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## Well-being and life satisfaction in Argentinean adolescents

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Seligman proposes that well-being can be achieved by three main pathways: the pleasant life or positive emotions, the engaged life, and the meaningful life. The aims of this study are to investigate the three pathways to well-being in Argentinean adolescents and analyze their relationship to life satisfaction. A sample of 255 Argentinean adolescent students (110 boys and 145 girls) who were between 13 and 18 years of age was used in this study. Participants completed the Three Pathways to Well-being Scale and the Satisfaction with Life Scale. Argentinean adolescents scored highest in the pleasant life, second highest on the engaged life and lowest on the meaningful life. The results showed that among the three pathways, only the engaged life was a significant predictor of life satisfaction; however, this was found only in a small proportion of variance (8%). In consonance with well-being theory, those adolescents who can make use of the three pathways at a high level reported the highest level of life satisfaction. Results were similar to previous findings in adult population.

**Keywords:** adolescents; life satisfaction; well-being; positive psychology

The pursuit of well-being and happiness has interested philosophers throughout the history of humanity (Aristotle 1985; Keyes and Annas 2009; Waterman 1993); however, it has been studied in psychology for a relatively short period of time (Lyubomirsky, Sheldon, and Schkade 2005; Seligman 2002). Researchers have studied well-being using two different but complementary perspectives: (1) the subjective well-being or hedonic life and (2) the psychological well-being or eudemonic life (Henderson and Knight 2012; Peterson, Park, and Seligman 2005; Ryan and Deci 2001).

The first perspective, called hedonic, includes the study of well-being associated with subjective well-being, positive emotions and life satisfaction (Diener 2009; Lyubomirsky and Lepper 1999; Pavot and Diener 2008). This conception focuses on the maximization of pleasure and the minimization of pain from the subjective position of the individual (Henderson and Knight 2012). Most studies of well-being have focused on subjective well-being (Diener 2009). This concept consists of three main components: (1) the frequency and degree of positive affect or joy, (2) the lack of negative feelings such as depression or anxiety, and (3) a moderate level of satisfaction in a specified period of time. The first two components relate to the affective aspect of subjective well-being, while life satisfaction refers to the cognitive aspect of well-being (Diener 2009). From the

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hedonic perspective, a person with high levels of well-being would experience more positive than negative emotions. The hedonic level of positive emotions is considered to be dispositional because it is linked to personality and inherited genetic traits (Diener, Oishi, and Lucas 2003; Hills and Argyle 2001; Lucas and Diener 2009).

Research has demonstrated the importance of life satisfaction and positive emotions in the pursuit of well-being (Diener and Biswas-Diener 2008). The experience of positive emotions and life satisfaction have been linked to important enduring life outcomes; these include healthier psychological functioning, better physical health, increased job success, longevity and high-quality interpersonal relationships (Diener 2009; Lyubomirsky, King, and Diener 2005). Individuals who are more satisfied with their lives experience greater self-appreciation, mastery of the environment, and social skills (Argyle 1987; Diener 2009).

A second perspective considers well-being as being focused on virtuous activities and the meaning of life. Well-being is thus oriented more toward a eudemonic life than one that is purely hedonistic (Peterson, Park, and Seligman 2005). The eudemonic orientation postulates that people develop their best qualities and use their skills and talents to serve the greater good, in particular, the welfare of others and humankind in general. Well-being from this approach is related to personal self-actualization and growth, and the commitment to social goals and shared values (Peterson, Park, and Seligman 2005). Several major theories share the eudemonic view, such as the psychological well-being theory (Ryff and Keyes 1995), the self-determination theory (Ryan and Deci 2000), and the concept of the sense of coherence (Antonovsky 1987).

This perspective considers well-being as being highly engaged in what one does (i.e., work, play, sports). Engagement includes commitment, perseverance and a sense of having been called to do what one does (Park, Peterson, and Ruch 2009; Peterson and Seligman 2004). One mechanism involved in engagement may be the habitual experience of the psychological state of flow (Csikszentmihalyi 1997). Csikszentmihalyi (1990) proposed this concept to describe a type of activity (i.e., work, study, sports) in which the person is so focused on the task, that the sense of time is lost (Csikszentmihalyi 1990). The experience of flow requires mastery of certain skills, because this state is rarely achieved during passive or routine tasks. The flow experience is described as invigorating and intrinsically enjoyable (Csikszentmihalyi 1997). Well-being, from this perspective, does not come immediately as from positive emotions, rather it requires hard work. If a person is aware of his/her strengths and is able to apply them to a particular task, it is possible to achieve the flow state (Peterson, Park, and Seligman 2005).

Another concept that has received particular attention in eudemonic well-being is the meaning in life. The meaning in life may be defined as the sense made of, and significance felt regarding, the nature of one's being and existence (Steger et al. 2006). Frankl (2004) argued that human beings are characterized by a quest for meaning, which is an innate drive to find sense, and meaning in our lives, and failing to find meaning results in psychological distress (Frankl 2004). Research has supported the proposed link between lack of meaning and psychological distress. Finding less meaning in life has been linked to increased depression, anxiety, trauma, suicidal ideation and substance abuse (Kleftaras, Psarra, and Kalantzi-Azizi 2007; Laudet, Morgen, and White 2006; MacDermott 2010; Mascaro and Rosen 2008; Steger et al. 2009; Triplett et al. 2012). In contrast, finding more meaning has been positively correlated with many indicators of well-being, such as positive affect, self-esteem, optimism, life satisfaction, hope, joy, curiosity, daily positive social interactions, positive experiences at work, job satisfaction

and the perception of meaning in work tasks (Dunn and O'Brien 2009; Ho, Cheung, and Cheung 2010; Steger and Dik 2009; Steger et al. 2006).

Research suggests that both hedonic and eudemonic points of view can be supported by data (Henderson and Knight 2012; Ryan and Deci 2001). Following this line of work, positive psychology considers multiple different pathways to well-being (Kashdan, Biswas-Diener, and King 2008; McMahan and Estes 2011; Peterson, Park, and Seligman 2005; Seligman, Parks, and Steen 2006). Seligman (2002) proposed that well-being can be reached by three main pathways or routes: the pleasant life or positive emotions, the engaged life, and the meaningful life (Seligman 2002). Within this proposal, originally named as the *authentic happiness theory* the terms happiness and well-being have been used synonymously. More recently, Seligman has preferred the term well-being for his theory in order to avoid the 'cheerful' connotation of the term happiness (Seligman 2011). In his new model, called PERMA (Positive Emotions-Engagement-Relationships – Meaning-Accomplishment) he added two new pathways to well-being: positive relations and accomplishments/achievement. However, this model has not been fully developed and empirically tested yet.

The pleasant life corresponds to the hedonic perspective of well-being (Peterson, Park, and Seligman 2005). It consists of experiencing various positive emotions in the present (i.e., satisfaction derived from immediate pleasures and savoring), the past (i.e., gratitude and forgiveness), and the future (i.e., hope and optimism). It also applies to learning skills to amplify the intensity and duration of these emotions (Seligman, Parks, and Steen 2006).

Concerning the engaged life, Seligman (2002) posits that engagement and flow may be enhanced if people identify their greatest talents and strengths, and seek opportunities to use these strengths more frequently (signature strengths).

The meaningful life consists of using one's signature strengths and talents to belong to and serve something that one believes is bigger than the self. These include positive institutions such as religion, politics, family, community and nation. Participating in these institutions produces a feeling of satisfaction and the belief that one has lived well (Csikszentmihalyi 1997; Lyubomirsky, Sheldon, and Schkade 2005).

Research has shown that the three pathways are empirically distinct and each is positively associated with life satisfaction in adults (Henderson, Knight, and Richardson 2014; Peterson, Park, and Seligman 2005; Vella-Brodrick, Park, and Peterson 2009). Participants who obtain high scores in the three pathways report the greatest level of life satisfaction, while those who obtain low scores on the three pathways report low life satisfaction. However, engagement and meaning were the most strongly correlated with life satisfaction (Peterson, Park, and Seligman 2005).

Similar results were obtained in two different cross-cultural studies that used adult populations from the United States, Switzerland and Australia (Peterson et al. 2007; Vella-Brodrick, Park, and Peterson 2009). In both studies, the pleasant life contributed less to the well-being of the Australian and Swiss populations compared to the American population. In addition, participants from the United States scored higher in the meaningful life.

San Martin, Perles, and Canto (2010) evaluated the three pathways to well-being in a sample of Spanish university students. They found that the most frequently used orientation was pleasure, followed by meaning and, finally, engagement. These authors found that engagement was related to life satisfaction, while pleasure was most closely

associated with well-being. However, the contribution of these variables was slight (San Martín, Perles, and Canto 2010).

In the only study of the hedonic and eudemonic well-being in Latin America, Castro Solano (2011) found that Argentinean adults used more frequently the pathway engagement, which was followed by pleasure, and meaning. However, the eudemonic life was most strongly correlated with life satisfaction, while the hedonic life was not associated with this variable (Castro Solano 2011).

In relation to the three pathways to well-being and demographic variables such as age and gender, results are not consistent among studies. San Martín, Perles, and Canto (2010) and Peterson, Park, and Seligman (2005) found no differences in the three pathways between men and women. However, Castro Solano (2011) reported that women showed higher levels of engagement than men. On the other hand, Vella-Brodick, Park, and Peterson (2009) found that age and gender had a significant but low contribution to the prediction of well-being in an American sample but not in an Australian sample. Regarding age, some studies found younger people to report higher levels of pleasure (Peterson, Park, and Seligman 2005; San Martín, Perles, and Canto 2010) and lower levels of meaningful life (Castro Solano 2011).

Previous research studies examining the three pathways to well-being have been exclusively focused on adult populations, thus it is needed to evaluate the extent of these findings in adolescents. Nevertheless, some partial studies have investigated one or two pathways to well-being in adolescents. Most studies of adolescents well-being have focused on life satisfaction (see Proctor, Linley, and Maltby 2008 for review). Adolescents who report high life satisfaction exhibit greater gratitude, self-esteem, positive affect, and find more meaning in life than adolescents with average to low levels of life satisfaction (Proctor, Linley, and Maltby 2010). Similarly, Froh et al. (2010) found that youths who were high in engaged living tended to be more grateful, hopeful, happier, prosocial, and reported greater life satisfaction, positive affect and self-esteem (Froh et al. 2010). Several studies have shown that various character strengths are related to well-being, happiness and life satisfaction in adolescents (Gillham et al. 2011; Park and Peterson 2008; Toner et al. 2012). In addition, adolescents with purposeful work goals report finding more meaning in life and schoolwork than those without purposeful work goals (Yeager and Bundick 2009). Life meaning has been shown to play a protective role with regard to health risk behaviors and poor psychological health in Romanian adolescents (Brassai, Piko, and Steger 2011). Hirschi (2011) investigated the effects of the three pathways to well-being in vocational identity in German adolescents and found that meaning and engagement, but not pleasure, were positively correlated to developing a vocational identity (Hirschi 2011).

There are only two previous studies about the three pathways to well-being in adolescents, which have reached to some inconsistent findings. Brdar, Rijavec, and Miljković (2009) found that a life of pleasure was related only to hedonic well-being or life satisfaction in a mixed sample of Croatian adolescents and young adults. A life of engagement was linked to both hedonic and eudemonic well-being, while meaningful life was correlated only with eudemonic well-being (Brdar, Rijavec, and Miljković 2009). However, the same authors found in another sample of Croatian adolescents that the life of pleasure did not explain subjective well-being (Brdar and Anic 2010). Thus, further studies on the three pathways to well-being and their relationship to life satisfaction are needed with an adolescent sample.

Examining whether previous findings from adult populations can be applied to this age group is important. Improving the mental health of individuals during adolescence can have positive lasting effects if they learn skills and behaviors that can be applied across the life course (Norris and Vella-Brodrick 2009). There is plenty of evidence that demonstrates the efficacy and effectiveness of positive interventions in adults aimed at cultivating pleasure, engagement, and meaning (Seligman, Rashid, and Parks 2006). These interventions may also be useful to prevent and supplementary treat psychopathology, such as depressive symptoms (Duckworth, Steen, and Seligman 2005). Thus, positive interventions may have potential utility in fostering mental health and well-being in school settings. In addition, a different cultural group, such as Argentinean adolescents, provides a broader perspective. Most of studies about pathways to well-being have been carried out in developed countries. Park, Peterson, and Ruch (2009) found that nations differed in their general orientation to well-being and, Argentina was among the nations with relatively high orientations to pleasure and to engagement.

The aims of this study are twofold: to investigate the three pathways to well-being in Argentinean adolescents, and to analyze their relationship to life satisfaction in this population.

We hypothesized that the pleasant and engaged life will be the most frequently used pathways to well-being in Argentinean adolescents, and the eudemonic life will be more strongly related to life satisfaction than the hedonic life.

## Method

### Sample

The sample was composed of 255 Argentinean adolescent students (110 boys and 145 girls) aged 13–18 years old. It was a purposive sampling recruited from two high schools [one private ( $n = 128$ ) and one public ( $n = 127$ )] in the city of Buenos Aires. The mean age was 15.47 years old ( $SD = 1.57$  years old).

### Instruments

The research variables, three pathways to well-being and satisfaction with life have been measured through two instruments: *Three pathways to well-being scale (TPWB)* and the *Satisfaction with Life Scale (SWLS)*.

#### *Three pathways to Well-being Scale (TPWB)*

This scale assesses well-being based on the three pathways model developed by Seligman (2002). This scale includes 19 statements that are rated on a 5-point Likert format from 1 (very different from me) to 5 (very similar to me). The scale is divided into three subscales that correspond to each of the pathways to well-being: pleasant life (7 items, e.g., ‘I try to repeat the pleasant moments over and over’), engaged life (6 items, e.g., ‘I have a clear view of my goals in life and I work hard to achieve them’), and meaningful life (6 items, e.g., ‘I use my strengths to accomplish things that benefit society’). This instrument was developed and validated using Argentinean adults and adolescents (Castro Solano 2011; Góngora 2012). The instrument showed good evidence of factorial validity through exploratory and confirmatory factor analysis as well as convergent validity with the Personal Well-Being Index, Meaning in Life Questionnaire, Satisfaction with Life Scale and the Strengths and Virtues Inventory. The internal consistencies have been



adequate for all scales (all  $\alpha \geq .70$ ). The internal consistencies for this sample were pleasant life,  $\alpha = .76$ , engaged life,  $\alpha = .80$ ; and meaningful life,  $\alpha = .70$ .

### *Satisfaction with Life Scale (SWLS)*

The SWLS is a 5-item scale that assesses overall life satisfaction (Diener et al. 1985). Respondents rate each item from 1 (Strongly agree) to 7 (Strongly disagree). The SWLS is among the most widely used measures of well-being, and various international empirical studies have demonstrated its validity and reliability in adults and adolescents (Castro Solano 1999; Diener et al. 1985; Pavot et al. 1991). In this sample, the internal consistency measured by Cronbach's alpha was  $\alpha = .75$ .

### *Procedure*

Participants were selected by school Years (1 to 5). Since the schools participating in this study had several courses of the same Year, the selection of courses was randomized per Year. There was approximately the same number of participants per school Year. In addition, a similar number of students were selected from the private and the public schools. This distribution is consistent with the high school enrollment in Buenos Aires, where approximately half of students attend to private schools and the other half to public institutions (General Direction of Educational Quality Evaluation 2012). Participants were informed of the purpose of the study, and their parents signed an informed consent form. No further incentives were given for participation. The instruments were administered in classes during the school day, under the supervision of the research staff. Instruments were administered to groups of up to 30 people per group. All tests were completed in a single session.

### *Data analysis*

Bivariate correlations were applied between the TPWB scales and the SWLS. Taking into account that previous studies on the three pathways to well-being (Peterson, Park, and Seligman 2005; San Martin, Perles, and Canto 2010; Vella-Brodrick, Park, and Peterson 2009), found that gender and particularly age were significant predictors of life satisfaction – although its contribution was not high – hierarchical linear regression was performed using life satisfaction as the dependent variable and age, gender and the TPWB scale as predictor variables.

Cluster analysis was conducted using TPWB subscales to empirically identify groups of participants on the three pathways scores. The aim of cluster analysis was to identify homogeneous groups or clusters based on their shared characteristics. A two-step procedure involving both hierarchical and nonhierarchical analyses was performed. The first step involved a hierarchical cluster analysis using Ward's linkage method with the squared Euclidian distance measure. Ward's method minimizes the within clusters differences and avoids problems with forming long, snake-line chains found in other methods (Hair et al. 2010). This analysis provides a tree model, a dendrogram, based on the distance between the clusters. On the basis of the dendrogram and on theoretical grounds, a three-cluster solution was selected to be suitable. Next, the non-hierarchical method *k*-means cluster analysis was used with the cluster centers found in the hierarchical method. Non-hierarchical methods (*k*-means) assign observations into clusters using nearest centroid sorting and requires the number of clusters to be specified (Blashfield and Aldenderfer 1988). One-way ANOVA was employed to explore

differences among the three groups. Finally, a one-way ANOVA was performed using the SWLS score as the dependent variable and the three cluster groups as a fixed factor. Gabriel's post-hoc procedure was selected because the sample sizes differed slightly and the variance was homogeneous (Field 2009). Two-tailed tests were used for all analyses.

## Results

### *Preliminary analysis: descriptive statistics, correlation among variables and relationship with gender, age, and type of school*

The mean scores, standard deviations, skew, and kurtosis for the three TPWB subscales and SWLS are presented in Table 1. In order to compare which pathway to well-being had a higher score among adolescents, and taking into account the disparity between the number of items in each TPWB subscale, mean values were divided by the number of items on each subscale. This resulted in the following values: pleasant life = 3.92 (.73), engaged life = 3.80 (.80), and meaningful life = 3.11 (.76). The pleasant life was the pathway in which adolescents scored highest, followed by the engaged life, and finally by the meaningful life.

No significant differences were found between boys and girls on any TPWB subscale: Pleasant Life ( $t = 1.63$ ,  $df = 253$ ,  $p = .10$ ), Engaged Life ( $t = 1.46$ ,  $df = 253$ ,  $p = .15$ ), and Meaningful Life ( $t = 1.27$ ,  $df = 253$ ,  $p = .20$ ). Concerning the relationship between the age of the participants and the scores obtained on the three TPWB subscales, results showed no significant correlations for the pleasant life ( $r = .12$ ,  $p = .06$ ) and the engaged life ( $r = .12$ ,  $p = .06$ ); however, a significant correlation was found for the meaningful life, albeit small ( $r = .16$ ,  $p = .01$ ). Adolescents from the private school scored higher than students from the public school in the Pleasant life ( $t = 2.92$ ,  $df = 253$ ,  $p \leq .01$ ,  $d = .36$ ) and in the Engaged life ( $t = 2.91$ ,  $df = 253$ ,  $p \leq .01$ ,  $d = .35$ ) but no differences were found for the Meaningful life ( $t = 1.41$ ,  $df = 253$ ,  $p = .16$ ).

In the case of SWLS, boys score higher than girls, although the magnitude of the difference was small to moderate ( $t = 2.56$ ,  $df = 253$ ,  $p = .01$ ,  $d = .32$ ). No significant association was found between life satisfaction and the age of participants ( $r = .01$ ,  $p = .98$ ). In addition, no differences were found in this variable between adolescents from private and public schools ( $t = -.23$ ,  $df = 253$ ,  $p = .82$ ).

The TPWB subscales were moderately correlated with each other; this indicates that although they are significantly associated, the subscales assess different aspects of well-being. In relation to association between the well-being subscales and satisfaction with life, significant correlations were only found between the Engaged life and Life Satisfaction (SWLS;  $r = .31$ ). The magnitude of this association was moderate. The results are presented in Table 2.

Table 1. Means, standard deviations, kurtosis, and Skewness of the TPWB and SWLS scales.

Scale	Mean	Standard deviation	Kurtosis	Skewness
Pleasant life	3.91	.73	.50	-.84
Engaged life	3.81	.80	.03	-.59
Meaningful life	3.11	.76	.06	-.33
SWLS	24.30	6.43	-.04	-.62



Table 2. Correlations between the TPWB subscales and the SWLS.

Scale	Pleasant life	Engaged life	Meaningful life	SWLS
Pleasant life	–	–	–	.08
Engaged life	.35*	–	–	.31*
Meaningful life	.21*	.34*	–	.13

\* $p < .001$ .

**Pathways to well-being and prediction of life satisfaction**

Hierarchical linear regression analysis for life satisfaction (SWLS) was performed, using in the first step, the demographic variables (age and gender), in the second step, the TPWB scales measuring the three pathways to well-being, and in the third step, the interaction between pleasure  $\times$  engagement  $\times$  meaningful. However, multicollinearity diagnostics revealed to be above the limits ( $VIF = 17.89$  for the pleasure  $\times$  engagement  $\times$  meaningful). If  $VIF$  is greater than 10 then there is cause for concern (Field 2009). Considering that the third step of the regression only added less than 1% of the explained variance ( $\Delta R^2 = .006$ ) and the main focus of the analysis was the contribution of each of three pathways, it was decided to omit this third step in order to avoid a biased result in the regression analysis. Thus, a second regression with two steps was performed. Results are presented in Table 3.

The analysis revealed a significant regression ( $R^2 = .10$ ,  $F = 5.18$ ,  $p < .001$ ). Multicollinearity diagnostics were now well within acceptable limits. The most significant main effects were the three pathways to well-being, because they predicted most of the explained variance (8%); this was well beyond the effect of the demographic variables. However, there were only two significant predictors in the regression model: gender ( $\beta = -.14$ ,  $p < .05$ ) and, particularly, the Engaged Life ( $\beta = .28$ ,  $p < .001$ ).

**Cluster analysis of pathways to well-being and life satisfaction**

Previous research (Peterson, Park, and Seligman 2005) in adult population showed that adults who simultaneously scored high in all three pathways to well-being (full life) reported the greatest life satisfaction. By contrast, those who simultaneously scored low on all three pathways (empty life) had the lowest level of life satisfaction. In order to test whether these findings apply to adolescents, hierarchical and non-hierarchical cluster

Table 3. Hierarchical linear regression predicting life satisfaction.

	$r$	$R^2$	$\Delta R^2$	$F$	$\beta$
Step 1		.10	.02	5.18***	
Age	.01				-.03
Gender	-.15**				-.14*
Step 2			.08		
Pleasant life	.06				-.04
Engaged life	.28***				.28***
Meaningful life	.12*				.02

Note:  $\beta$  weights are for the final model.

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

analyses were performed to empirically identify cases on the basis of the three TPWB subscales.

The analysis revealed three cluster groups of adolescents. The first group ( $n = 64$ , 25.1%) corresponded to adolescents who had average scores in the pleasant life, and low scores in the eudemonic life, that is, in the engagement and in the meaningful subscales. The second group ( $n = 86$ , 33.7%) was characterized by adolescents high in the pleasant and engaged life, but low in the meaningful life. The third group ( $n = 105$ , 41.2%) could be labeled as the full life, since it corresponds to adolescents high in the three lives simultaneously. Table 4 shows the three cluster results.

A one-way ANOVA was performed to compare the means of SWLS among the three cluster groups. Life satisfaction was significantly higher in the full life group ( $F = 3.45$ ,  $df = 2$ ,  $p < .05$ ,  $\eta^2 = .03$ ). The Gabriel post-hoc test indicated that students who simultaneously scored high in all three lives scored significantly higher in the SWLS (Mean = 25.20, SD = 6.71) than those students in the first cluster group (medium pleasure–low engagement–low meaning; Mean = 22.55, SD = 6.35;  $p < .05$ ). The low meaning group (second cluster group) had intermediate scores (Mean = 24.58, SD = 5.92) in the SWLS and no differences with the two other cluster groups.

## Discussion

Argentinean adolescents scored higher in the pleasant life, follow by the engaged life, and then by the meaningful life. This is consistent with Park, Peterson, and Ruch's (2009) findings, which identifies differences in the uses of the pathways to well-being between groups of nations. Argentina is among the nations that score high in the pleasant and engaged life. However, a previous research in Argentinean adults (Castro Solano 2011) reported that the engaged life was the most used pathway. Previous studies in young adults also found that this age group showed a higher use of the pleasant life (Peterson, Park, and Seligman 2005; San Martin, Perles, and Canto 2010). This indicates that younger people, including adolescents, tend to obtain well-being maximizing the experience of positive emotions and derive their satisfaction from immediate pleasures. In addition, meaning in life begins development during adolescence and continues throughout life, in conjunction with other processes, such as the development of identity, relationships, and goals (Fry 1998). Therefore, a more limited use of pathway to well-being may be expected in adolescents. Indeed, meaning was the only pathway that had a significant, albeit small, association with age. The study found no gender differences in

Table 4. Means and standard deviation of groups obtained by cluster analysis of TPWB subscales.

Scale	Group 1 (Average pleasure–low engagement–low meaning; $n = 64$ )	Group 2 (High pleasure–high engagement–low meaning; $n = 86$ )	Group 3 (High pleasure–high engagement–high meaning; $n = 105$ )	$F$ (2, 253)	$\eta^2$
Pleasure	3.30 (.77)	4.05 (.52)	4.19 (.63)	40.50*	.24
Engagement	2.83 (.60)	3.94 (.53)	4.32 (.51)	149.59*	.55
Meaning	2.77 (.66)	2.59 (.53)	3.79 (.42)	133.24*	.52

\* $p < 0.001$ .

pathways to well-being between boys and girls; this implies that adolescents of both sexes use similar orientations to well-being.

In this study, adolescents attending to a private school showed a higher use of the pleasant and engagement pathways. Since students in the private school had a higher socioeconomic status, this variable may affect the use of pathways. The relationship between the socioeconomic backgrounds and the pathways to well-being has been slightly studied before. In the only previous research, Peterson, Park, and Seligman (2005) found no relation between these two variables in adult population. Thus, further research is needed to define the nature of the relationship between socioeconomic status and pathways to well-being in adolescents.

Regarding the relationship among the three pathways and life satisfaction, we first examined the association and contribution of each pathway to life satisfaction. The results showed that among the three pathways, only the engaged life had a moderate association with life satisfaction and it was also the only significant predictor of this variable. The eudemonic life consistently appears to be more important in predicting life satisfaction when compared to the hedonic life. In the present study, although adolescents reported a greater focus on the hedonic life, maximizing positive emotions had no contribution to life satisfaction. Adolescence is characterized by affective turmoil and a relatively high prevalence of negative emotionality (Riediger et al. 2009; Larson et al. 2002). The greatest relative instability can be found in the early adolescent years with stability increasing in late adolescence (Larson et al. 2002). However, maximizing positive affective states and reducing negative affective states may lead to some groups of adolescents to participate in risky behaviors, such as drinking alcohol, using drugs, having unsafe sex, smoking cigarettes, and skipping school (Caffray and Schneider 2000). On the other hand, previous studies have reported that adolescents who were highly satisfied with their lives were those who were engaged in schoolwork and extra-curricular activities (Froh et al. 2010; Yeager and Bundick 2009).

However, a deeper analysis showed that the engaged life predicted a small proportion of the variance of life satisfaction (8%). Although these results are similar to those reported in previous studies using adult samples – and even larger than the proportions found with Spanish and Australian adult samples in which the pathways explained between 3% to 5% of life satisfaction (Peterson, Park, and Seligman 2005; San Martin, Perles, and Canto 2010; Vella-Brodrick, Park, and Peterson 2009) – the contribution of the pathway was not significant. This may suggest that pathways are not as relevant to life satisfaction as it has been posited by the well-being model. Additionally, other variables, which were not included in this study, may have a greater influence on life satisfaction. Moreover, some cultural differences can be ascribed to the relation among the pathways and life satisfaction as only in the American sample the contribution was somewhat higher (11–19%; Peterson, Park, and Seligman 2005; Vella-Brodrick, Park, and Peterson 2009). Thus, cross-cultural studies are essential to examine the generalization of findings about the relevance of hedonic and eudemonic well-being to life satisfaction.

In a second analysis, we empirically grouped adolescents according to their pathways scores and thus, this was the first study of empirically distinct adolescents on the basis of the pathways to well-being. There was a middle-low score group of adolescents who could be considered more languishing since they had average scores in the hedonic life and low in the eudaemonic life. This group had significantly lower life satisfaction in comparison with the full life group. In concordance with a previous study with adult population (Peterson, Park, and Seligman 2005) and with the well-being theory

(Seligman, Parks, and Steen 2006), we found that only those adolescents who had high scores simultaneously in the three pathways had the highest levels of life satisfaction. In other words, although the second group was high in two pathways but low in the meaningful life, it did not showed to be a significantly different group to the first middle-low group. It was necessary that the three pathways were simultaneously high to show a significant difference in the level of life satisfaction.

Another important conclusion was that most of the Argentinean adolescents of our sample were classified in healthy groups: high in two or three pathways (74.9%). This is consistent with Keyes' study (2006) with American adolescents that shows that 83% of adolescents had moderate levels of mental health and flourishing. Flourishing involves the conjunction of emotional, psychological, and social well-being (Keyes 2005). This author affirmed that adolescents had higher levels of mental health in comparison with adult population (Keyes 2006). Future studies with larger and nationwide representative samples should reexamine the extent and pertinence of the clusters found in this research.

Some limitations must be noted. This study was conducted with a particular cultural group, Argentinean adolescents; thus, the results must be reexamined in other sociocultural groups of adolescents. The sample used in this study included high school students. However, the participation in extra-curricular school activities such as sports, church, music or art, was not controlled for. In other words, all participants were students although some of them participated in extra activities. This reflects the heterogeneity of high school students in Argentina, but also limits a further understanding of the engagement pathway in this age group. It would be important to extend this study to adolescent groups with special interests, similar to those mentioned above. Furthermore, the inclusion in the study of other outcome variables, such as daily reports of well-being, engagement and interest in activities, and satisfaction in different areas of life would be important in order to further examine the contribution of an hedonic and an eudemonic life to adolescents' well-being.

Finally, our findings give insight into the ways adolescents achieve well-being and improve the understanding of their positive psychological functioning. In relation to the well-being model, our findings are mixed. Only one of the three pathways proposed in the model was related to life satisfaction. However, in consonance with the theory, those adolescents with high scores in the three pathways reported the highest levels of life satisfaction. This implies that the relationship between the pathways to well-being and life satisfaction in adolescents still requires further studies with larger and culturally different groups. We believe that resolving this question is of great importance to understand the ways in which adolescents improve their well-being and flourish. This will allow advancing in the development and implementation of interventions to enhance well-being and life satisfaction in this age group. The school seems the ideal setting to develop positive interventions in adolescents, which can complement and reinforce existing mental health programs.

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