



A Scoping Review of the Evidence of the 5Cs Model of Positive Youth Development in Europe

Antonio David Martin-Barrado * and Diego Gomez-Baya 

Department of Social, Developmental and Educational Psychology, Universidad de Huelva, 21007 Huelva, Spain; diego.gomez@dpee.uhu.es

* Correspondence: antoniodavid.martin@dpee.uhu.es

Abstract: In the last 20 years, evidence has been found that supports the “5Cs” of the Positive Youth Development (PYD) model developed by Lerner and his colleagues in the United States. This model considers adolescents as active elements who may acquire the resources and strengths to develop positive relationships with others. However, few studies have focused on its generalization to other contexts. Therefore, the aim of the present scoping review is to examine the evidence of the 5Cs model (Confidence, Competence, Caring, Connection and Character) in Europe. A search was carried out in the international Web of Science database for articles published in Europe between 2013 and June 2023, obtaining 123 articles. Subsequently, after applying the inclusion criteria, 23 articles were included. The findings agreed that men have higher levels of Competence and Confidence, while women scored higher in Connection, Caring and Character. Furthermore, many studies stated that higher scores in Connection, Competence, Character and Confidence are related to better mental health, higher academic performance and greater social and environmental contribution. Consequently, it is crucial to increase the number of interventions based on this model to result in future adults who are healthy, happy and engaged with society. Finally, future lines of research are discussed, as well as the importance of researchers carrying out more intervention programs.

Keywords: 5Cs; positive youth development; scoping review; Europe



Citation: Martin-Barrado, A.D.; Gomez-Baya, D. A Scoping Review of the Evidence of the 5Cs Model of Positive Youth Development in Europe. *Youth* **2024**, *4*, 56–79. <https://doi.org/10.3390/youth4010005>

Academic Editor: Todd Michael Franke

Received: 21 October 2023

Revised: 22 December 2023

Accepted: 2 January 2024

Published: 4 January 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Adolescence is a transitional stage between childhood and adulthood, characterized by physical, psychological and social changes [1]. During this life stage, the search for self-identity becomes more intense [2]. Therefore, in this search, adolescents may present maladaptive behaviors such as poor school performance, drug use and intergenerational conflicts [3,4]. Adolescence lasts approximately from 10 to 19 years old, although many authors agree that several current factors such as delayed parenthood, more time in education, as well as less job stability have caused it to be extended to 29 years old. In this sense, a new stage emerges between adolescence and adulthood known as emerging adulthood [5,6].

The conception of adolescence is completely different depending on the historical moment. For example, Stanley Hall at the beginning of the 20th century described adolescence as a stage marked by a period of “storm and stress”, which gave rise to many myths and intergenerational conflicts that persist even today [7–9]. Other important authors like Freud and neo-Freudian authors such as Erik Erikson increased this initial negative vision of adolescence by arguing that this stage was marked by problems that needed to be corrected [10,11]. In other words, these and other authors characterized adolescents based on deficit models by labeling them as problematic, passive beings, ignoring all the potential they may have [4,12,13].

1.1. In Search of a Strengths-Based Model

Some researchers aimed to alleviate the limitations of these deficit models that did not lead to positive results for youths. Thus, positive terms such as plasticity and developmen-

tal diversity emerged from positive developmental psychology, with the goal of adopting a new perspective in which the adolescent was placed as an active element of change. In this line, a positive perspective of human nature was further researched [11,12,14].

A model with these characteristics emerged in the United States, known as Positive Youth Development (PYD), which focuses on the developmental strengths that each adolescent possesses and would help them reach an adaptive transition into adulthood [15]. This model aims to increase behaviors, skills and competencies to foster a more optimal, healthy and adaptive development [16,17]. This perspective is framed within the developmental systems theory, which states that the quality of the interactions between adolescents and their contexts (e.g., family and school) should provide the necessary resources to enhance PYD [18,19]. From this perspective, the opportunity for nurturing in each adolescent the resources—regardless of their background or adversities suffered—is highlighted [15]. This theoretical model has increased interest not only in the promotion of positive development, but also in the prevention of the emergence of problems [3].

Lerner and Lerner [20] conducted a seven-year longitudinal research design in the United States known as the 4-H Positive Youth Development Study with around 7000 students. In this sense, they argued that, if adolescent strengths are aligned with family, school and community, positive development will be favored. In the 4-H study, Lerner developed the validation of the 5Cs model of PYD in the USA and it has become one of the most widely used in the field of PYD, as well as with the most solid evidence. This 5Cs model is characterized by five interrelated components that describe the characteristics necessary for positive development in adolescence: Competence, Confidence, Connection, Character and Caring [17,19]. Competence refers to the positive view of oneself in different areas. Confidence indicates one's positive view of both oneself and one's self-efficacy. Connection refers to the positive relationships one has with others. Character relates to the assumption of and respect for cultural and social values. Caring represents the ability to empathize with others. It was found that when these 5Cs are fulfilled, a sixth one arises, named as Contribution, which relates to the contribution that the adolescent can perform beyond oneself. In addition, it was found that higher scores on the 5Cs model predicted fewer behavioral problems [20].

1.2. Evidence from the 5Cs Model in the United States

Most of the PYD research has been conducted in the United States, where PYD promotion programs have been shown to bring positive outcomes in family, school and community contexts, and simultaneously reducing problem behaviors [21,22]. Other large studies such as that by Catalano and colleagues [3] supported these results by reviewing all the intervention programs they found at the time of their research. The reviewed programs that were based on PYD showed significant and positive benefits for adolescents, such as improvements in interpersonal skills, better problem solving, improved academic performance and a greater prevention of risk factors such as drug and alcohol use. In addition, it was found that men take more risky behaviors and women participate more in providing to society [22].

A longitudinal study was conducted with the aim to demonstrate if the use of the very short version of the PYD scale (PYD-SF) was a useful instrument to examine youths' attributes [15]. Several conclusions were drawn from this study. First, it was demonstrated that PYD-SF can be an efficient and useful index. Second, PYD score appeared to remain stable in early adolescence, being more strongly stable in late adolescence. When the adolescent scored higher on the 5Cs, he/she might build more positive influential relationships with the environment (i.e., contribution) and show a lower probability of risk behaviors and depressive symptoms. And lastly, although the 5Cs are understood as an overall construct of PYD for youths to have more positive outcomes, examining the separate Cs may provide a more descriptive picture of PYD.

In another longitudinal design research, the existence of positive associations between the 5Cs and self-regulation abilities is revealed after a year of follow-up in an adolescent

sample. In this sense, when there are self-regulatory difficulties, these were associated with negative development, characterized by more depressive symptoms and criminal and risky behavior. Furthermore, it is highlighted that even if there are adolescents who only score highly in one or two Cs, PYD can continue to be promoted through those available Cs due to the lack of perfect interrelationships between these components [23].

Regarding the methodology, the intervention programs that were shown to be most effective were those that lasted at least nine months; included the family, environment and school; and improved the interpersonal aspects of the adolescents. Other research [24,25] has also highlighted the benefits of PYD-based programs, providing adolescents with greater social engagement, personality growth and better academic performance. They also highlight the benefits resulting from extracurricular activities.

There is evidence that PYD programs in different formats (i.e., sport, arts, music programs) may prevent behavioral problems and promote good self-esteem, emotional skills and resilience [26–29]. School-based and mentoring programs received the strongest empirical support [26]. Recently, a review of quantitative and qualitative studies on sport-based PYD programs showed positive evidence [29]. Furthermore, a systematic review of 23 school-based PYD programs [27] showed that these programs increase youth well-being and social confidence, in addition to enhancing greater connectedness among classmates. However, these programs often have incomplete descriptions that make it difficult to determine which components were the most useful ones. Another review of prevention and PYD programs in European countries showed some remarkable results [28]. First, prevention programs were found to be more frequent than PYD programs, which underlines a greater focus on reducing risk behaviors. Second, it seems that models created outside Europe were more difficult to be implemented, perhaps because of the great cultural and economic diversity of the European continent, where each country tries to develop its own program in relation to its culture and language.

1.3. Justification and Objectives

Over the years, the stage of emerging adulthood is becoming more prominent and occupies a longer period of the life cycle, up to the age of 29. Therefore, more scientific evidence from studies based on the 5Cs of PYD is needed for young people to be able to manage their lives in the most adaptive and healthy way possible.

Likewise, it should not be forgotten that most of the research and interventions on the 5Cs have been carried out with samples from the United States, so more information is needed on their evidence in other major contexts, such as the European continent. The evidence in this continent seems particularly important since it is the region where most research and replication studies of the 5Cs model were conducted, after the United States. Likewise, literature reviews with more recent studies are needed, because some published reviews did not address the last ten years, when many studies in this line were developed. Furthermore, the results may be useful for establishing intervention programs to improve adolescent development and health along with the prevention of risk behaviors. Few recent investigations have focused on whether the European evidence of the model is in line with the North American results, although studies such as that of Dimitrova et al. [30] argued that the model can be applied in other contexts. In this regard, the present scoping review aims to identify the research evidence of the 5Cs model of PYD in Europe.

2. Materials and Methods

2.1. Search Strategy

In order to address the study aim, a scoping review was carried out on studies published in the last decade, from 2013 to 26 June 2023, the day on which the search was carried out. This period was chosen to be able to rely on the most recent findings. The international electronic database of Web of Science (Clarivate Analytics, London, United Kingdom) was used, where a total of 123 possible articles were obtained. Finally, the articles included in this review were subjected to an in-depth analysis.

Initially, the search terms were defined only in title field to search for articles to be included. The following Boolean operators were used to obtain as many useful articles as possible: “positive youth development” OR “positive development” OR “PYD” OR “5Cs” OR “5Cs” OR “5Cs” OR “five C’s” OR “5 C’s” OR “5C’s”. In addition, all countries on the European continent were originally selected.

2.2. Inclusion and Exclusion Criteria

The procedure described above made it possible to obtain access to various articles. Studies that met the following criteria were included: (a) the articles had to have full text; (b) the articles were in English (language criterion); (c) the articles selected had to be empirical and quantitative, so that theoretical, qualitative articles and systematic reviews were excluded; (d) the publication period had to be between 2013 and June 2023; (e) the sample study was from any country in Europe (participant criterion); (f) the model to be used was based on Lerner’s 5Cs (design criterion); (g) the study’s objectives included analyzing the 5Cs with other variables; and (h) the results included some dimension of the 5Cs (outcome criterion).

2.3. Data Extraction

For this scoping review, the guidelines of the Systematic Reviews and Meta-Analyses (PRISMA) guidance by Urrútia and Bonfill [31] were used to create an extraction form. Indicators were collected from all the included articles to obtain information regarding: authors’ names, objectives, study design, country and sample, instruments and main results. After an in-depth analysis of the articles included, several categories were established into which they could be grouped according to their main goals: 5Cs structure, 5Cs according to gender and identity, 5Cs and education, 5Cs and psychological adjustment, 5Cs and social and environmental contribution, and 5Cs intervention program. This classification was performed to facilitate interpretation and results’ comparison, despite the fact that some articles were included in more than one category.

3. Results

3.1. Search Results

3.1.1. Step 1. Record Identification

Initially, 123 potentially eligible articles published in Europe between 2013 and 2023 were included in the Web of Science database after including the Boolean commands.

3.1.2. Step 2. Initial Analysis

Starting from the total number of works from the previous step, the next consisted of reviewing the articles by analyzing the title and abstract. Considering the previously defined inclusion and exclusion criteria, we determined whether or not they fit the current scoping review. After this first analysis, 87 articles were subjected to a more in-depth analysis. A total of 36 articles were excluded because 21 articles were not focused on PYD within the field of psychology, 10 studies were carried out with a non-European sample and five articles turned out to be qualitative design studies.

3.1.3. Step 3. Exhaustive Analysis

Of the 87 initially valid articles, they were subjected to full-text analysis. After this, it was necessary to exclude 50 investigations because they were not based on the 5Cs model of PYD, and four studies because they were theoretical reviews of the literature.

Finally, this entire procedure resulted in the remaining 23 articles being considered to be relevant for the present scoping review, with English being the dominant language in all of them. Figure 1 shows all the steps followed in this review.

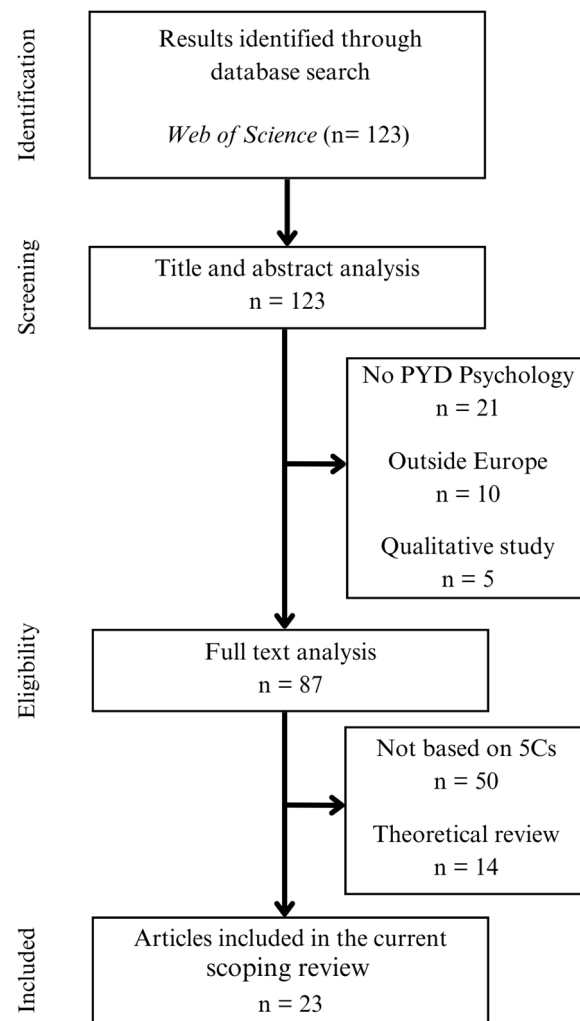


Figure 1. PRISMA flowchart in the process of creating the scoping review.

3.2. Characteristics of the Included Studies

Table 1 summarizes the main characteristics of the studies relevant to the scoping review, according to the indicators mentioned above.

Table 1. Characteristics of the studies included in the scoping review [32–90].

Category *	Author(s)	Objective(s)	Study Design Country and Sample	Instrument(s)	Main Results
1	Erentaitė and Raižienė [51].	<ul style="list-style-type: none"> - Examine which PYD structure has stronger empirical support (second level or bifactor). - To find out if the instrument based on 5Cs is valid for Lithuania. 	<p>Cross-sectional. Lithuania. $N = 1686$ (age = 14–20, $M = 16.61$, $SD = 1.23$).</p>	PYD: Lithuanian version of PYD [68].	<ul style="list-style-type: none"> - Good factorial validity of the instrument was found for Lithuanian late adolescents. Bifactorial structure showed stronger support than a second-order-level model. - The 5Cs components separately and the PYD separately have good internal consistency. - The instrument is valid for predicting problematic and positive behaviors.
1,4	Holsen et al. [35].	<ul style="list-style-type: none"> - To analyze whether there is factorial invariance between Norwegian and US samples. - To find out if the 5Cs are positively related to other indicators in the Norwegian sample. - To analyze whether the 5Cs are negatively related to maladaptive development in the Norwegian sample. 	<p>Cross-sectional. Norway. $N = 1195$ (age = 16–19, $M = 17.5$, $SD = 0.89$; 48.5% women). ** United States: $N = 839$ ($M = 16.81$, $SD = 0.78$; 67.9% were women).</p>	<ul style="list-style-type: none"> - Connection: HBSC [40] and MSPSS. - Academic competence: SPPA [39]. - Social competence: close friend support subscale of the SPPA [39]. - Character: PSL-AB [37]. - Confidence: SPY [38]. - Caring: Sympathy Scale [36] and Empathetic Concern subscale of the IRI. [69]. - Life satisfaction: MSLSS [49]. - Anxiety and depressive symptoms: Check list [70]. 	<ul style="list-style-type: none"> - The 5Cs showed a five-factor structure rather than a unifactorial one. - The 5Cs correlated positively with life satisfaction and empowerment, and negatively with anxiety and depressive symptoms. There was a positive correlation between Caring and symptoms of anxiety and depression.
1,4	Novak et al. [50].	<ul style="list-style-type: none"> - To examine the empirical validity of the 5Cs model in Croatia. - To investigate the construct validity of the 5Cs model, as well as to examine its relationships with mental health and stress. 	<p>Cross-sectional. Croatia. $N = 3559$ ($M = 15.12$, $SD = 0.39$; 53.5% women).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. - Depression, anxiety and stress: DASS-21 [71]. - Mental well-being: SWEMWS [48]. 	<ul style="list-style-type: none"> - Competence, Connection and Confidence showed negative relationships with stress. Character and Caring showed a positive relationship. - Competence, Connection, Confidence and Character were associated with positive mental health. - The PYD-SF scale correlated with positive mental health and mental distress in Croatia. - Confidence and Connection obtained a negative influence with mental distress. Competence was shown to have a lower negative effect in distress. - Character and Caring were positively related to symptoms of stress, anxiety and depression. - Unifactorial structure of the 5Cs was observed.

Table 1. Cont.

Category *	Author(s)	Objective(s)	Study Design Country and Sample	Instrument(s)	Main Results
1	Fernandes et al. [32].	To explore the distribution of the 5Cs in young people from diverse contexts.	<p>Cross-sectional. $N = 3195$ (age = 15–25). Republic of Kosovo. $N = 900$ ($M = 16.34$, $SD = 0.97$, 66.7% women). Norway. $N = 425$ ($M = 20.16$, $SD = 1.51$; 73.5% women). Portugal. $N = 247$ ($M = 16.60$, $SD = 1.29$, 42.1% women). Slovenia. $N = 648$ ($M = 19.81$, $SD = 2.63$; 63.4% women). Turkey. $N = 974$ ($M = 19.96$, $SD = 2.46$; 68.7% women). ** Ghana. $N = 981$ ($M = 19.82$, $SD = 1.74$; 52.5% were women).</p>	<p>5Cs: PYD-SF [33]. PYD development assets: DAP [72].</p>	<ul style="list-style-type: none"> - Differences in the distribution of the 5Cs across countries. Students from Kosovo and Turkey reported higher Caring and Connection. The highest means of the 5Cs were found in Turkey and Kosovo. - An analysis of the measurement invariance was conducted, and it was observed that the scale performs similarly across the four countries. - The 5Cs were correlated with each other. The associations were strong and positive, mainly between Character and Caring, and between Confidence and Competence.
2,4,5	Conway et al. [52].	<ul style="list-style-type: none"> - To determine the validity of the instrument based on 5Cs for Irish adolescents. - To demonstrate a negative relationship between PYD and depressive symptoms and risk behaviors. - To assess the five-factor model with gender and age. 	<p>Cross-sectional. Ireland. $N = 672$ (age = 11–19, $M = 14.81$, $SD = 1.61$; 57.6% men).</p>	<ul style="list-style-type: none"> - PYD/5Cs: PYD measures [17]. - Contribution: Ideology and actions subscales [17]. - Depressive symptoms: CES-D [44]. - Risk behavior: PSL-AB [37] & Monitoring the Future [73]. 	<ul style="list-style-type: none"> - Good internal reliability of the PYD and 5Cs in Irish sample, except Competence. - Higher Character and Connection resulted in lower risk behaviors. - Young adolescents showed higher PYD. More PYD was found to result in fewer depressive symptoms. - Higher Character, Connection and Competence correlated with higher Contribution. Confidence was associated with lower Contribution. - There was measurement invariance between gender and age across adolescence. - Females scored higher on Caring, Character and Connection. Males scored higher on Confidence and Competence.
2,3,4	Aardal et al. [34].	<ul style="list-style-type: none"> - To study the mediating effect of the 5Cs between perceived school empowerment and school satisfaction. Gender differences were also calculated. 	<p>Cross-sectional. Norway. $N = 997$ (49.8% women). First year ($N = 581$, $M = 16.4$). Second year ($N = 414$, $M = 18.89$).</p>	<ul style="list-style-type: none"> - Life satisfaction: MSLSS [49]. - School empowerment [74]. - Caring: Sympathy Scale [36]. - Character: PSL-AB [37]. - Connection: HBSC [75]. - Teacher support: HBSC [40]. - Confidence: SPPA self-esteem subscale [39]. 	<ul style="list-style-type: none"> - Women scored higher on Caring, Character and Connection. Men scored higher on Confidence. There were no gender differences in Competence. - Two main PYD categories, for example, efficacy factor (Connection, Confidence and Competence) and socioemotional factor (Caring, Character). - The efficacy Cs mediated the association between school empowerment on school satisfaction. - The 5Cs were more important for women's perception of school empowerment and school satisfaction.

Table 1. Cont.

Category *	Author(s)	Objective(s)	Study Design Country and Sample	Instrument(s)	Main Results
2,4	Gómez-Baya et al. [53].	<ul style="list-style-type: none"> - To examine gender differences in PYD in Spanish youths. - To analyze associations of PYD with social commitment and individual thriving. 	<p>Cross-sectional. Spain. $N = 768$ (age = 17–29, $M = 19.50$, $SD = 2.27$; 60.5% women).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. - Psychological adjustment: Subjective Happiness Scale [76]. - Depressive symptoms: PHQ-9 [45]. - Academic adjustment: HBSC [77]. - Lifestyles and Social Engagement: CN-PYD items [78] 	<ul style="list-style-type: none"> - Women showed greater Connection, Caring and Character, and greater social engagement and academic adjustment. - Men showed greater Confidence and Competence, as well as more physical exercise and lower depressive symptoms. - More PYD was associated with greater social engagement and better psychological adjustment. - Character had a positive influence on vegetable consumption.
2,4	Gómez-Baya et al. [54].	<ul style="list-style-type: none"> - To analyze the relationship between PYD and resilience, in addition to differences by gender. - To examine the moderating role of self-regulation. 	<p>Cross-sectional. Portugal. $N = 2700$ (age = 16–29, $M = 21.3$, $SD = 2.79$; 73.3% women).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. - Resilience: internal resources subscale [79]. - Self-regulation: ASRI [80]. 	<ul style="list-style-type: none"> - The greater the presence of internal resources for resilience, the greater the PYD. - Long-term self-regulation positively moderated the relationship between PYD and internal resources, mainly in men. - Women scored higher on Caring and Character, as well as on long-term self-regulation and internal resources.
2,4	Gómez-Baya et al. [55].	<ul style="list-style-type: none"> - To describe the 5Cs and depressive symptoms in Croatia and Spain. - To investigate the relationships between 5Cs and depressive symptoms in both countries. - To analyze differences between 5Cs and depressive symptoms according to gender. 	<p>Cross-sectional. Croatia. $N = 584$ ($M = 19.19$, $SD = 1.86$; 64.38% women). Spain. $N = 768$ ($M = 19.50$, $SD = 2.27$; 60.54% women).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. - Depressive symptoms: PHQ-9 [45]. 	<ul style="list-style-type: none"> - Participants scored higher on Caring than on the other Cs. This component was positively associated with greater symptomatology of depression and anxiety. - Croatian youths scored higher on global PYD and its components. Spanish youths reported higher Connection. - Women reported higher Connection, Character and Caring in both countries, as well as more depressive symptoms. Spanish men reported higher Confidence. - Competence, Confidence, Character and Connection were negatively correlated with depression. - Regression analyses showed that up to 20% of depressive symptoms are explained by the 5Cs.

Table 1. Cont.

Category *	Author(s)	Objective(s)	Study Design Country and Sample	Instrument(s)	Main Results
2,4	Manrique-Millones et al. [56].	<ul style="list-style-type: none"> - To analyze the association of the 5Cs with depressive symptoms in students from Spain and Peru. - To examine gender differences between the 5Cs and depressive symptoms. - To investigate indirect effects of the 5Cs on the association of depressive symptoms with country and gender. 	<p>Cross-sectional.</p> <p>Spain. $N = 1044$ ($M = 20.47$, $SD = 3.08$; 75.5% women).</p> <p>** Peru. $N = 250$ ($M = 20.49$, $SD = 3.51$; 60% were women).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. - Depressive symptoms: PHQ-9 [45]. 	<ul style="list-style-type: none"> - Connection, Character, Confidence and Competence were found to be negatively related to depressive symptoms. - Confidence and Connection showed strong negative association with depressive symptoms. - Positive association of Caring with depressive symptoms was seen. - Spanish students showed higher scores for Caring and Character. - No gender differences were found in depressive symptoms. - Males reported higher levels of Competence and Confidence, while females reported higher levels of Character and Caring.
2,3	Kozina and Wiium [57].	<ul style="list-style-type: none"> - To examine the development of the 5Cs in a school year, considering the COVID-19 pandemic. - To study whether the change in the 5Cs is associated with gender, age and school level. 	<p>Longitudinal.</p> <p>3 moments in a school year (beginning, middle and end).</p> <p>Slovenia. $N = 1241$ (age = 13–19, $M = 15.35$, $SD = 1.21$; 59.5% women).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. 	<ul style="list-style-type: none"> - Decrease in the components of Connection, Character and Caring throughout the school years. - Increase in Competence and Confidence over the same period. - No age differences in the 5Cs. Associations were found with gender and school level. For example, Connection was stable in upper secondary and decreased in lower secondary. - Males showed higher Connection, Confidence and Competence. - Females showed higher Character and Caring.
2	Crocetti et al. [58].	To find out if adolescents with different identity styles show differences in the 5Cs.	<p>Cross-sectional.</p> <p>Lithuania. $N = 1633$ (age = 14–19, $M = 16.56$, $SD = 1.22$; 54.1% women).</p>	<ul style="list-style-type: none"> - 5Cs: PYD measures [17]. - Civic engagement: Items created for this study. 	<ul style="list-style-type: none"> - Information-oriented adolescents had the most positive profile with high scores on the 5Cs, with benefits to both self and community. - Normative-oriented adolescents scored high on Confidence and Connection. It was beneficial to the adolescent, but not to the community. - Adolescents oriented to a diffuse-avoidant style scored lower on the 5Cs. They were the worst profile. - Females preferred the information-oriented style and males the diffuse-avoidant.

Table 1. Cont.

Category *	Author(s)	Objective(s)	Study Design Country and Sample	Instrument(s)	Main Results
3	Kozina et al. [59].	Investigate the association between 4Cs (Connection, Caring, Confidence and Character) and mathematics achievement (Competence). In addition, gender and type of school differences were analyzed.	Cross-sectional. Slovenia. <i>N</i> = 2802. No <i>M</i> or <i>SD</i> information provided (52% women).	- 5Cs: PYD-SF [33]. - Academic performance: PISA tests [81].	- Negative association between Connection and mathematical performance in technical programs in both genders. - Confidence had a positive influence with academic performance, in general gymnasium sessions and in technical programs, mainly among men. - Character was related to mathematics performance in medium-length vocational programs. - Caring was only negatively associated with mathematics performance in technical and gymnasium programs. - Academic performance is dependent on school type and gender.
3	D'Urso et al. [43].	To describe the dynamics between PYD and bullying, as well as examining sociocultural and gender differences.	Longitudinal at three different times (9, 13 and 17 years old). Ireland. <i>N</i> = 7165. No <i>M</i> or <i>SD</i> information provided (51% women).	- Items created for this study	- Connection and Caring components predicted later development of Competence, Confidence and Character. - Bullying negatively influenced Competence and Confidence. - Having good affective bonds with peers and parents provided the adolescent with appropriate social-emotional skills to overcome traumatic events. - Sociocultural risk factors influenced Competence, Confidence and Character. Suffering from family trauma impacted these components in late adolescence.
4	Tomé et al. [62].	To analyze the influence of the 5Cs on well-being (anxiety, social alienation, general well-being, physical and psychological symptoms) by gender.	Cross-sectional. Portugal. <i>N</i> = 384 (age = 10–20, <i>M</i> = 15.3, <i>SD</i> = 2.3; 53.4% men).	- 5Cs: PYD-SF [33]. - Anxiety symptoms: MASC [46]. - Well-being: Kidscreen scale [82]. - Psychological symptoms: HBSC [83].	- Confidence was related to well-being in both genders. - For men, Competence had a positive influence with anxiety. For women, this influence was negative. - Character was associated with well-being for men. - Affection was identified with psychological distress in both men and women. - Connection was associated with well-being mainly in women. - The 5Cs were found to have an influence on adaptive development in young people, although more strongly in females.

Table 1. Cont.

Category *	Author(s)	Objective(s)	Study Design Country and Sample	Instrument(s)	Main Results
4	Kovačević-Lepojević et al. [65].	Examining the relationship of the 5Cs and life satisfaction.	Cross-sectional. Serbia. $N = 215$ (age: 14–18. No M or SD information provided (65.1% women.).	- 5Cs: PYD-SF [33]. - Life satisfaction: MSLSS [49].	- Youths were more satisfied with friends, their environment, themselves and their families. They were less satisfied with school. - 5Cs were useful in explaining the percentage of variation in young people's satisfaction with family and living environments. - Competence was associated with self-satisfaction. - Connection, Confidence and Caring had strong relationships with life satisfaction. - Character was not significant in the satisfaction indicators.
4	Geldhof et al. [60].	To investigate whether an imbalance in the C of Caring can lead to maladaptive regulations in certain contexts.	Cross-sectional. Through longitudinal study. Norway. $N = 2386$ ($M = 16.60$, $SD = 1.98$; 55.2% men).	- Caring: PYD-SF [33], IRI Empathic Concern Subscale [69] and an item created. - Academic performance, self-esteem and positive identity: PYD-SF [33].	- A positive effect was found between Caring, anxiety and depressive symptoms. - Caring is not associated with adaptive outcomes. The other Cs may also have a latent potential to produce a maladaptive development.
4	Pistoni et al. [64].	To explore whether the 5Cs together with parental control could be predictors of different sexting clusters.	Cross-sectional. Italy. $N = 1866$ (age = 13–19, $M = 16.26$, $SD = 1.49$; 52.5% women).	- 5Cs: PYD-SF [33]. - Sexting: Two items from Klettke et al. [84]. - Perceived parental supervision [85].	- Males aged 18–19 with low Character, high Competence and who feel they cannot reveal themselves to their parents are more likely to engage in sexting. - Those youths who presented less Connection were the most likely to engage in active sexting.
4	Urke et al. [63].	- To examine the interrelationships between 5Cs and mental well-being, as well as whether this association was mediated by body esteem, taking gender into account.	Longitudinal. Two times (Grades 1 and 2). Age = 16–25. Norway. $N = 348$. T1 ($M = 16.9$, $SD = 0.44$; 54.9% men). T2 ($M = 17.84$, $SD = 0.38$; 58% men).	- 5Cs: PYD-SF [33]. - Mental well-being: WEMWBS [47]. - Body appreciation: BAS-2 [86].	- Competence and Connection predicted good mental well-being one year later. - A positive view of the body was associated with better mental well-being one year later. - Body appreciation was not a mediator in the relationship of the 5Cs and mental well-being, but remains an important asset for mental well-being.

Table 1. *Cont.*

Category *	Author(s)	Objective(s)	Study Design Country and Sample	Instrument(s)	Main Results
4	Kozina et al. [61].	<ul style="list-style-type: none"> - To examine the association between PYD (and the 5Cs) with anxiety (and its dimensions). - To investigate the predictive power of the 5Cs for various dimensions of anxiety. - To assess whether associations change by country. 	<p>Cross-sectional.</p> <p>Portugal. <i>N</i> = 384 (age = 10–20, <i>M</i> = 15.3, <i>SD</i> = 2.3, 46.6% women).</p> <p>Slovenia. <i>N</i> = 449 (age = 15–23, <i>M</i> = 16.96, <i>SD</i> = 1.59; 69% women)</p> <p>Spain. <i>N</i> = 768 (age = 17–29, <i>M</i> = 19.50, <i>SD</i> = 2.27, 60.5% women).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. - Anxiety in Portugal: MASC [46]. - Anxiety in Slovenia: LAOM [87]. - Anxiety in Spain: GAD-7 [88]. 	<ul style="list-style-type: none"> - In Spain and Slovenia, there was a significant negative relationship between global PYD and anxiety. Similarly, Confidence and Connection negatively predicted anxiety. Caring was positively associated. - In Portugal, Caring had a negative influence with anxiety (social anxiety and separation anxiety). Confidence was positively associated with anxiety (harm avoidance). Character was also positively associated for harm avoidance and social anxiety. Connection was negatively related to social anxiety and positively with separation anxiety and harm avoidance. - In Slovenia, Caring is a positive predictor of all three anxiety components (emotions, worries and decision). - Connection is negatively associated with anxiety (in the three dimensions) in the three contexts.
5	Giancola et al. [67].	Examine how the 5Cs predict sustainable behaviors in an Italian context.	<p>Cross-sectional.</p> <p>Italy. <i>N</i> = 219 (age = 18–29, <i>M</i> = 22.10, <i>SD</i> = 2.69).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. - Sustainable behaviors: four questionnaire scales of Tapia-Fonllem et al. [89]. 	<ul style="list-style-type: none"> - Character was associated with pro-environmental behaviors. Caring was linked to pro-environmental and altruistic behaviors. - Competition and Connection showed strong relationships with the values of altruism and equity.
5	Bøhlerengen and Wiium [66].	<ul style="list-style-type: none"> - To examine associations between the 5Cs and environmental concerns and attitudes of Norwegian students. 	<p>Cross-sectional.</p> <p>Norway. <i>N</i> = 220 (age = 16–20, <i>M</i> = 17.30, <i>SD</i> = 1.12; 52% men).</p>	<ul style="list-style-type: none"> - 5Cs: PYD-SF [33]. - Environmental variables: items from various scales of Wray-Lake et al. [90]. 	<ul style="list-style-type: none"> - Character was associated with several pro-environmental variables, followed by Competence and Caring. - Confidence showed a positive correlation with personal and governmental responsibility, although it correlated negatively with conservation behavior. - Connection showed no significant associations. - Higher scores on 5Cs were associated with greater environmental concern.
6	Truskauskaitė-Kunevičienė et al. [41].	<ul style="list-style-type: none"> - Evaluate the effectiveness of the “Try Volunteering” program for the development of the 5Cs. 	<p>Longitudinal.</p> <p>Quasi-experimental Lithuania. <i>N</i> = 615. Intervention group (<i>N</i> = 351, age = 13–16, <i>M</i> = 15.26, <i>SD</i> = 0.69) and control group (<i>N</i> = 264, age = 14–17, <i>M</i> = 15.24, <i>SD</i> = 0.64).</p>	<ul style="list-style-type: none"> - 5Cs: PYDI [42]. 	<ul style="list-style-type: none"> - Most students in the program scored higher on Competence, Connection and Caring. - Non-participants scored low on Competence, Confidence and Character. - The program was shown to be health promoting and protective.

Note: * Article categories: 1—5Cs structure; 2—5Cs development according to gender and identity; 3—5Cs and education; 4—5Cs and psychological adjustment; 5—5Cs social and environmental contribution; 6—5Cs intervention program. ** Country not included because it is non-European.

Regarding the study design, 19 articles followed a cross-sectional model and the remaining four followed by a longitudinal model. All the articles included were from scientific journals. As for the total participants of all articles, a total sample of 37,863 adolescents with an age of 10 to 29 years was included. Most of the studies focused on students with an age from approximately 13 to 19 years old, only four articles covered from approximately 16 years old to 29 years old. The complete majority of the articles stated that higher levels of the 5Cs were positively associated with better psychological adjustment. In addition, an equal gender distribution was found in most of the studies that provide this information, although with some advantage in favor of females. Only two studies showed a greater gender bias, where more than 70% of the sample were women. However, there were studies that did not provide data on gender or basic statistics such as Mean (M) and Standard Deviation (SD).

Figure 2 showed the distribution of the included articles according to their publication date. It is notable that the years 2021 and 2023 (until June 21) are where the largest number of publications is concentrated (five); thus, there seems to be an increase in interest in the use of the 5Cs as an intervention model in the emerging adulthood.

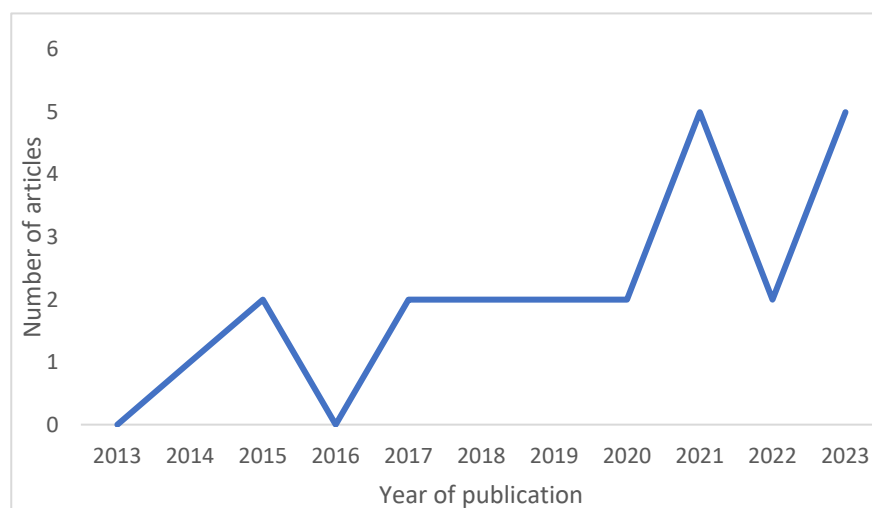


Figure 2. Distribution of articles by year of publication.

With respect to the scientific journals in which the articles were published, *Frontiers in Psychology* (8) stood out as the most popular for the publication of articles on this topic. In a lesser proportion, the *Journal of Adolescence* (2) was in second place, followed by: *Journal of Youth and Adolescence* (1), *Current Psychology* (1), *Scandinavian Journal of Adolescence* (1), *The Journal of Early Adolescence* (1), *The Journal of Genetic Psychology* (1), *Sustainability* (1), *International Journal of Adolescence and Youth* (1), *European Journal of Developmental Psychology* (1), *School Psychology International* (1), *International Journal of Behavioral Development* (1), *Behavioral Sciences* (1), *Sociologija* (1) and *Child and Youth Care Forum* (1).

Regarding the category of scientific journals previously mentioned, their categories can be grouped according to the analysis tool of the Journal Citation Report (JCR) into: multidisciplinary psychology (11), developmental psychology (9), educational psychology (1), environmental sciences (1) and sociology (1). This distribution can be viewed in Figure 3.

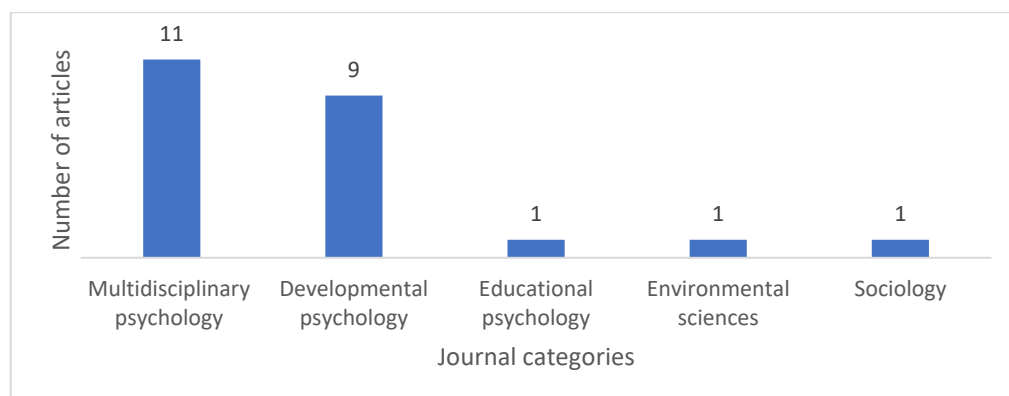


Figure 3. Distribution of journal categories.

In relation to the importance of the scientific publication in its field of study, they can be classified in quartiles and impact index through the aforementioned JCR tool. In this way, there are nine journals in the first quartile (Q1), eight in Q2, three journals in Q3 and another three in Q4. The highest impact factor is 3.8 in Q1 by the journal *Frontiers in Psychology* in the year 2023, and the lowest has an impact factor of 0.3 in Q4 by the journal *Sociologija* of the same year. A distribution of quartiles is shown in Figure 4.

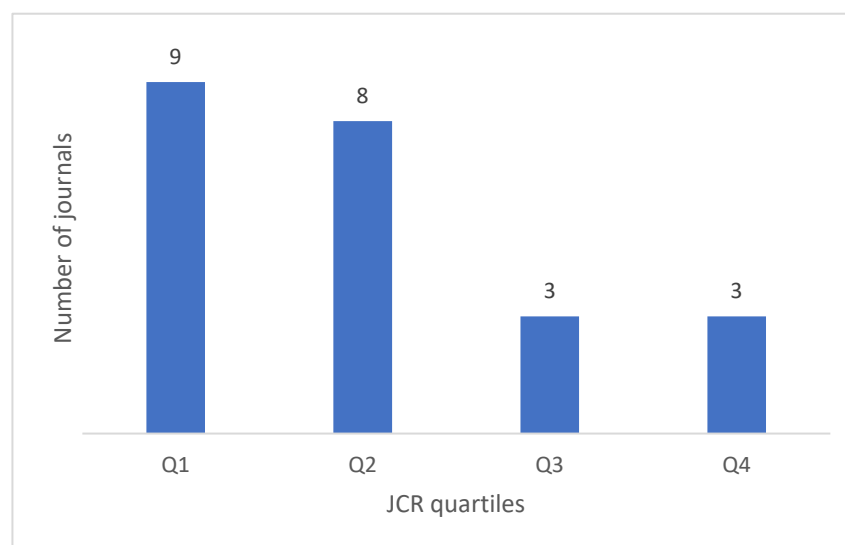


Figure 4. Distribution of quartiles according to the included journals.

Geographically, the 23 articles included in the scoping review come from different European countries, with some studies including samples from more than one country, as in the case of Fernandes et al. [32], which includes a sample from four European countries. Thus, studies with a sample from Norway are found to be the most numerous (6), followed by Spain (4), Slovenia (4), Portugal (4), Lithuania (3), Italy (2), Ireland (2) and, to a lesser extent, the Republic of Kosovo (1), Turkey (1), Croatia (1), Serbia (1) and Italy (1). This results in the studies being grouped into Eastern, Northern and Southern European articles.

3.3. Measuring Instruments

First, regarding the instruments to measure the 5Cs, the PYD—Short Form (PYD-SF) by Geldhof et al. [33] was the most used to assess the 5Cs (in 16 articles). It is followed by the PYD 5Cs measure of Lerner [17] (in two articles). Other authors such as Aardal et al. [34] and Holsen et al. [35] measured the 5Cs through each component's own instruments. That is, Caring was measured with the Eisenberg and collaborators Sympathy Scale [36],

Character with the PSL-AB [37], Confidence with the SPPY [38], Competence with the SPPA [39] and Connection with the HBSC instrument [40]. For its part, Truskauskaitė-Kunevičienė et al. [41] used the PYDI instrument [42] to assess the 5Cs. It should be noted that the study by D'Urso et al. [43] is the only one that created items of its own for their research.

As for the instruments that evaluate other variables in relation to the 5Cs, there were researchers who used different tools to examine psychological adjustment. For example, with respect to depressive symptoms, these were measured with both the CES-D [44] and the PHQ-9 [45]. For anxious symptoms, the use of the MASC stood out [46], showing risk behaviors with the PSL-AB [37]. Mental well-being was measured through the WEMWBS [47] and its short-scale SWEMWB [48]. Another variable worth highlighting is life satisfaction, which was measured in three studies with the MSLSS [49].

3.4. Structure of the 5Cs

Table 1 showed the articles that have focused their research on the structure of the 5Cs model of PYD. On the one hand, Novak et al. [50] found in their research a greater strength in the unifactorial structure of the 5Cs, such that all its components work better as a single factor. On the other hand, Erentaitė and Raižienė [51] found with a Lithuanian sample that the manifestations of the 5Cs can be explained both by each component separately and by the overall PYD construct. In the same vein, Aardal et al. [34] opted for a bifactor model, dividing the components into an efficacy category (Connection, Confidence and Competence) and a socioemotional category (Caring and Character). Fernandes et al. [32] also supported this bifactor model but without taking into account the Connection dimension. Finally, Holsen et al. [35] claimed, with a Norwegian youth sample, that the analysis of each component of the 5Cs separately presented better factorial validities than the single factor study of PYD.

3.5. Development of the 5Cs According to Gender and Identity

The studies under this category are presented in Table 1. Many investigations with samples from various European countries examined in their results whether men and women presented a different patterns in the development of the 5Cs. Generally, men scored higher on the dimensions of Confidence and Competence, whereas women performed likewise on Caring, Character and Connection [34,52–57].

Other relevant research in this category focused on examining whether there were differences in identity styles according to the 5Cs. In this sense, Crocetti et al. [58] found that information-oriented adolescents, that is, self-reflective and empathetic identity explorers, had the most positive identity profile with better scores on the 5Cs. In addition to the benefits derived from scoring high in all components, these young people obtained a higher rate of participation in volunteer activities, but showed little political participation. In contrast, youths who conformed to social expectations, were less classified as identity explorers, and had a greater need for closeness (those oriented toward a normative style) but had higher gains in the Confidence and Connection components. This strategy may be more beneficial for them, but not for the community since they had a low rate of civic participation. Finally, young people characterized by a procrastination of self-reflection of their identity, were found to use more maladaptive coping strategies and report poorer family relationships and had the worst 5C profile, with the lowest grades and lowest civic engagement. Concerning gender, women were observed to prefer the information-oriented style while men showed a more frequent diffuse-avoidance identity style.

3.6. The Study of the 5Cs in the Educational Area

Other researchers have focused their efforts on the relationship between the components of the 5Cs in the educational area. A summary of these works can be found in Table 1. First, Kozina et al. [59] examined the relationship of mathematical performance (understood as Competence) with the other remaining four Cs in students from Slovenia. This work

found the importance of the school context when associated with different components of the PYD depending on the type of school and the gender of the adolescents. For example, Confidence influenced the mathematical performance of men in general and technical high school. In students enrolled in vocational training programs, the Character component achieved the highest averages. Second, in a longitudinal study by Kozina and Wium [57], the development of the 5Cs was examined in a school year by also considering the effects of the COVID-19 pandemic in Slovenian students. In general, there were no significant changes in the development of the 5Cs throughout the academic year, but differences were observed according to gender and school level. For example, the Connection dimension showed low levels in lower secondary school and was more stable in upper secondary school. In addition, it was found that in the development of the school year, there was a progressive decrease in scores in the components of Character, Connection and Caring, while the dimensions of Competence and Confidence increased.

For their part, Aardal et al. [34] measured the mediating effect of the 5Cs between empowerment and school satisfaction in a Norwegian sample. They divided the 5Cs into two categories: efficacy (Connection, Confidence and Competence) and socioemotional (Caring and Character). The effective Cs were the ones that contributed most significantly to the educational field, mediating between empowerment and school satisfaction. Regarding the emotional Cs, they concluded that certain levels can be positive and others not. It was also found that the 5Cs were more important in women's perception of school empowerment and satisfaction. It is notable that there were no differences by gender in the Competence component.

In relation to bullying, D'Urso et al. [43] found several results. On the one hand, they found that being bullied in early adolescence predicted worse scores in the dimensions of Competence and Confidence. Despite this, the authors stated that if an individual had the support of their parents and peers, they were more likely to prosper in the near future. On the other hand, sociocultural risk factors had a negative impact on Competence, Confidence and Character in late adolescence, regardless of whether or not they suffered bullying.

3.7. The Relationship between the 5Cs and Psychological Adjustment

The results of mental health problems in adolescence can be classified into two general groups: internalizing and externalizing problems. These studies are shown in Table 1. Regarding internalizing problems, several studies [34,35,52,53,55,56,60] agreed that higher scores in the dimensions of Connection, Character, Confidence and Competence correlated with better mental health. In contrast, higher scores on the Caring component resulted in a higher presence of depressive and anxious symptoms. Secondly, in relation to this latter component, the research by Kozina et al. [61], with samples from several European countries, found that in Spain and Slovenia, high levels of Caring were associated with greater anxiety, while in Portugal, this component was shown to be protective (especially against social and separation anxiety). Novak et al. [50] found that both Caring and Character dimensions are the most related to anxious and depressive symptomatology. Tomé et al. [62] found that Competence was the component that was most related to anxiety symptoms in men, while Connection in women was the component that was most associated with psychological well-being. Third, the research by Gomez-Baya et al. [53] revealed the need to include resilience in the PYD paradigm, as it was positively associated with PYD score. In addition, the moderating role of self-regulation in that relationship was highlighted.

There was one study that examined whether body satisfaction influenced the relationship between PYD dimensions and the subsequent mental well-being of Norwegian adolescents [63]. It was found that the components of Competence and Connection were the most influential for subsequent mental well-being. Furthermore, although no mediating effect of body satisfaction was found, body image had a positive influence.

With regard to externalizing problems, a previous research that focused its results on risk behaviors was conducted. On the one hand, in a study, it was found that high

levels of Character and Connection were associated with lower risk behaviors such as substance abuse and delinquency, while high levels in the Confidence dimension was related to participation in these types of behaviors [52]. On the other hand, an investigation focused on the relationship of the 5Cs, sexting and parental control [64] showed that those adolescents who had a good view of themselves (Competence) and low presence of moral standards (Character) participated more in sexting. The social relationships one had with others (Connection) also played an important role, as those who were more isolated were the ones who participated more in active sexting.

The study by Kovačević-Lepojević et al. [65] with Serbian adolescents aged 14–18 years revealed that the Caring, Connection and Confidence components had a strong relationship with life satisfaction, whereas the Character dimension was not significant. The remaining component (Competence) was associated with self-satisfaction. In addition, it stands out that school is the context with which adolescents are the least satisfied, while they are satisfied with themselves, their family, friends and environment.

3.8. The Relationship between the 5Cs and Social and Environmental Contribution

The PYD is a combination of five dimensions, and it was found that a sixth dimension, Contribution, emerges when high scores are obtained in these components. Table 1 shows the relative studies between the associations with social and environmental contributions. In one study, it was found that young adolescents were those who showed higher PYD scores and thus higher Contribution to family, the self and society. The components that were mostly associated with the Contribution were Character, Connection and Competence. In contrast, those adolescents with higher scores for the Confidence component scored lower for Contribution [52].

Regarding the environmental contribution, there were authors who focused their research on examining whether the 5Cs influenced environmental concerns and attitudes in a certain way. Bøhlerengen and Wiium [66] found that higher scores on the 5Cs were related to greater concern for the environment, with the components of Character, Competence and Caring being the most prominent. Furthermore, Giancola et al. [67] found that the Competence and Connection dimensions showed a strong relationship with the values of equity and altruism. Caring and Character components were linked to a greater number of pro-environmental behaviors, such as the reduction in electrical energy consumption and a greater recycling habit.

3.9. The Application of the 5Cs in Intervention Design

Finally, Table 1 shows the intervention of the longitudinal program named “Try volunteering”, implemented in Lithuania by Truskauskaitė-Kunevičienė et al. [41]. This school program aimed to predict the benefits of young people promoting the 5Cs. It was found that those students who participated in the program obtained higher scores in all the Cs, as well as better adjustment compared to those who did not participate. Thus, this unique program was shown to promote and protect mental health and well-being.

4. Discussion

The 5Cs model of Positive Youth Development (PYD) has been of great interest in recent years, positioning youth resources as the focus of intervention to improve both their development and their contribution to others. This has led to an increased production of articles on this model in Europe in high-impact journals, most of which are in the Q1 and Q2 quartiles. Many research studies of the 5Cs model and the validation of the 5Cs instrument have been conducted in several European countries. However, to our knowledge, this is the first scoping review that focuses on including studies related to the 5Cs model with the aim of examining whether the evidence of the model is in line with the North American results in order to examine whether the model is generalizable outside the United States.

In relation to bibliographic criteria, the present review included articles from 2013 to June 2023 that are focused on the use of the 5Cs model in Europe. After applying the previ-

ously defined selection criteria, 23 studies remained to be included, suggesting that despite the wide age of theoretical knowledge on the 5Cs model, few are interventions conducted outside the United States. Most of these articles are under the area of multidisciplinary psychology and developmental psychology. This seems to indicate that the main research field is psychology. As for the origin of the samples, it was very heterogeneous, including several European countries, such as Norway, Spain, Italy, Turkey and Ireland.

Regarding the evidence of the PYD 5Cs model, most studies [34,35,52–57,60,63,65] agreed that the benefits of applying the model were in line with the results of previous United States research [3,17,24,25]. In addition, there were two other general points in common. First of all, there was a different pattern in the development of Cs according to gender. On the one hand, males scored higher in the Confidence and Competence dimensions. On the other hand, women scored similarly for Caring, Character and Connection. This difference may be due to gender stereotypes that still exist in society, where men are taught to focus on achievement and women are taught to be more socially oriented [56]. Secondly, it became evident that at least four Cs (Competence, Confidence, Connection and Character) are indeed related to a better psychological adjustment (lower depressive and anxious symptoms), greater life satisfaction and mental well-being, as well as better academic performance. For their part, D'Urso et al. [43] stated that the components linked to the existence of close friendships (Connection and Caring) predicted the subsequent development of Competence, Confidence and Character. This result could be related to the importance of peers in helping to develop the self-esteem and identity of young people. Likewise, it was also found that sociocultural risk factors (such as disorderly neighborhoods and chaotic family transitions) have a strong impact on these aforementioned components.

There are contradictory results regarding the Caring component according to the type of sample used [61]; it is possible that this component does not follow the “more is better” rule as stated by Geldhof et al. [60]. In this sense, if young people worry too much without having the necessary tools to manage their emotions, they may end up suffering. Regarding the relationship of the 5Cs and risk behaviors, high levels of positive relationships with others (Connection) were shown to be protective of several risk behaviors such as engaging in sexting and substance abuse [52,64].

In terms of the structural validity of the model, it is remarkable that most research has followed a single-factor model of the 5Cs, although there are some studies that have advocated a bifactor model [32,34,51] or a five-factor model where each component performed better separately than together [35]. However, it is possible that the model is best explained by considering each component separately [33]. Perhaps in this way, the knowledge of PYD can be expanded.

In the education area, the components of Competence and Confidence tended to increase in score [57]. These two components have been found to be related to useful strategies for dealing with bullying situations [43]. Furthermore, in combination with Connection—mainly, if there was a good emotional bond (Connection) with peers and parents—they mediated the relationship between empowerment and school satisfaction [34], as well as being a protective factor against bullying experiences in early adolescence. This result may be due to the importance of social support to reach resilience, which in turn may increase the PYD score [54].

There are a few investigations that included the Contribution component in their studies. Despite this, the results seem to indicate that higher scores in the 5Cs are associated with greater environmental concern and social contribution, with the components of Character, Competence and Connection being the most relevant [52,66,67]. These results are in line with the contributions of Lerner and Lerner [20]. Likewise, only one study was found that related identity styles to the 5Cs. In this sense, those adolescents who presented a more decisive and exploratory identity (information-oriented) obtained the best scores in the 5Cs and were the ones who contributed the most to the community [58]. Identity, as Erikson [10] states, is the fundamental task of adolescence. In this sense, it is expected

that young people who are more active and concerned about their development will score better in PYD [17].

Another aspect to mention is that there was only one study that turned out to be an intervention program based on the 5Cs model. This study [41] concluded that interventions based on the 5Cs are health promoting and protective, enhancing the positive development of those who participate as stated by Lerner et al. [17]. Despite this, the limited number of European research articles to date found on the model of 5Cs of PYD may indicate that the cultural diversity of this continent may pose a difficulty in the implementation of models from outside Europe [28]. More research of this type is needed to provide more consistent results.

4.1. Limitations and Strengths

With respect to the limitations of the present scoping review that may affect the results and discussions raised, it should be noted that both the language (English) and the medium of communication (only scientific articles) may have excluded other research papers. Likewise, only the Web of Science database was used; future research should incorporate more international databases. Another limitation is with regard to the type of design used in the articles, most of which followed a cross-sectional design. Finally, in relation to the nature of scoping reviews, we should acknowledge that the personal bias may affect the selection of studies and interpretation of their results.

In light of these limitations, there are other positive aspects to highlight. Firstly, research is described in very diverse areas of the European continent such as the east (such as Croatia and Turkey), the north (Norway) and the south (such as Spain and Portugal). Secondly, it is notable that most studies included large sample sizes. The studies with the largest sample were those that included samples from several European countries, such as Fernandes et al. [32], or were of longitudinal design, such as D'Urso et al. [43]. Most investigations had, on average, sample sizes (N) between 1000 and 3000 adolescents. Thirdly, there seems to be a greater use of standardized scales, as most studies used the PYD—Short Form (SF) by Geldhof et al. [33] to measure the 5Cs of PYD, which facilitated the comparison of results.

4.2. Implications for Research, Policy and Practice

Regarding research, it is a remarkable fact that no scientific articles were found from some European countries, such as France or Germany, among others, even though these countries are likely known to provide good models of youth empowerment actions [28]. However, more research is needed in the context of the European continent to know if the 5Cs model can be generalized. Secondly, more emphasis should be focused on longitudinal studies to predict relationships. Thirdly, the vast majority of research did not include common mental disorders that influence adolescence such as Attention Deficit Hyperactivity Disorder (ADHD) or Eating Disorders (EDs). There were studies that have included depressive and anxious symptoms, but they were not based on a clinical sample. Likewise, self-report instruments are used instead of resorting to the clinical interview, which results in the symptomatology always being discussed but not the clinical profile itself. Fourth, there were studies that have used different instruments to measure the 5Cs of the PYD, although they are increasingly relying on the use of the PYD—Short Form (SF) by Geldhof et al. [33]. Nevertheless, care should be taken to extrapolate conclusions when studies measure the same variable with different instruments. Fifth, according to the results presented, it seems relevant to treat PYD not only as a global factor, but as a result of the analysis of the 5Cs separately. Sixth, all the articles included different characteristics in terms of the type of sample used, coming from different educational environments such as high school or university. These samples are usually chosen for convenience, but their provenance should be aleatory, as they exclude young people who are in the labor sphere or who do not have access to education or formal work. Therefore, researchers should consider these other youth contexts whose results may differ from those coming

from the educational setting. Seventh, PYD intervention and promotion programs should fully describe all the aspects of PYD to facilitate comparison with other programs and to determine which components of the program are the most effective ones [27]. Finally, few studies have considered moderator variables and more research is needed to reach appropriate conclusions avoiding sampling errors.

As a future line of research, it is recommended that more intervention programs based on the 5Cs should be designed to test the kinds of changes and how long they last, as highlighted by Catalano et al. [3]. Secondly, the 5Cs model should be tested in other contexts such as Oceania and Asia, as well as in developing countries. Another possible future line of research is to consider the work context, since no studies have been observed that take this type of environment after the educational stage. Finally, it would be interesting to consider how social networks (e.g., TikTok, Instagram) may affect the positive development of young people.

In relation to public policies, the vulnerability that many young people present could be favored with extracurricular programs or leisure activities in the community, since it has been proven effective both in promoting PYD and reducing risk behaviors. In this regard, it is recommended to keep gender differences in mind to promote the 5Cs model as best as possible. Universities could adopt the model that is available in the Spanish Network of Health Promoting Universities (REUPS) (<https://www.unisaludables.es/es/>, accessed on 15 November 2023).

Finally, several recommendations for practice are presented. First, it is important to take into account the 5C indicators to create effective intervention programs, as have been performed in the United States. These programs have been shown to promote PYD and reduce risky behaviors [15,21,22]. Second, interventions should be made to encourage an information-oriented identity style, since this profile has been associated with better PYD and greater benefits to the community [54]. Third, intervention programs should include emotional regulation tools for youths, so that the Caring component would not obtain contradictory results and excessive empathy could be prevented from causing discomfort. Fourth, considering the influence of peers in the adolescent stage, it would be appropriate to offer more safe contexts where friends can support each other both in and out of school, in order to facilitate PYD. Fifth, according to Catalano et al. [3] for PYD interventions to be more effective, the programs should have a minimum duration of nine months; include social, behavioral, emotional, cognitive, and moral competencies; develop a sense of self-efficacy; and provide guidance to adults to establish appropriate norms for youth.

5. Conclusions

The findings of the present scoping review have provided some answers to the overall aim of this manuscript. Thus, the evidence of the 5Cs model of PYD in Europe is in line with studies from the United States [3,17,20,22], extending the generalization of the 5Cs model of PYD to other contexts. Nevertheless, more studies are needed from different countries in which adolescents are involved beyond the school setting, such as the work context. Europe seems to be in a first stage of theoretical research on the 5Cs model, and the step that should start now would be the intervention to reach a third stage, which could be the design of public policy measures for youth. There is a need to implement interventions based on the 5Cs, since the results of the present scoping review supported this. These programs can be effective for a healthy transition to adulthood.

Author Contributions: Conceptualization, A.D.M.-B. and D.G.-B.; writing—original draft preparation, A.D.M.-B.; writing—review and editing, A.D.M.-B. and D.G.-B.; supervision, A.D.M.-B. and D.G.-B.; funding acquisition, D.G.-B. All authors have read and agreed to the published version of the manuscript.

Funding: This research received funding from the INVESTIGO PROGRAM within the Recovery, Transformation and Resilience Plan for Andalusia, granted to A.D.M.-B., and the Excellence Project of the Junta de Andalucía, granted to D.G.-B., with the title: Positive Youth Development in Andalusian

University Students: Longitudinal Analysis of Gender Differences in Well-Being Trajectories, Health-Related Lifestyles and Social and Environmental Contribution (PROYEXCEL_00303).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data are contained within the article.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Alsinet, C.; Pérez, R.; Agullo, M. Adolescentes y percepciones del riesgo. *J. Youth Stud.* **2003**, *18*, 90–101.
2. Zacarés-González, J.J.; Iborra-Cuellar, A.; Tomás-Miguel, J.M.; Serra-Desfilis, E. El desarrollo de la identidad en la adolescencia y adultez emergente: Una comparación de la identidad global frente a la identidad en dominios específicos. *Ann. Psychol.* **2009**, *25*, 316–329.
3. Catalano, R.F.; Berglund, M.L.; Ryan, J.A.M.; Lonczak, H.S.; Hawkins, J.D. Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prev. Treat.* **2002**, *5*, 15. [CrossRef]
4. Sahar, I.; Rossland, M.F.; Wiium, N. Risk behaviors among young people: The role of developmental assets. *EREBEA* **2020**, *10*, 31–52. [CrossRef]
5. Arnett, J.J.; Žukauskienė, R.; Sugimura, K. The new life stage of emerging adulthood at ages 18–29 years: Implications for mental health. *Lancet Psychiatry* **2014**, *1*, 569–576. [CrossRef] [PubMed]
6. Sawyer, S.M.; Azzopardi, P.S.; Wickremarathne, D.; Patton, G.C. The age of adolescence. *Lancet Child Adolesc. Health* **2018**, *2*, 223–228. [CrossRef] [PubMed]
7. Arnett, J.J. Stanley Hall’s Adolescence: Brilliance and nonsense. *Hist. Psychol.* **2006**, *9*, 186–197. [CrossRef] [PubMed]
8. Hall, G.S. *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion, and Education*; D. Appleton & Company: Boston, MA, USA, 1904; Available online: <https://psycnet.apa.org/doi/10.1037/10616-000> (accessed on 3 November 2023).
9. Shek, D.T.; Dou, D.; Zhu, X.; Chai, W. Positive youth development: Current perspectives. *Adolesc. Health Med. Ther.* **2019**, *10*, 131–141. [CrossRef]
10. Erikson, E.H. Identity and the life cycle: Selected papers. *Psychol. Issues* **1959**, *1*, 1–171.
11. Steinberg, L.; Lerner, R.M. The scientific study of adolescence: A brief history. *J. Early Adolesc.* **2004**, *24*, 45–54. [CrossRef]
12. Brown, B.B.; Prinstein, M.J. (Eds.) *Encyclopedia of Adolescence*; Elsevier: Amsterdam, The Netherlands, 2011.
13. Lerner, R.M.; Steinberg, L. *Handbook of Adolescent Psychology, Volume 1: Individual Bases of Adolescent Development*; John Wiley & Sons: New York, NY, USA, 2009.
14. Lerner, R.M.; Lerner, J.V.; Murry, V.M.; Smith, E.P.; Bowers, E.P.; Geldhof, G.J.; Buckingham, M.H. Positive youth development in 2020: Theory, research, programs, and the promotion of social justice. *J. Res. Adolesc.* **2021**, *31*, 1114–1134. [CrossRef] [PubMed]
15. Geldhof, G.J.; Bowers, E.P.; Mueller, M.K.; Napolitano, C.M.; Callina, K.S.; Lerner, R.M. Longitudinal Analysis of a Very Short Measure of Positive Youth Development. *J. Youth Adolesc.* **2014**, *43*, 933–949. [CrossRef]
16. Benson, P.L.; Scales, P.C.; Hamilton, S.F.; Sesma, A. Positive Youth Development: Theory, Research, and Applications. In *Handbook of Child Psychology: Theoretical Models of Human Development*; Lerner, R.M., Damon, W., Eds.; John Wiley & Sons: New York, NY, USA, 2006; pp. 894–941. [CrossRef]
17. Lerner, R.M.; Lerner, J.V.; Almerigi, J.B.; Theokas, C.; Phelps, E.; Gestsdottir, S.; Naudeau, S.; Jelicic, H.; Alberts, A.; Ma, L.; et al. Positive Youth Development, Participation in Community Youth Development Programs, and Community Contributions of Fifth-Grade Adolescents: Findings From the First Wave Of the 4-H Study of Positive Youth Development. *J. Early Adolesc.* **2005**, *25*, 17–71. [CrossRef]
18. Lerner, R.M. The positive youth development perspective: Theoretical and empirical bases of a strengths-based approach to adolescent development. In *The Oxford Handbook of Positive Psychology*; Lopez, S.J., Snyder, C.R., Eds.; Oxford University Press: Cary, NC, USA, 2009; pp. 149–163.
19. Lerner, R.M. *Liberty: Thriving and Civic Engagement among America’s Youth*; Sage: Newcastle upon Tyne, UK, 2004. [CrossRef]
20. Lerner, R.M.; Lerner, J.V. *The Positive Development of Youth. Report of the Findings from the Seven Years of the 4-H Study of Positive Youth Development*; Institute for Applied Research in Youth Development, Tufts University: Medford, MA, USA, 2011.
21. Lerner, R.M.; Lerner, J.V.; Urban, J.B.; Zaff, J. Evaluating programs aimed at promoting positive youth development: A relational development systems-based view. *Appl. Dev. Sci.* **2016**, *20*, 175–187. [CrossRef]
22. Jelicic, H.; Bobek, D.L.; Phelps, E.; Lerner, R.M.; Lerner, J.V. Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H Study of Positive Youth Development. *Int. J. Behav. Dev.* **2007**, *31*, 263–273. [CrossRef]
23. Gestsdóttir, S.; Lerner, R.M. Intentional self-regulation and positive youth development in early adolescence: Findings from the 4-h study of positive youth development. *Dev. Psychol.* **2007**, *43*, 508–521. Available online: <https://psycnet.apa.org/doi/10.1037/0012-1649.43.2.508> (accessed on 3 November 2023). [CrossRef]

24. Gardner, M.; Roth, J.; Brooks-Gunn, J. Adolescents' participation in organized activities and developmental success two and eight years after high school: Do sponsorship, duration, and intensity matter? *Dev. Psychol.* **2008**, *44*, 814–830. [[CrossRef](#)] [[PubMed](#)]
25. Larson, R.; Jarrett, R.; Hansen, D.; Pearce, N.; Sullivan, P.; Walker, K.; Watkins, N.; Wood, D. Organized youth activities as contexts of positive development. In *Positive Psychology in Practice*; Linley, A., Joseph, S., Eds.; John Wiley & Sons: New York, NY, USA, 2004; pp. 540–560.
26. Waid, J.; Uhrich, M. A scoping review of the theory and practice of positive youth development. *Br. J. Soc. Work* **2020**, *50*, 5–24. [[CrossRef](#)]
27. Curran, T.; Wexler, L. School-based positive youth development: A systematic review of the literature. *J. Sch. Health* **2017**, *87*, 71–80. [[CrossRef](#)]
28. Busiol, D.; Shek, D.T.L.; Lee, T.Y. A review of adolescent prevention and positive youth development programs in non-English speaking European countries. *Int. J. Disabil. Hum. Dev.* **2016**, *15*, 321–330. [[CrossRef](#)]
29. Jones, G.J.; Edwards, M.B.; Bocarro, J.N.; Bunds, K.S.; Smith, J.W. An integrative review of sport-based youth development literature. *Sport Soc.* **2017**, *20*, 161–179. [[CrossRef](#)]
30. Dimitrova, R.; Buzea, C.; Wiium, N.; Kosic, M.; Stefanel, D.; Chen, B.B. Positive Youth Development in Bulgaria, Italy, Norway and Romania: Testing the Factorial Structure and Measurement Invariance of the 5Cs Model. In *Handbook of Positive Youth Development. Springer Series on Child and Family Studies*; Dimitrova, R., Wiium, N., Eds.; Springer: Cham, Switzerland, 2021; pp. 267–281. [[CrossRef](#)]
31. Urrútia, G.; Bonfill, X. Declaración PRISMA: Una propuesta para mejorar la publicación de revisiones sistemáticas y metaanálisis. *Med. Clin.* **2010**, *135*, 507–511. [[CrossRef](#)] [[PubMed](#)]
32. Fernandes, D.; Pivec, T.; Dost-Gözkán, A.; Uka, F.; Gaspar de Matos, M.; Wiium, N. Global overview of youth development: Comparison of the 5Cs and developmental assets across six countries. *Front. Psychol.* **2021**, *12*, 685316. [[CrossRef](#)] [[PubMed](#)]
33. Geldhof, G.J.; Bowers, E.P.; Boyd, M.J.; Mueller, M.K.; Napolitano, C.M.; Schmid, K.; Lerner, J.V.; Lerner, R.M. Creation of Short and Very Short Measures of the 5Cs of Positive Youth Development. *J. Res. Adolesc.* **2014**, *24*, 163–176. [[CrossRef](#)]
34. Aardal, E.; Holsen, I.; Diseth, Å.; Larsen, T. The 5Cs of Positive Youth Development in a school context; gender and mediator effects. *Sch. Psychol. Int.* **2018**, *39*, 3–21. [[CrossRef](#)]
35. Holsen, I.; Geldhof, J.; Larsen, T.; Aardal, E. The 5Cs of positive youth development in Norway: Assessment and associations with positive and negative outcomes. *Int. J. Behav. Dev.* **2017**, *41*, 559–569. [[CrossRef](#)]
36. Eisenberg, N.; Fabes, R.A.; Murphy, B.; Karbon, M.; Smith, M.; Maszk, P. The relations of children's dispositional empathy-related responding to their emotionality, regulation, and social functioning. *Dev. Psychol.* **1996**, *32*, 195–209. [[CrossRef](#)]
37. Benson, P.L.; Leffert, N.; Scales, P.C.; Blyth, D.A. Beyond the 'village' rhetoric: Creating healthy communities for children and adolescents. *Appl. Dev. Sci.* **1998**, *2*, 138–159. [[CrossRef](#)]
38. Harter, S. Developmental perspectives on the self-system. In *Handbook of Child Psychology*; Hetherington, E.M., Ed.; John Wiley & Sons: New York, NY, USA, 1983; pp. 275–285.
39. Harter, S. *Manual for the Self-Perception Profile for Adolescents*; University of Denver: Denver, CO, USA, 1988.
40. Currie, C.; Zanotti, C.; Morgan, A.; Currie, D.; de Looze, M.; Roberts, C.; Samdal, O.; Smith, O.R.; Barnekow, V. *Social Determinants of Health and Well-Being among Young People*; World Health Organization: Copenhagen, Denmark, 2012.
41. Truskauskaitė-Kunevičienė, I.; Romera, E.; Ortega-Ruiz, R.; Žukauskienė, R. Promoting positive youth development through a school-based intervention program Try Volunteering. *Curr. Psychol.* **2020**, *39*, 705–719. [[CrossRef](#)]
42. Arnold, M.E.; Nott, B.D.; Meinhold, J.L. *The Positive Youth Development Inventory (PYDI)*; Oregon State University: Corvallis, OR, USA, 2012.
43. D'Urso, G.; Symonds, J.; Pace, U. Positive youth development and being bullied in early adolescence: A sociocultural analysis of national cohort data. *J. Early Adolesc.* **2021**, *41*, 577–606. [[CrossRef](#)]
44. Radloff, L.S. The CES-D scale: A self-report depression scale for research in the general population. *Appl. Psychol. Meas.* **1977**, *1*, 385–401. [[CrossRef](#)]
45. Kroenke, K.; Spitzer, R.L.; Williams, J.B. The PHQ-9: Validity of a brief depression severity measure. *J. Gen. Intern. Med.* **2001**, *16*, 606–613. [[CrossRef](#)] [[PubMed](#)]
46. Salvador, M.; Matos, A.P.; Oliveira, S.; March, J.S.; Arnarson, E.Ö.; Carey, S.C.; Craighead, W.E. A Escala Multidimensional de Ansiedade para Crianças (MASC): Propriedades psicométricas e análise fatorial confirmatória numa amostra de adolescentes portuguesas. *Iberoam. J. Psychol. Diagn. Assess.* **2017**, *3*, 33–46. [[CrossRef](#)]
47. Tennant, R.; Hiller, L.; Fishwick, R.; Platt, S.; Joseph, S.; Weich, S.; Parkinson, J.; Secker, J.; Stewart-Brown, S. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Development and UK validation. *Health Qual. Life Outcomes* **2007**, *5*, 63–76. [[CrossRef](#)] [[PubMed](#)]
48. Stewart, S.; Janmohamed, K. *Warwick-Edinburgh Mental Wellbeing Scale: User Guide Version 1*; NHS Health Scotland: Scotland, UK, 2008.
49. Huebner, E.S. Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychol. Assess.* **1994**, *6*, 149–158. [[CrossRef](#)]
50. Novak, M.; Šutić, L.; Gačal, H.; Roviš, D.; Mihić, J.; Maglica, T. Structural model of 5Cs of positive youth development in Croatia: Relations with mental distress and mental well-being. *Int. J. Adolesc. Youth* **2023**, *28*, 50–68. [[CrossRef](#)]

51. Erentaitė, R.; Raižienė, S. Lithuanian version of measure of positive youth development based on the 5Cs model. *Eur. J. Dev. Psychol.* **2015**, *12*, 701–717. [[CrossRef](#)]
52. Conway, R.J.; Heary, C.; Hogan, M.J. An evaluation of the measurement properties of the 5Cs model of positive youth development. *Front. Psychol.* **2015**, *6*, 1941. [[CrossRef](#)]
53. Gómez-Baya, D.; Reis, M.; Gaspar de Matos, M. Positive youth development, thriving and social engagement: An analysis of gender differences in Spanish youth. *Scand. J. Psychol.* **2019**, *60*, 559–568. [[CrossRef](#)]
54. Gómez-Baya, D.; Tomé, G.; Reis, M.; Gaspar de Matos, M. Long-term self-regulation moderates the role of internal resources for resilience in positive youth development in Portugal. *J. Genet. Psychol.* **2020**, *181*, 127–149. [[CrossRef](#)]
55. Gómez-Baya, D.; Babić Čikeš, A.; Hirnstein, M.; Kurtović, A.; Vrdoljak, G.; Wium, N. Positive youth development and depression: An examination of gender differences in Croatia and Spain. *Front. Psychol.* **2022**, *12*, 6282. [[CrossRef](#)] [[PubMed](#)]
56. Manrique-Millones, D.; Gómez-Baya, D.; Wium, N. The Importance of the 5Cs of Positive Youth Development to Depressive Symptoms: A Cross-Sectional Study with University Students from Peru and Spain. *Behav. Sci.* **2023**, *13*, 280–295. [[CrossRef](#)] [[PubMed](#)]
57. Kozina, A.; Wium, N. The development of the 5Cs of positive youth development in a school year: A 3-wave longitudinal study of Slovenian youth during the COVID-19 pandemic. *Front. Psychol.* **2023**, *14*, 982856. [[CrossRef](#)] [[PubMed](#)]
58. Crocetti, E.; Erentaitė, R.; Žukauskienė, R. Identity Styles, Positive Youth Development, and Civic Engagement in Adolescence. *J. Youth Adolesc.* **2014**, *43*, 1818–1828. [[CrossRef](#)] [[PubMed](#)]
59. Kozina, A.; Wium, N.; González, J.M.; Dimitrova, R. Positive youth development and academic achievement in Slovenia. *Child Youth Care Forum* **2019**, *48*, 223–240. [[CrossRef](#)]
60. Geldhof, G.J.; Larsen, T.; Urke, H.B.; Holsen, I.; Lewis, H.; Tyler, C.P. Indicators of positive youth development can be maladaptive: The example case of caring. *J. Adolesc.* **2019**, *71*, 1–9. [[CrossRef](#)] [[PubMed](#)]
61. Kozina, A.; Gómez-Baya, D.; Gaspar de Matos, M.; Tomé, G.; Wium, N. The association between the 5Cs and anxiety—Insights from three countries: Portugal, Slovenia, and Spain. *Front. Psychol.* **2021**, *12*, 668049. [[CrossRef](#)] [[PubMed](#)]
62. Tomé, G.; Gaspar de Matos, M.; Reis, M.; Gómez-Baya, D.; Coelho, F.; Wium, N. Positive youth development and wellbeing: Gender differences. *Front. Psychol.* **2021**, *12*, 2343. [[CrossRef](#)]
63. Urke, H.B.; Holsen, I.; Larsen, T. Positive youth development and mental well-being in late adolescence: The role of body appreciation. findings from a prospective study in Norway. *Front. Psychol.* **2021**, *12*, 696198. [[CrossRef](#)]
64. Pistoni, C.; Martinez Damia, S.; Alfieri, S.; Marta, E.; Confalonieri, E.; Pozzi, M. What are the predictors of sexting behavior among adolescents? The positive youth development approach. *J. Adolesc.* **2023**, *95*, 661–671. [[CrossRef](#)]
65. Kovačević-Lepojević, M.; Gutvajn, N.; Tadić, V. Life satisfaction and positive youth development in Serbia. *Sociologija* **2023**, *65*, 217–232. [[CrossRef](#)]
66. Böhlerengen, M.; Wium, N. Environmental attitudes, behaviors, and responsibility perceptions among Norwegian youth: Associations with positive youth development indicators. *Front. Psychol.* **2022**, *13*, 844324. [[CrossRef](#)] [[PubMed](#)]
67. Giancola, M.; Pino, M.C.; D’Amico, S. Exploring the psychosocial antecedents of sustainable behaviors through the lens of the positive youth development approach: A Pioneer study. *Sustainability* **2021**, *13*, 12388. [[CrossRef](#)]
68. Lerner, R.M. *Scoring protocol: Measure of PYD (4H Study of PYD)*; Institute for Applied Research in Youth Development, Tufts University: Medford, OR, USA, 2010.
69. Davis, M. Measuring individual differences in empathy: Evidence for a multidimensional approach. *J. Personal. Soc. Psychol.* **1983**, *44*, 113–126. [[CrossRef](#)]
70. Derogatis, L.R.; Melisaratos, N. The brief symptom inventory: An introductory report. *Psychol. Med.* **1983**, *13*, 595–605. [[CrossRef](#)] [[PubMed](#)]
71. Lovibond, S.H.; Lovibond, P.F. *Manual for the Depression Anxiety Stress Scales*, 2nd ed.; Psychology Foundation: Sydney, Australia, 1995.
72. Lerner, R.M.; Benson, P.L. *Developmental Assets and Asset Building Communities*; Springer: Boston, MA, USA, 2003.
73. Monitoring the Future. *National Survey on Drug Use, 1975–2000*; National Institute on Drug Abuse: Bethesda, MD, USA, 2000.
74. Ozer, E.J.; Schotland, M. Psychological empowerment among urban youth: Measure development and relationship to psychosocial functioning. *Health Educ. Behav.* **2011**, *38*, 348–356. [[CrossRef](#)] [[PubMed](#)]
75. Zimet, G.D.; Dahlem, N.W.; Zimet, S.G.; Farley, G.K. The multidimensional scale of perceived social support. *J. Personal. Assess.* **1988**, *52*, 30–41. [[CrossRef](#)]
76. Lyubomirsky, S.; Lepper, H.S. A measure of subjective happiness: Preliminary reliability and construct validation. *Soc. Indic. Res.* **1999**, *46*, 137–155. [[CrossRef](#)]
77. Gaspar de Matos, M.G.; Santos, T.; Reis, M. *BePositive Project: Positive Youth Development (PYD) in Adolescents: Portuguese Report*; Lambert Academic Publishing: Berlin, Germany, 2017.
78. Wium, N. Positive Youth Development in a Cross-National Perspective. 2023. Available online: <http://www.uib.no/en/rg/sipa/pydcrossnational>. (accessed on 5 November 2023).
79. CHKS. *Resilience Module*; California Healthy Kids Program Office: Los Alamitos, CA, USA, 2000.
80. Moilanen, K.L. The adolescent self-regulatory inventory: The development and validation of a questionnaire of short-term and long-term self-regulation. *J. Youth Adolesc.* **2007**, *36*, 835–848. [[CrossRef](#)]

81. OECD. *PISA 2015 Technical Report*; OECD Publishing: Paris, France, 2017; Available online: <https://www.oecd.org/pisa/publications/> (accessed on 5 November 2023).
82. Gaspar, T.; Matos, M.G.; Ribeiro, J.L.; Leal, I.; Erhart, M.; Ravens-Sieberer, U. Health-related quality of life in children and adolescents: Subjective well-being. *Span. J. Psychol.* **2012**, *15*, 177–186. [[CrossRef](#)]
83. Matos, M.G.; Simões, C.R.; Aventura Social Team. *A Saúde dos Adolescentes Portugueses em Tempos de Recessão. Estudo 2014 do Health Behaviour in School Aged Children (HBSC) [The Health of Portuguese Teenagers in Times of Recession. 2014 Study of Health Behavior in School Aged Children (HBSC)]*; FMH/MS/IHMT: Lisboa, Portugal, 2015.
84. Klettke, B.; Hallford, D.J.; Mellor, D.J. Sexting prevalence and correlates: A systematic literature review. *Clin. Psychol. Rev.* **2014**, *34*, 44–53. [[CrossRef](#)] [[PubMed](#)]
85. Delforterie, M.J.; Verweij, K.J.; Creemers, H.E.; van Lier, P.A.; Koot, H.M.; Branje, S.J.; Huizink, A.C. Parental solicitation, parental control, child disclosure, and substance use: Native and immigrant Dutch adolescents. *Ethn. Health* **2016**, *21*, 535–550. [[CrossRef](#)] [[PubMed](#)]
86. Tylka, T.L.; Wood-Barcalow, N.L. The Body Appreciation Scale2: Item refinement and psychometric evaluation. *Body Image* **2015**, *12*, 53–67. [[CrossRef](#)] [[PubMed](#)]
87. Kozina, A. The LAOM Multidimensional Anxiety Scale for measuring anxiety in children and adolescents: Addressing the psychometric properties of the scale. *J. Psychoeduc. Assess.* **2012**, *30*, 264–273. [[CrossRef](#)]
88. Spitzer, R.L.; Kroenke, K.; Williams, J.B.; Löwe, B. A brief measure for assessing generalized anxiety disorder: The GAD-7. *Arch. Intern. Med.* **2006**, *166*, 1092–1097. [[CrossRef](#)]
89. Tapia-Fonllem, C.; Corral-Verdugo, V.; Fraijo-Sing, B.; Durón-Ramos, M.F. Assessing sustainable behavior and its correlates: A measure of pro-ecological, frugal, altruistic and equitable actions. *Sustainability* **2013**, *5*, 711–723. [[CrossRef](#)]
90. Wray-Lake, L.; Flanagan, C.A.; Osgood, D.W. Examining trends in adolescent environmental attitudes, beliefs, and behaviors across three decades. *Environ. Behav.* **2010**, *42*, 61–85. [[CrossRef](#)]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.