”	“Worries intensity”
<b>SF-PYD:</b>			
<b>Total Score, Correspondent 5C/Subscales Scores and Dimensions</b>			
<b>PYD - TOTAL</b>	Higher ÷	Lower ÷	Lower ÷
<b>PYD - CONFIDENCE/TOTAL</b>	Higher ÷	Lower ÷	Lower ÷
PYD - CONFIDENCE/Positive Identity	Higher ÷	Lower ÷	Lower ÷
PYD - CONFIDENCE/Appearance	Higher ÷	Lower ÷	Lower ÷
PYD - CONFIDENCE/Self-awareness	Higher ÷	Lower ÷	Lower ÷
<b>PYD - COMPETENCE/TOTAL</b>	Higher ÷	Lower ÷	Lower ÷
PYD - COMPETENCE/Academic	Higher ÷	Lower ÷	Lower ÷
PYD - COMPETENCE/Physical	Higher ÷	Lower ÷	Lower ÷
PYD - COMPETENCE/Social	Higher ÷	Lower ÷	Lower ÷
<b>PYD - CONNECTION/TOTAL</b>	Higher ÷	Lower ÷	Lower ÷
PYD - CONNECTION/Family	Higher ÷	Lower ÷	Lower ÷
PYD - CONNECTION/School	Higher ÷	Lower ÷	Lower ÷
PYD- CONNECTION/Neighborhood	Higher ÷	Lower ÷	Lower ÷
PYD - CONNECTION/Peers	Higher ÷	Lower ÷	Lower ÷
<b>PYD - CARING/TOTAL</b>		Lower ÷	Higher ÷
<b>PYD - CHARACTER/TOTAL</b>	Higher ÷		Lower ÷
PYD - CHARACTER/Social Conscience		Lower ÷	Higher ÷
PYD - CHARACTER/Personal Values	Higher ÷	Lower ÷	Higher ÷
PYD - CHARACTER/Values Diversity	Higher ÷		
PYD - CHARACTER/Conduct Behaviour	Higher ÷		Lower ÷

**Table 18.** Synoptic-table for PYD-SF associations with HBSC/WHO questions: “Having breakfast during weekdays”, “Worries frequency” and “Worries intensity”.





## 2. FUTURE RESEARCH PLANS

The results above described are in line with the literature, with the exception of the Subscale CARING, that will need additional studies to test its cultural validity.

Globally, some controversial results will be targeted for further in depth analysis such as the association of some PYD dimensions to *Socio Economic Status (SES)*, to *Perceived Academic Competence* and to the *Intensity of Worries*.

The whole initial survey included a few risk behaviours that will also be considered in a future analysis. Preliminary results surfaced the idea that sometimes risks are anyhow associated to social emancipation, personal maturity and adulthood. Correlates and implications of this findings for intervention need to be carefully considered.

Focus groups will be carried out in order to get youths' views on the meaning of the present results, and in order to incorporate their active participation on developing strategies and public policies recommendations, as well as to increase PYD among young people, aiming to promote their health and well-being.

Results reinforce the need to strengthen youth's assets, and to support their active engagement in society, as a way to context and find solutions for their problems.

## 3. KEY-FINDINGS

- **Younger** youths seem to be more confident, especially regarding appearance and self-awareness. They also seem to feel more competent in social situations. Taking into account a developmental point of view, the results were not expected and raised the idea that young people must be supported on "how to grow while being healthy, happy and positive".
- **Gender differences** were in general not found, with the exception that girls seem more concerned with social issues. These results were also unexpected and raised the idea that in general, among young people, there is less gender differences in the "processes" (the 5C) than in the social and health "products" that is considering their social and health behaviours. This findings highlighted a major

concern about gender inequities with more social pressure and lack of opportunities for girls.

- **Regarding Socio Economic Status (SES)**, wealthier young people tend to present higher PYD values, especially regarding the perception of CONFIDENCE and COMPETENCE. However, a rather unexpected negative association was surfaced between SES and the Personal Values dimension (one of the 5C, the CHARACTER).
- **Regarding school/university matters**, the young people who report better PYD results tend to be also the ones that feel less frequently bored at school and also less pressure with school related work. They also tend to be the ones with better self-perceived academic competence. A rather unexpected negative association was surfaced between self-perceived academic competence and the Personal Values dimension (one of the 5C, the CHARACTER), just as it happened with SES. Both associations raise the idea that being wealthy and a successful student may occur in the absence of developing adequate personal values.
- **Regarding “having breakfast”** and considering that sometimes it is the single best indicator of health and well-being among young people, those who present better PYD results tend to be also the ones who report a more steady habit of having breakfast.
- Finally, **regarding “worrying”**, a quite prevalent sub-clinical situation that can impair young people well-being (Matos et al., 2016; Matos, Gaspar, Cruz & Neves, 2013; Matos, Gaspar, Tomé & Cruz, 2012), the youths who report better PYD results tend to be also the ones who report less frequently being worried and with less intense worries. Nevertheless, a quite unexpected positive association was surfaced between CARING and between the dimensions Social Conscience and Personal Values of CHARACTER, and the intensity of worries.

## PART V: REFERENCES

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**PART VI: ANNEXES**



## Annexe 1



## The PYD-SF Questionnaire - Portuguese Version

### Positive Youth Development - 5C

(Trad. e adapt.: Matos, M.G., Ramiro, L., Galvão, D., Reis, M., Santos, T. & Aventura Social, 2016)

### QUESTÕES SOBRE TI E OS OUTROS (POSITIVE YOUTH DEVELOPMENT)

**1. Em baixo encontras uma lista de itens que poderão refletir a tua experiência. Indica qual a opção de resposta que consideras a verdadeira para ti?\***

Por favor, indica a tua resposta para **cada afirmação** e selecciona **apenas uma** das opções.

	Discordo Totalmente	Discordo	Não concordo, nem discordo	Concordo	Concordo Totalmente
	1	2	3	4	5
a) No geral, sentes-te feliz em seres como és.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Tens a certeza de que terás uma boa vida quando fores adulto/a.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Tens muitas conversas positivas com os teus pais.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Na tua família, sentes-te útil e importante.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) És bastante encorajado/a na tua instituição de ensino.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Os professores da tua instituição de ensino incentivam-te a ser o melhor possível.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Os adultos da tua cidade ou localidade fazem-te sentir importante.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Os adultos da tua cidade ou localidade ouvem o que tens a dizer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2. Até que ponto estas afirmações são verdadeiras para ti?\***

Por favor, indica a tua resposta para **cada afirmação** e selecciona **apenas uma** das opções.

	Nunca são Verdadeiras	Raramente são verdadeiras	Por vezes são verdadeiras	Frequentemente são verdadeiras	São sempre verdadeiras
	1	2	3	4	5
a) Sentes que os teus amigos são bons amigos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b) Os teus amigos preocupam-se contigo.

### 3. Até que ponto as afirmações seguintes te definem?

Por favor, selecciona a posição apropriada para cada afirmação:

	Nada parecido/a comigo	Um pouco parecido/a comigo	De certo modo parecido/a comigo	Bastante parecido/a comigo	Muito parecido/a comigo
	1	2	3	4	5
a) Quando percebes que estão a tirar proveito de uma pessoa, tens vontade de a ajudar.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Incomoda-te que aconteçam coisas más a qualquer pessoa.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Sentes pena de outras pessoas que não possuem aquilo que tu tens.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Quando vês alguém a ser maltratado/a, sentes pena da pessoa.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Deixa-te triste ver uma pessoa que não tem amigos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Sentes pena quando vês uma pessoa magoada ou angustiada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 4. Até que ponto são importantes para a tua vida cada uma das coisas seguintes?\*

Por favor, selecciona a posição apropriada para cada afirmação:

	Sem importância	Um pouco importante	Não tenho certeza	Muito importante	Extremamente importante
	1	2	3	4	5
a) Contribuir para tornar o mundo num lugar melhor para viver.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Despende de tempo e dinheiro para tornar melhor a vida de outras pessoas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Fazer o que acreditas ser correcto, mesmo que os teus amigos gozem contigo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Aceitar as responsabilidades pelas tuas acções, quando fazes um erro ou te metes em sarilhos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**5. Pensa nas pessoas que te conhecem bem. Como julgas que te classificariam em relação a cada uma das afirmações seguintes?\***

Por favor, selecciona a posição apropriada para cada afirmação:

	Nada parecido/a comigo	Um pouco parecido/a comigo	De certo modo parecido/a comigo	Bastante parecido/a comigo	Muito parecido/a comigo
	1	2	3	4	5
a) Conhecedor de muitas coisas sobre pessoas de outras raças/culturas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Apreciador da companhia de pessoas de raças/culturas diferentes da tua.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**6. Por favor lê cada uma das afirmações abaixo e assinala a opção que indica a resposta que melhor se aplica a ti.**

Por favor, selecciona a posição apropriada para cada afirmação:

	Discordo Totalmente	Discordo	Nem concordo, nem discordo	Concordo	Concordo Totalmente
	1	2	3	4	5
a) Sou tão inteligente como os outros jovens da minha idade.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Sinto-me feliz com o meu peso e altura.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Sinto que sou capaz de fazer muito bem qualquer nova actividade física ao ar livre.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Eu tenho muitos amigos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Sou bem sucedido nos trabalhos que faço na sala de aula.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Sinto-me satisfeito/a comigo mesmo/a a maior parte do tempo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Sou popular junto dos colegas da minha idade.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Considero-me atraente.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i) Dificilmente faço coisas que sei que não devia fazer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- j) Geralmente comporto-me da forma como seria esperada.
- k) Estou muito satisfeito/a por ser como sou.
- l) Sou melhor do que os outros jovens da minha idade a fazer desporto.

\* **Questões de resposta obrigatória.**

***O questionário terminou. Obrigada pela tua colaboração!***

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#### **Itens Escala PYD-Versão Reduzida para os 5 C**

<b>C</b>	<b>Subescala</b>	<b>Itens</b>	
<b><i>Competência (Competence)</i></b>	Académica (Academic)	6a	6e
	Social (Social)	6d	6g
	Física (Physical)	6c	6l
<b><i>Confiança (Confidence)</i></b>	Auto-estima (Self-Worth)	6f	6k
	Identidade Positiva (Positive Identity)	1a	1b
	Aparência (Appearance)	6b	6h
<b><i>Carácter (Character)</i></b>	Consciência Social (Social Conscience)	4a	4b
	Valores Pessoais (Personal Values)	4c	4d
	Diversidade de Valores (Values Diversity)	5a	5b
	Comportamento (Conduct Behaviour)	6i	6j
<b><i>Conexão (Connection)</i></b>	Família (Family)	1c	1d
	Escola (School)	1e	1f
	Vizinhança (Neighborhood)	1g	1h
	Grupo de Pares/Amigos (Peer)	2a	2b
<b><i>Cuidado (Caring)</i></b>	Não tem subescalas.	3a	3b
		3c	3d
		3e	3f