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Chapter 5

Positive Youth Development in Peru: A Study of Developmental Assets, 5Cs and Mental Health

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Abstract: The term "Positive Youth Development" (PYD) has been defined in a number of different ways, but it generally refers to an emphasis on the developmental characteristics that contribute to effective outcomes and behaviors of young people. To better understand the patterns and relationships of two of the main PYD models, the present study examined the associations between developmental assets, 5Cs (competence, confidence, connection, caring and character) and mental health in a sample of young Peruvians. Cross-sectional data was collected from 503 young participants from Peru (M_{age} = 19.7, SD = 3.9). The findings of structural equation modeling indicated a positive relationship between the 5Cs and developmental assets, as well as a significant association between the 5Cs and mental health, and a mediator role of the 5Cs in the relationship of developmental assets and mental health. Furthermore, one factor of external developmental assets (i.e. Constructive use of Time) was the only dimension with a below average score. We discussed the importance of implementing a PYD perspective in this particular setting.

Keywords: 5Cs, developmental assets, Peru, Positive Youth Development, mental health, structural equation modeling

Introduction

The perspective of Positive Youth Development (PYD) emerged during the 1990s, looking into adolescence as a period full of resources, conversely to negative personal theories of behavior in which negative traits were attributed to youth and identified as problems to be solved (Brendtro et al., 1990). According to the PYD perspective, the conditions of the psychosocial environment are of utmost importance for the development and well-being of young people (Lerner et al., 2005). The objective of PYD is therefore to enhance the skills of young people, while highlighting the role of the community as a mobilizing agent since it is the environment in which young people develop, noting that the community encompasses the family, educational institution, neighborhood and peer group, among others (Damon, 2004; Lerner et al., 2005; Lerner et al., 2013).

There are several theoretical models that work under the PYD perspective, some being: The Targeting Life Skills (Hendricks, 1996; 1998), The Four Essential Elements (Brendtro et al., 1990; Kress, 2003), Community Action Framework for Youth Development (Connell et al., 2000), the 5Cs (Lerner, 1995) and the developmental assets (The Search Institute, 1997; 2007), with the latter two being among the most important due to their extensive empirical support.

Tenets of Positive Youth Development: The 5Cs and Developmental Assets

Richard Lerner and his research team described the importance of offering development opportunities to adolescents, grouped into the 5Cs (competence, confidence, connection, caring and character), which are interconnected indicators that together obtain positive results in the mental and psychological health of young persons (1995, 2005). According to the 5Cs, *Competence* denotes the capacity and ability of the person to face various challenges and circumstances of life; *Confidence* is a positive belief about the value and efficacy of personal resources; *Connection* is related to positive interpersonal relationships in different development contexts, such as family, peers and communities; *Character* regulates behaviors towards social functioning, and finally, *Caring* implies having a sense of sympathy or empathy towards others. The definitions of the 5Cs have evolved over time. Lerner suggested *Contribution* as a sixth C, identifying it as one of the essential components of youth development (Lerner,

2004). Furthermore, recent research has expanded upon a new operationalization by including a seventh C of *Creativity* as a resource for encouraging youth flourishing in diverse social and cultural settings (Abdul Kadir et al., 2021; Dimitrova et al., 2021; Manrique-Millones et al., 2021a).

During the 1990s, Peter Benson and the Search Institute developed a theory for youth development based on resilience (Benson et al., 1998; Benson et al., 1999). The goal of the new approach was to highlight resources accessible to young people that would promote their development, with emphasis on these individuals' accomplishments rather than their weaknesses. The resilience method focuses on both the internal and external qualities that young people already possess, with the idea that developing these strengths will promote positive outcomes and help prevent undesired behaviors in young people.

Research studies on the Developmental Assets Model hold that internal and external factors are crucial in fostering PYD (Adams et al., 2019; Benson et al., 1999; Wiium et al., 2019).

Cross-cultural studies have highlighted the heterogeneity and use of external and internal assets. For example, African countries such as Ghana seem to prioritize internal assets similarly to studies in Norwegian youth. In contrast, studies on youth from Slovenia reported more external assets, specifically support and empowerment (Fernandes et al., 2021).

Growing research has corroborated the prevalence of developmental assets in multiple samples from outside the United States (US), namely Africa (Adams et al., 2018), Europe (Issa et al., 2020), and Latin America (Manrique-Millones et al., 2021), as well as their psychometric qualities across other ethnic groups and nations, although the assets were determined based on youth samples from the US (Scales et al., 2017; Wiium et al., 2018). It has been empirically demonstrated that developmental assets play a crucial role in achieving favorable results and protecting young people against a wide range of risks and problematic behaviors. Although research on PYD is on the rise in different countries around the world, empirical studies using more than one theoretical model simultaneously have remained scarce in South America.

Positive Youth Development and Mental Health

As mentioned above, the PYD perspective shares the idea that every young person has the potential for successful and healthy development, and as such

it has been associated with a number of positive outcomes in diverse areas, such as educational settings (Adams et al., 2019; Ardoin et al., 2022; Novak et al., 2021), physical activities and sports (Bateman et al., 2020; Martins et al., 2021), nutrition (Edwards & Cheeley, 2016; Wiium, 2021); climate change (Kabir & Wiium, 2021; Pereira & Freire, 2021), civic engagement (Law & Atkinson, 2021; Middaugh et al., 2017), and mental health (Kabir et al., 2021; Manrique-Millones et al., 2021; Onyeka et al., 2022), among others.

Increasing research has associated the 5Cs with mental health (Kabir et al., 2021; Manrique- Millones et al., 2023; Tomé et al., 2021). Gómez-Baya et al. (2022) conducted a study with young Spanish and Croatian participants and revealed an inverse association of confidence and connection with depression symptoms. A cross-cultural study in a sample of youths from Portugal, Slovenia and Spain found a significant association between anxiety and the 5Cs across the three countries (Kozina et al., 2021).

The results of several studies support a positive relationship between developmental assets and mental health. A study conducted in South America with Peruvian and Colombian emergent adults, reported a positive correlation between mental health indicators and developmental assets (Manrique-Millones et al., 2021b). Similarly, Wiium et al. (2021) reported that Norwegian youth with poor mental health experienced fewer developmental assets than their peers.

Peruvian Youth in Context and National Policies

The National Institute of Statistics and Informatics (INEI, 2022) reported that in 2022 the youth population represented 27% of the total Peruvian population. Among these youths, 3 out of 10 adolescents do not finish high school at the normative age, and 17 out of every 100 adolescents and young people between the ages of 15 and 29 do not study or work.

The National Youth Policy Law was enacted in Peru in 2019 to address the current situation of the young population, with a projection to the year 2030. This law is aimed at achieving a future situation in which at least 8 out of 10 young people between the ages of 15 and 29 age improve their integral development with a subsequent effective participation in society (Secretaría Nacional de la Juventud, 2019). Nevertheless, since its promulgation in 2019, this law has not yet had a regulatory channel and thus has not been enforced (Mesa de Concertación para la Lucha contra la Pobreza, 2022).

Despite the period of sustained economic growth Peru has undergone in the last 17 years, important improvement is needed in development indicators in the areas of education, work and mental health (OECD, 2017).

The Present Study

The present study evaluates a structural model involving developmental assets, the 5Cs and mental health in a sample of Peruvian young participants. We aimed:

1. To examine the relationship between developmental assets (internal and external) and mental health.
2. To analyze the association of developments assets (internal and external) with the 5Cs.
3. To investigate the association between the 5Cs and mental health.
4. And to study the indirect effects (mediation) of the 5Cs and the association between developmental assets and mental health. See Figure 5.1.

First, we hypothesized that there is a positive relationship between developmental assets and mental health based on previous literature. Second, we expect to find a positive association between the variables (i.e., developmental assets and 5Cs). Third, we expect a positive association between the 5Cs and mental health. Finally, we hypothesized the mediation effect of the 5Cs on the association between developmental assets and mental health.

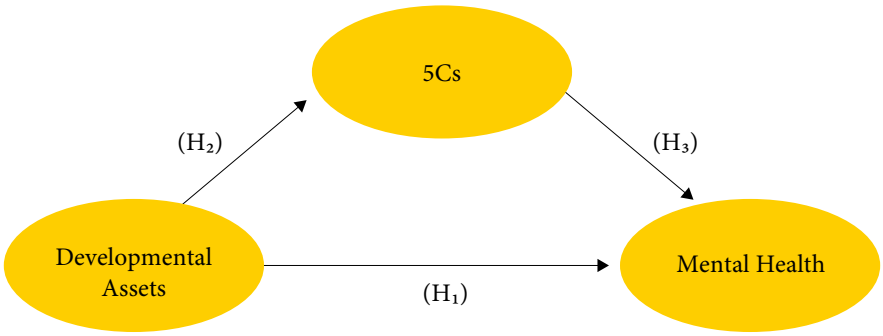

Figure 5.1 *Theoretical Model Proposed of the Effects of Developmental Assets on Mental Health, Through the 5Cs of Positive Youth Development.*

Method

Participants

Cross-sectional data on 503 young participants in Peru (60% females) was collected. The participant ages ranged from 15 to 29 (M_{age} = 19.7, SD = 3.9). In addition, the level of education of the parents was recorded, with 25.5% of youths stating that their fathers had a university degree while 0.8% were illiterate, and 19.9% reporting that their mothers had a university degree while 1.2% had no education.

Instruments

The 5Cs of Positive Youth Development-Short Form (Geldhof et al., 2014; Manrique-Millones et al., 2023)

This 34-item scale assesses indicators of healthy youth development across five dimensions. *Competence* (e.g., "I do very well in my class work at school/university."), *Confidence* (e.g., "I am happy with myself most of the time"), *Character* (e.g., "I usually act the way I am supposed to."), *Caring* (e.g., "When I see another person who is hurt or upset, I feel sorry for them") and *Connection* (e.g., "I feel like an important member of my local community").

Participants were asked to rate their opinion on a five-point Likert-style scale, where 1 indicates "strongly disagree" and 5 indicates "strongly agree. For the Character subscale, the same Likert-type scale was used, with 1 denoting "not important" and 5 denoting "extremely important". Finally, for the Caring subscale, a five-point Likert-type scale was given, with 1 being "not at all like me" and 5 being "very much like me".

Mean scores were used to generate the values for each of the 5Cs of the PYD construct, with higher scores representing higher levels of each C. All the McDonald's omega coefficients for the subscales in this study were satisfactory, ranging from ω = .76 to ω = .95.

Developmental Assets (Search Institute, 2007)

The developmental assets comprise a total of 58 items that evaluate personal, family, school and related resources from the world of peers and the neighborhood, incorporating support and experiences to promote positive development during adolescence. The scale consists of two dimensions: external and internal

assets. The former refers to the support from family, communities and schools or universities young people need. This dimension is divided into four factors: support (e.g., "I have parents/guardian who are good at talking to me about things"), empowerment (e.g., "I am included in family tasks and decisions"), boundaries and expectations (e.g., "I have a department/school that enforces rules fairly") and constructive use of time (e.g., "I am spending quality time at home with my parent(s) when we do things together"). The internal assets dimension highlights the social-emotional strength and values nurtured by young people and is divided into four indicators: commitment to learning (e.g., "I am encouraged to try things that might be good for me"), positive values (e.g., "I am developing respect for other people"), social competencies (e.g., "I express my feelings in proper ways") and positive identity (e.g., "I am thinking about what my purpose is in life"). The McDonald's omega coefficients were adequate, ranging from $\omega = .50$ to $\omega = .89$.

Mental Health Continuum-Short Form (MHC-SF; Keyes, 2005)

The original 14-item questionnaire evaluates positive mental health and is divided into three dimensions: emotional well-being (e.g., "During the past month, how often did you feel interested in life"), social well-being (e.g., "During the past month, how often did you feel that you had something important to contribute to society") and psychological well-being (e.g., "During the past month, how often did you feel that you liked most parts of your personality").

According to their experiences over the past month, the participants were asked to rate the items on a six-point Likert scale, having the alternatives: never, once or twice, about once a week, two or three times a week, almost every day, and every day. In this study, the total MHC-SF score was determined as a measure of overall mental health. A higher score would, therefore, represent a higher level of mental wellness. The McDonald's omega coefficients were adequate, ranging from $\omega = .82$ to $\omega = .89$.

Procedure

The current study was part of a larger cross-sectional study on PYD in several countries (see Wiium and Dimitrova, 2019). The institutional review board of the Research Committee of the Universidad San Martín de Porres in Peru granted ethical approval for the study. To ensure linguistic equivalence

of the instrument, the survey was translated from English to Spanish and then back-translated. Young people completed a set of self-administered scales and sociodemographic data using two methods: the face-to-face approach (i.e., paper and pencil), with the majority of participants recruited from universities, and the virtual approach (i.e., online platform), in which a link was made available and shared on various social media platforms. Participants were asked to give informed consent and were given the option to withdraw from the survey at any time without any penalty. Additionally, participants were ensured that their participation was anonymous and that the data collected would only be utilized for research purposes.

Statistical Analysis

Initially, the internal structure of each scale was evaluated with confirmatory factor analysis using polychoric correlation matrices. The estimator used was the weighted least squares with adjusted mean and variance (WLSMV), a recommended procedure for ordinal items (Beauducel & Herzberg, 2006; Gana & Broc, 2019). This allowed the parceling of the study variables to be placed in the model (Hagtvet & Nasser, 2004) and the scores of these variables were scaled to values between 0 and 30 to facilitate their visualization with the consideration that this procedure does not affect the values of the correlations between the variables. The theoretical model was analyzed by means of structural equations modeling with the robust maximum likelihood estimator, which is appropriate for numerical variables and because it is robust to deviations from inferential normality (Muthen & Muthen, 2017). Fit assessment was performed using the comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized residual root mean square (SRMR). CFI values > .90 (Bentler, 1990), RMSEA < .100 and SRMR < .080 (Browne & Cudeck, 1992) were used. All these analyses were carried out with controlling according to the demographic characteristics for sex and age. For the mediation analysis, the bootstrapping method (resampling) was used with 5000 iterations and establishing a 95% confidence interval (Yzerbyt et al., 2018). Regarding the reliability analysis, the internal consistency method with the omega coefficient (ω) was used. The correction in the calculation of the omega coefficient was also considered due to the presence of correlated errors (Raikov, 2004).

The software used was "R", version 4.1.2 and the lavaan library was used in its version 06-10 (Rosseel, 2012).

Results

Descriptive and Correlation Analyses

The total scores of the indicators were calculated for the study variables, which were scaled with values between 0 and 30 in order to facilitate the interpretation of results. The mean score for each external developmental asset was above average, with the exception of Creative Use of Time, which had the lowest score (M = 11.5; SD = 5.9); regarding internal developmental assets, all four dimensions scored above average, with Commitment to Learning having the highest mean score (M = 22.7; SD = 4.9) and Positive Identity having the lowest mean score (M = 18.6; SD = 5.9). Concerning the 5Cs, Confidence and Character had the highest mean score (M = 21.5; SD = 6.3 and M = 21.4; SD = 4.9, respectively) and the lowest score was Competence (M = 17.8; SD = 5.0). Finally, the dimension of social well-being had the lowest score (M = 15.1; SD = 7.0) while emotional well-being had the highest score (M = 21.7; SD = 6.1). Table 5.1 shows the correlation matrix of the variables, in which the correlations ranged between .12 and .77 for the study variables. In addition, Table 5.1 also shows the McDonald's omega coefficients that were found, with values ranging from .50 to .95.

Measurement and Structural Analysis

First, the MHC-SF scale was analyzed, obtaining a good fit for the original structure of three correlated factors, $\chi^2(74) = 271.5$, $p < .001$, CFI = .921, RMSEA = .075, SRMR = .058. The variable developmental assets were analyzed per dimension. For external assets, we initially obtained an inadequate model fit, and thus, considering the modification indices and in consistent with our theoretical framework, item 15 was removed and the covariance of the errors of items 23 with 24 and 9 with 10 were allowed to correlate, obtaining a good fit, $\chi^2(267) = 987.3$, $p < .001$, CFI = .906, RMSEA = .073, SRMR = .071. Regarding internal assets, due to low factor loadings, items 48, 53, 54, 55 and 58 were removed and the covariance of the errors of items 39 and 42 was

allowed, obtaining a good fit, $\chi^2(398) = 1242.7$, $p < .001$, CFI = .905, RMSEA = .065, SRMR = .069. Finally, concerning the 5Cs scale, after removing items 8, 11, 14, 31 and covarying the errors of items 33 and 34, an adequate fit was obtained, $\chi^2(394) = 1611.3$, $p < .001$, CFI = .938, RMSEA = .078, SRMR = .071.

Two models were tested, representing each developmental asset. Regarding the model involving external assets (see figure 5.2), an adequate model fit was initially not obtained, $\chi^2(71) = 407.4$, $p < .001$, CFI = .881, RMSEA = .098, SRMR = .074, and therefore, it was respecified allowing the covariance between the indicators of Character and Care of the 5Cs, $r = .46$, achieving an adequate adjustment, $\chi^2(70) = 306.6$, p < .001, CFI = .916, RMSEA = .082, SRMR = .067. This result confirms H_{2a} on the direct relationship of external assets in the 5Cs, $\beta = .73$, $p < .001$, and H_{3a} on the positive effect of the 5Cs on mental health, $\beta = .99$, $p < .001$. Nevertheless, the effect of external assets on mental health (H_{1a}) was not confirmed, $\beta = -.09$, $p = .145$. These results were calculated controlling for gender and age. See Figure 5.2.

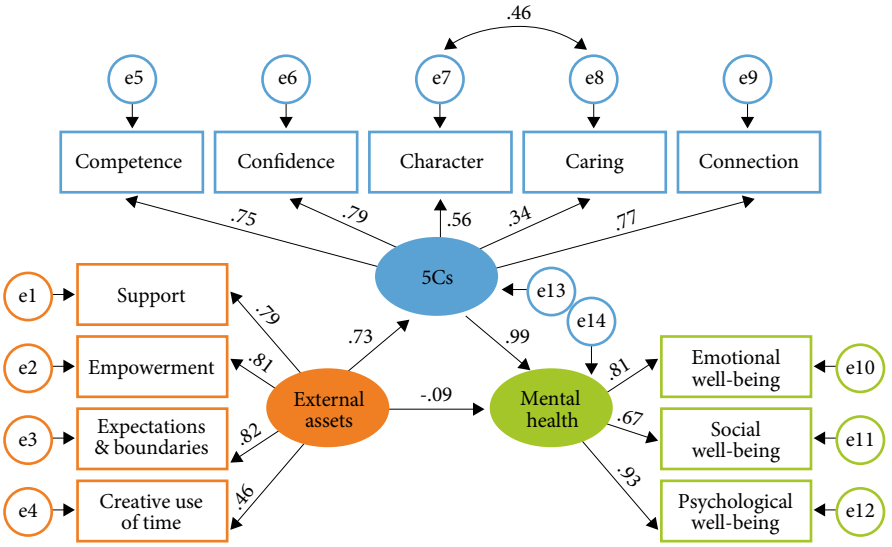

Figure 5.2 *Results of the Structural Model on the Effect of External Assets and 5Cs on Mental Health. Standardized Estimates are Shown after Controlling for Gender and Age.*

Table 5.1 *Descriptive Statistics, Internal Consistencies and Correlations for the Variables.*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Emotional well-being	–															
2. Social well-being	.55	–														
3. Psychological well-being	.77	.60	–													
4. Support	.38	.38	.40	–												
5. Empowerment	.42	.37	.49	.62	–											
6. Expectations & Boundaries	.40	.34	.48	.67	.67	–										
7. Creative use of time	.26	.34	.28	.41	.33	.34	–									
8. Commitment to Learning	.42	.27	.52	.36	.49	.52	.19	–								
9. Positive Values	.42	.43	.53	.43	.48	.54	.32	.65	–							
10. Social Competence	.43	.38	.55	.40	.50	.54	.24	.60	.70	–						
11. Positive Identity	.42	.35	.49	.35	.36	.39	.26	.50	.49	.51	–					
12. Competence	.53	.53	.62	.34	.42	.38	.36	.34	.36	.43	.42	–				
13. Confidence	.63	.46	.71	.36	.41	.36	.27	.39	.41	.43	.47	.65	–			
14. Character	.40	.32	.48	.37	.41	.38	.18	.45	.54	.51	.35	.36	.40	–		
15. Caring	.25	.22	.31	.24	.26	.28	.12	.29	.40	.39	.19	.20	.20	.55	–	
16. Connection	.49	.57	.62	.51	.58	.56	.33	.44	.51	.51	.42	.58	.56	.48	.32	–
Mean	21.7	15.1	20.9	17.0	20.0	21.1	11.5	22.7	19.7	20.7	18.6	17.8	21.5	21.4	19.5	19.1
SD	6.1	7.0	6.1	5.6	5.4	5.1	5.9	4.9	4.2	4.8	5.9	5.0	6.3	4.9	6.4	4.8
α	-1.0	0.0	-0.8	-0.2	-0.6	-0.5	0.2	-0.6	-0.3	-0.3	-0.1	-0.3	-1.0	-0.6	-0.6	-0.4
ω	.85	.82	.89	.83	.75	.83	.50	.89	.85	.78	.71	.76	.95	.86	.92	.78

Note. SD = standard deviation; α: alpha; ω: omega

Analysis of the mediating role of the 5Cs in the relationship of external assets and mental health was also performed by bootstrapping of 5000 iterations, obtaining a statistically significant mediating effect, $\beta = .73$, $p < .001$.

Regarding the internal assets in the mental health explanatory model, an inadequate fit was initially obtained, $\chi^2(71) = 397.3$, $p < .001$, CFI = .887, RMSEA = .096, SRMR = .077. Therefore, the model was respecified allowing covariance between errors of the Character and Caring indicators of the 5Cs, $r = .45$, resulting in an adequate fit, $\chi^2(70) = 303.8$, $p < .001$, CFI = .919, RMSEA = .082, SRMR = .073. This result confirms the H_{2b} on the direct relationship of internal assets on the 5Cs, $\beta = .76$, $p < .001$, and the H_{3b} on the positive effect of the 5Cs on mental health, $\beta = .89$, $p < .001$. Similar to the previous model, H_{1b} on the effect of internal assets on mental health was not confirmed, $\beta = .04$, $p = .598$. These results were calculated controlling for sex and age, and are shown in Figure 5.3. Finally, analysis of the mediating role of the 5Cs in the effect of internal assets with mental health was also performed, obtaining a statistically significant effect, $\beta = .68$, $p < .001$, by bootstrapping of 5000 iterations.

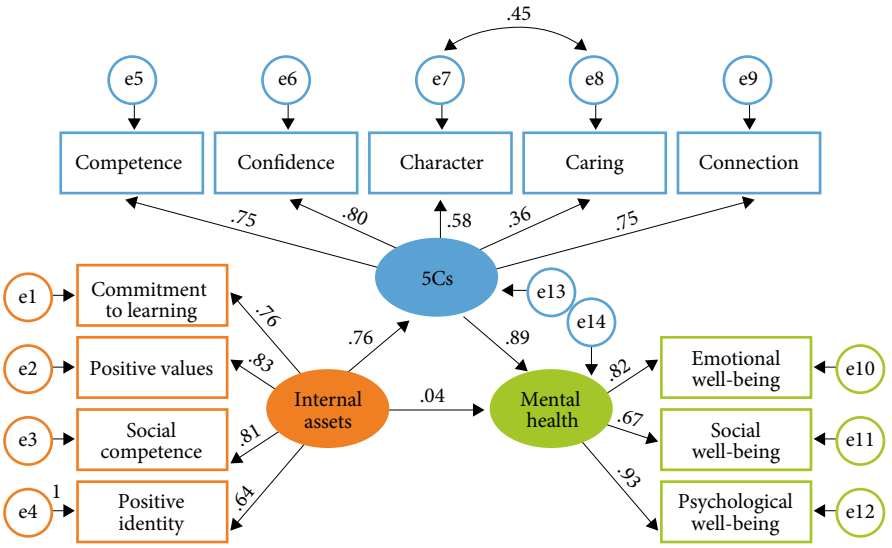

Figure 5.3 *Results of the Structural Model on the Effect of Internal Assets and the 5Cs on Mental Health. Standardized Estimates are Shown After Controlling For Gender and Age.*

Discussion

The main objective of this study was to evaluate a model with two of the main constructs of PYD (i.e., developmental assets and the 5Cs) and its effect on mental health in young Peruvian participants, being one of the few studies that involves two constructs of positive development in a sample of Peruvian youth. The study conducted by Fernandes et al. (2021) also involved both constructs comparing different realities (i.e., Turkey, Ghana, Kosovo, Slovenia, Norway and Portugal), concluding that it is important to take into account cultural differences to establish adequate intervention programs and youth policies.

Within the model proposed in the present study, we also assessed the relationship among developmental assets, the 5Cs and mental health. Additionally, we aimed to analyze a possible mediating role of the 5Cs on the association of developmental assets and mental health. The results showed a positive relationship between development assets and the 5Cs, as well as a significant positive link between the 5Cs and mental health. Moreover, a significant mediating effect of the 5Cs was found. Nonetheless, one should be cautious as these are preliminary results and models were modified in order to get adequate model fit.

The relationship between developmental assets and mental health was not significant. It should be noted that these results are preliminary and that more longitudinal studies are needed.

First, we expected a positive association between developmental assets and the 5Cs, which was in this study. There are several definitions for PYD, with the developmental resources that contribute to positive outcomes and behaviors in young people generally being highlighted. Both development assets and the 5Cs of PYD are of great importance, yet there is limited research on their benefits in a model. From previous literature (Eglantina et al., 2023; Fernandes et al., 2021) it can be concluded that the more internal (i.e. individual skills, competencies, commitment to learning, positive values, social competencies, and positive identity) and external (i.e. support, empowerment, expectations, and constructive use of time) developmental assets the young person has, the greater the probability that they will have a healthy and caring lifestyle in the long term, thus indicating that the development of assets and the promotion of the 5Cs could be taken into account together.

Thus, it is important to strengthen a wide range of resources capable of helping young people not only to overcome risks or any other adverse events present in daily life, but also to have fulfillment in their lives. In the Peruvian sample it was of concern to note that the dimension that most needs revision is related to the constructive use of time. Questions regarding the positive ways young Peruvians spend their time should be made. In Peru, some public organizations promote the participation of adolescents and young people, such as the Advisory Council for Children and Adolescents (CCONNA), and the Regional Youth Council (COREJU). Nonetheless, problems have been detected in the effectiveness of both organizations, with the main issue being related to the incidence of youth participation in these institutions.

The National Youth Secretary has considered these problems and has undertaken a restructuring of the Regional Youth Council. It is expected to involve around 2 000 adolescents and young people. This organization will allow discussion of the regional reality and possible national solutions (UNICEF-PERU, 2018).

Second, a positive relationship between the 5Cs of PYD and mental health was hypothesized. Our results confirmed this hypothesis. Different studies have reported and highlighted that the flourishing characteristics of the 5Cs will allow the development of positive qualities and, in turn, reduce the risks of presenting any problem that affects the psychological health and well-being of the young person. Embracing this same idea, Rothes et al. (2022) emphasized that when these indicators (i.e., 5Cs) are built and consolidated, a clear life purpose is generated, which, in turn, influences in motivation. Furthermore, Hernández-Torrano et al. (2020) added that general well-being is also generated and contributes to a good state of mental health for youths.

Third, we hypothesized a positive relationship between developmental assets and mental health, which was not confirmed in the present study. Initially, this result seemed counterintuitive, since a previous study including emergent Peruvian and Colombian adults obtained a statistically significant positive result between these variables (Manrique-Millones et al., 2021). We believe that the presence of the 5Cs may have induced this difference. This may also be somewhat explained by the mediating role of the 5Cs, in which the five indicators would explain the relationship between developmental assets and mental health. Likewise, another important factor is the way in which the calculation of the scores of each construct was operationalized.

In this study, the means of each dimension were used, while in the previous study, the frequency of development assets was used as criteria.

Although we found some interesting findings, there are some limitations which should be mentioned. First, the sample encompassed young participants with a broad age range from 15 to 29 years old. Although this wide spectrum of age could impact the perception of the variables studied, it is important to mention that all the analyses were performed controlling for age and gender, to reduce as much as possible any undesired effect of these sociodemographic variables. For future studies the inclusion of more homogeneous samples is recommended. Likewise, more gender-based studies are suggested, as this can differ culturally.

Second, the internal consistency of the constructive use of time was rather low and might, to some extent, have impacted our results. It is important for future research to address this issue and analyze this particular dimension using a qualitative approach, such as with focus groups or interviews, to obtain more accurate information based on potential cultural differences. Third, although we have tested each measure of the developmental assets (internal and external) and the 5Cs individually, while trying to fit the model with all variables together, some construct similarities may have been present. For example, in the internal assets, positive identity, which reflects self-esteem and self-worth, correlated with confidence which refers to a sense of self-worth and positive self-efficacy. Concerning external assets, support, which involves family, neighborhood and, in general, a good environment where the youth feel assisted and protected, was associated with connection which refers to positive links with people or institutions. This is not uncommon and has been reported in previous studies involving both PYD constructs (Fernandes et al., 2021). Finally, the cross-sectional nature of the data does not allow the analysis of causality of the variables or to evaluate the dynamics of behavior. It is recommended to use a longitudinal design for future research given its far-reaching strengths.

Despite the above limitations, the results of the present study provide insight into the relationship between the 5Cs, developmental assets, and mental health in young Peruvian participants. The developmental assets can be analyzed as a foundation for PYD and the 5Cs can be considered a result of adequate resources in juvenile contexts and personal strengths (Fernandes et al., 2021).

We need the support and commitment of the authorities to promote laws and proposals regarding the Peruvian youth agenda by adopting a PYD framework that has been demonstrated to have a positive effect related to mental health and is supported by the findings of the present research.

Peruvian adolescents and young people should be the priority population in the design of development policies and should have greater participation in decision-making. Guaranteeing the full exercise of their rights, access to adequate and quality services, as well as timely and pertinent information, is essential to enhance their growth opportunities.

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