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The Big Five and subjective wellbeing: The mediating role of optimism

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Abstract

Background: Previous literature has shown that personality is one of the most important predictors of Subjective Wellbeing. However, the mechanisms through which basic personality dispositions contribute to wellbeing have scarcely been explored. Therefore, in this study we examined the mediating role of Optimism in the relationship between the Big Five personality model (both factors and facets) and Subjective Wellbeing. Additionally, we assessed whether the results varied by sex. **Method:** A sample of 611 Spanish adolescents completed self-report measures of BFQ, LOT-R, and SHS. We conducted structural equation modeling to test the proposed mediating models. **Results:** Optimism completely mediated the relationship between Extraversion and Emotional Stability factors and Subjective Wellbeing. Likewise, Optimism mediated the relationship between the personality facets Politeness, Perseverance, Emotion control, Impulse control, and Dynamism and Subjective Wellbeing. The findings were invariant by sex. **Conclusions:** These results provide help in identifying the possible mechanisms through which basic dispositions of personality contribute to wellbeing. These findings can be used to develop interventions that target the promotion of greater Subjective Wellbeing through Optimism, and thereby improve adolescents' adjustment.

Keywords: Optimism; Big Five factors; facets of the Big Five; subjective wellbeing; adolescents.

Resumen

Los Cinco Grandes factores de personalidad y el bienestar subjetivo: el papel mediador del optimismo. **Antecedentes:** los resultados de la investigación previa han mostrado que uno de los principales predictores del bienestar subjetivo es la personalidad. Sin embargo, los mecanismos a través de los cuales ésta contribuye al bienestar subjetivo permanecen prácticamente inexplorados. Por ello, el presente estudio examinó el papel mediador de optimismo en la relación entre el modelo de los Cinco Grandes (factores y facetas) y el bienestar subjetivo. Además, exploró la invarianza por sexo de los resultados. **Método:** seiscientos once adolescentes españoles completaron los auto-informes BFQ, LOT-R y SHS. Se realizaron modelos de ecuaciones estructurales para explorar los modelos de mediación propuestos. **Resultados:** optimismo medió totalmente la relación entre estabilidad emocional y extraversión y bienestar subjetivo. Además, también medió la relación entre las facetas de cordialidad, perseverancia, control de emociones, control de impulsos y dinamismo y bienestar subjetivo. Estos resultados fueron invariantes a través del sexo. **Conclusiones:** estos resultados permiten identificar mecanismos a través de los cuales la personalidad contribuye al bienestar y pueden ser utilizados para el diseño y desarrollo de intervenciones dirigidas a promover un mayor bienestar a través del optimismo, mejorando así el ajuste del adolescente.

Palabras clave: optimismo; Cinco Grandes; facetas de los Cinco Grandes; bienestar subjetivo; adolescentes.

Increased scientific interest in positive psychological states has targeted as key research objectives the identification of indicators of optimal functioning and the determination of which personal characteristics may influence a person's wellbeing (Diener et al., 2010). While a large number of studies have addressed wellbeing in adult populations, studies with adolescents remain limited. However, it is particularly important to understand which factors may influence and improve wellbeing in this population because adolescence is a period of growth marked by important changes in social, emotional, cognitive, and psychical development that can impact wellbeing (Cunsolo, 2017).

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Subjective Wellbeing (SWB), which has been the focus of most scientific research, comprises people's moods, their emotional reactions to events, and the judgments they form about their life satisfaction (Diener, Oishi, & Lucas, 2003); it also prioritizes a person's own evaluation of how well their life is going and whether they are achieving their desired life goals (Tov, 2018).

Several studies (Steel, Schmidt, & Shultz, 2008) have explored individual characteristics to determine why some people are happier than others. Personality, particularly Big Five (BF), has received the most attention in the literature (Lucas, 2018; Lucas & Diener, 2008). While Neuroticism and Extraversion are the main predictors of SWB, Conscientiousness and Agreeableness show significant but weaker associations (DeNeve & Cooper, 1998; Steel et al., 2008).

It has been suggested that the prediction of numerous variables could be improved by using facets instead of global dimensions (Ekehammar & Akrami, 2007). The few studies that provide information about the unique contribution of BF facets agree that the SWB variance explained by facets such as positive emotions

(Extraversion), depression and vulnerability (Neuroticism), and competence and self-discipline (Conscientiousness) exceeds that explained by the BF (Albuquerque, Lima, Matos, & Figueiredo, 2012; Anglim & Grant, 2016; Marrero-Quevedo & Carballeira-Abella, 2011; Schimmack, Oishi, Furr, & Funder, 2004).

Two broad explanations have been used to clarify the mechanisms underlying the association between personality and SWB: (i) a temperamental model, which focuses on the direct links between underlying physiological systems and the affective experiences that people have, and (ii) an instrumental explanation, which understands wellbeing as an indirect outcome of the conditions that people create depending on their personality traits (Lucas, 2018; McCrae & Costa, 1991). Neuroticism and Extraversion could be related to SWB through the mechanisms inherent in both models, while Conscientiousness and Agreeableness have been perceived as traits with supposedly only instrumental influences on wellbeing (McCrae & Costa, 1991). Consequently, the wellbeing level experienced by people high in Neuroticism and Extraversion could be partly justified by their baseline affective levels and the intensity of emotional responses that characterize them (temperamental hypothesis). Another source of influence may be the confidence and positive attitude with which extraverts approach life, and the perceived situational threat and concern about potentially stressful events experienced by those high in Neuroticism (instrumental explanation) (Lauriola & Iani, 2017; Lucas & Diener, 2008; Margolis & Lyubomirsky, 2018; Schimmack et al., 2004).

Conscientious individuals tend to persist in achieving their goals and perform tasks efficiently and reliably (Kaftan & Freund, 2018). Similarly, agreeable people establish more stable and satisfying close relationships (Robins, Caspi, & Moffitt, 2002). Thus, one way in which the personality profile characterized by low Neuroticism, high Extraversion, Conscientiousness, and Agreeableness may promote a higher level of happiness whether it facilitated the development of positive cognitive perspectives.

Numerous findings have supported a strong positive correlation between Optimism and wellbeing (Alarcon, Bowling, & Khazon, 2013; Marrero-Quevedo, Carballeira-Abella, & González-Villalobos, 2014). There are many ways in which optimism may impact wellbeing. For instance, optimists typically: give higher positive appraisals, pay greater attention to future positive information, are less concerned about stressful future events, have higher goal orientation, and are therefore more likely to succeed. However, no explicit theory has been formulated (Margolis & Lyubomirsky, 2018).

The relationship between Optimism and BF is also not well understood (Peterson, 2000). Initially, it was suggested that Optimism might represent a mere combination of Neuroticism and Extraversion (Marshall, Wortman, Kusulas, Hervig, & Vickers, 1992). However, subsequent results have showed that while the strongest correlations are established with Neuroticism (negative) and Extraversion (positive), Optimism also shows positive but weaker associations with Agreeableness and Conscientiousness (Busseri & Choma, 2016; Rey & Extremera, 2014). The association between Optimism and Openness has been weak and inconsistent (Miciuk, Jankowski, Laskowska, & Olés, 2016).

The model proposed by Sharpe, Martin, and Roth (2011) may offer a way of approaching the relationship between the BF and Optimism while simultaneously providing insights into ways in which Optimism may impact SWB. Authors make use of three conceptual pathways to describe Optimism and BF association. The Affective Pathway comprises both the negative and positive affectivity inherent in Neuroticism and Extraversion respectively. The Social Pathway involves higher surgency and an agreeable nature, aspects of Extraversion and Agreeableness. The Persistence Pathway concerns the Conscientiousness factor that includes characteristics such as perseverance, self-efficacy, and achievement-striving. Individuals characterized by a personality profile marked by low Neuroticism, high Extraversion, Agreeableness, and Conscientiousness develop optimistic beliefs about life events that, in turn, result in a tendency toward more adaptive behaviors and better mental/physical health (Sharpe et al., 2011). This reasoning echoes the view expressed by McAdams (1995), that individual differences in personality should be addressed at different levels. Furthermore, it is consistent with the emphasis of authors such as Caprara, Alessandri, Di Giunta, Panerai, and Eisenberg (2010) and Dweck (2008) in assigning a critical role to people's core beliefs (such as those relating to expected future outcomes) between broad personality traits and consistent patterns of experience and actions.

Most studies have focused on exploring the predictive validity of Optimism on SWB above and beyond BF (Hudek-Knežević & Kardum, 2009; Marrero-Quevedo & Carballeira-Abella, 2011). To our knowledge, just one study has addressed the mediating role of Optimism in the relationship between BF and wellbeing, with findings that support, although partially, this role (Lui, Rollock, Chang, Leong, & Zamboanga, 2016).

This study explored in adolescent population: (i) the associations between the BF model (factors and facets), Optimism, and SWB; and, (ii) the possible mediating role of Optimism in the relationships between the BF model and SWB. Because adolescence is a time of increasing personality divergences by sex (De Bolle et al., 2015), which could explain the different levels of SWB experienced by males and females (Serrano & Andreu, 2016), we also analyzed the possibility that previous results varied by sex.

Method

Participants

The sample comprised 611 Spanish adolescents (303 females and 308 males), from 14 to 18 years old (M = 15.49, SD= 1.00), in 3rd and 4th grades of High School and the 1st year of A-levels.

Instruments

Life Orientation Test-Revised (LOT-R) (Scheier, Carver, & Bridges, 1994; Spanish version of Ferrando, Chico, & Tous, 2002). The LOT-R comprises 10 items (although four are fillers) in which the participants assess, on a 5-point Likert scale, their expectations regarding future outcomes.

Subjective Happiness Scale (SHS) (Lyubomirsky & Lepper, 1999; Spanish version by Extremera, Fernández-Berrocal, González-Herrero, & Cabello, 2009). As a SWB indicator, the SHS scale measures the levels of happiness in a comprehensive and global sense. It contains four items, rated on a 7-point Likert scale.

Big Five Questionnaire (BFQ) (Caprara, Barbaranelli, Borgogni, & Perugini, 1993; Spanish version by Bermúdez, 1995).

The BFQ evaluates Big Five factors and their facets through 132 items measured on a 5-point Likert scale. Each factor includes two facets. Energy/Extraversion: dominance - ability to assert oneself, stand out, and influence others- and dynamism -includes behaviors related to energy and enthusiasm-. Friendliness/Agreeableness: cooperativeness -the person's ability to cooperate and listen to others- and politeness -comprises aspects related to affability, trust, and openness for others-. Conscientiousness: perseverance -encompasses aspects regarding persistence and tenacity- and scrupulousness -includes issues concerning reliability, meticulousness, and desire for order-. Emotional Stability: impulse control -ability to control one's behaviour- and emotion control -control of the emotional states in a given situation-. Openness: openness to experience -openness to different values, styles, and lifestyles- and openness to culture -interest in staying informed, reading, and acquiring new knowledge-.

Procedure

Different High Schools in the Community of Valencia, Spain, were randomly selected and informed about the research purpose. Both the school boards and participants provided the informed consent. The questionnaires were administered in presence of a researcher, in paper-and-pencil format, and filled out voluntarily and anonymously.

Data analysis

Descriptive statistics, Cronbach's alpha coefficients, and bivariate correlational analysis were calculated with the program SPSS (V. 23).

Structural equation models (SEM) were created with EQS 6.1 (Bentler & Wu, 2002) to test the mediating role of Optimism between the BF factors and facets on SWB (Table 2 and Table 3). Based on Holmbeck (1997), we computed the Model 1 (Model A-C), in which the basic personality dispositions are predictors of SWB. Then, Model 2 (Constrained A-B-C Model) was computed: SWB is regressed on Optimism, and Optimism is predicted by personality factors. In both models, the *paths* had to be significant and the adjustment adequate. Finally, Model 3 (Unconstrained A-B-C Model), in which the personality variables can predict SWB, was computed. Model 3 should not be statistically better than Model 2, regardless of whether there is a total mediating effect. In the set of models, the BF factors were based on the sum of its items; Table 4 reports the factor loadings of the observed variables on Optimism and SWB. The set of models included the correlation between personality dimensions.

Additionally, a multigroup analysis was performed to analyze possible differences in the mediating role of Optimism by sex.

To evaluate the goodness-of-fit of the models, different fit indices were calculated (Jackson, Gillaspy, & Purc-Stephenson, 2009) (acceptable criteria level in parentheses): comparative fit index (CFI > .90), non-normed fit index (NNFI > .90), incremental fit index (IFI > .90), root mean square error of approximation (RMSEA < .08; 90% confidence interval [CI]), and the standardized root mean square residual (SRMR) (lower values indicate better model fit). The Satorra-Bentler chi-square (S-Bχ^2) test was also considered ($p > .05$). This index was divided by degree of freedom to correct the influence of the number of subjects (S-B$\chi^2/df < 2$) (Hair, Anderson, Tatham, & Black, 1999).

Results

Descriptive and correlational analysis

Descriptive statistics, internal consistency, and correlations between the variables are presented in Table 1. Cronbach's alphas were satisfactory, although in the case of the LOT-R was $\alpha = .62$.

All correlations between the variables were positive. Optimism and SWB showed a strong association. Each of the BFs (with the exception of Agreeableness, which was only weakly associated with Optimism) were related moderately to weakly to both Optimism and SWB. Additionally, most facets showed moderate to weak relationships with both Optimism and SWB. Only three facets failed to show this pattern: cooperativeness (not associated with Optimism), scrupulousness (not associated with SWB), and openness to culture (not associated with either).

Mediation analysis

Factors. Model 1 (Model A-C) was first calculated and the factors of Extraversion, Agreeableness, and Emotional Stability were deemed predictors of SWB. The adjustment was good.

Model 2 (Model A-B-C) was also computed and Extraversion, Conscientiousness, and Emotional Stability were the predictor variables. Both Models (1 and 2) were recalculated including only Extraversion and Emotional Stability, which met the Holmbeck criteria (1997) previously mentioned. Finally, we calculated Model 3 (Model A-B-C, it included A-C) with Extraversion and Emotional Stability. The adjustment was also adequate. The differences between Models 2 and 3 were not statistically significant ($\Delta\chi_{(2)} = .23$, $p > .05$). The direct *path* from Extraversion and Emotional Stability to SWB did not improve the adjustment of Model 2. Our results showed that the effects of these traits were completely mediated by Optimism. According to this model, Extraversion, Emotional Stability, and Optimism explained 44% of the variance SWB.

Table 1
Descriptive statistics and correlations

	M	SD	SWB	Optimism
1. Energy/Extraversion (α=.81)	77.04	10.83	.26***	.30***
1.1. Dynamism (α=.76)	35,42	6,40	.32***	.27***
1.2. Dominance (α=.75)	41.62	6.53	.12**	.23***
2. Friendliness/Agreeableness (α=.85)	88.97	10.21	.15***	.12**
2.1. Politeness (α=.75)	44.58	5.60	.17***	.13**
2.2. Cooperativeness (α=.75)	44.38	5.73	.11**	08
3. Conscientiousness (α=.84)	80.49	11.09	.16***	.26***
3.1. Perseverance (α=.76)	41.50	5.99	.27***	.34***
3.2. Scrupulousness (α=.77)	39.00	6.57	.02	.14**
4. Emotional Stability (α=.88)	67.00	12.84	.24***	.28***
4.1. Emotion control (α=.77)	34.60	6.89	.33***	.38***
4.2. Impulse control (α=.84)	32.39	7.70	.10*	.13**
5. Openness (α=.82)	77.03	12.12	.07	.11**
5.1. Openness to experience (α=.74)	41.44	6.11	.14**	.13**
5.2. Openness to culture (α=.80)	35.60	7.90	.00	.07
6. Subjective wellbeing (α=.79)	20.00	4.40		.53***
7. Optimism (α=.62)	19.89	4.17		

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

Table 2
Fit indexes for Model 1, Model 2, and Model 3, and unrestricted (Model 2U) and restricted (Model 2R) versions of Model 2 in multi-group analysis

Model	S-Bχ^2	df	S-Bχ^2/df	RCFI	IFI	RNNFI	RMSEA (90% CI)	SRMR
Model 1	22.81	8	2.85	.98	.98	.96	.055[.029–.082]	.027
Model 2	38.25	18	2.13	.98	.98	.97	.043[.024–.062]	.031
Model 3	38.48	16	1.62	.98	.98	.96	.048[.029–.068]	.031
Model 2U	61.69	36	1.71	.98	.98	.96	.034[.019–.049]	.039
Model 2R	62.72	39	1.61	.98	.98	.97	.032[.016–.046]	.041

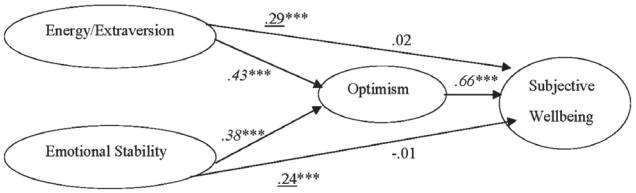

Figure 1. The standardized solution for Model 1, *Model 2*, and Model 3. Correlation between personality factors (r =-.11; $p < .01$) is omitted for the sake of simplicity. *** $p < .001$

Facets. Following the same procedure as that used for factors, we calculated Model 1 (Model A-C) and Model 2 (Model A-B-C); dynamism, politeness, perseverance, impulse control, and emotion control emerged as the significant facets. The adjustment of both models was satisfactory.

We calculated Model 3 (Model A-B-C, it included A-C) and its adjustment was also good. Models 2 and 3 were not statistically different ($\Delta\chi_{(5)} = 9.65$, $p < .05$). The direct *path* from these facets to SWB did not improve the adjustment of Model 2.

Facets. Two versions of Model 2 were calculated (Table 3). The unrestricted model (Model 2U) showed a good adjustment. The difference between Model 2U and the restricted model (Model 2R, with betas values constrained by sex) was not significant ($\Delta\chi_{(6)} = 2.25$, $p > .05$). Taken together, the results indicated that Optimism played an equal mediating role in the relationship of the facets on SWB for both males and females.

Discussion

This study investigated the mediating role of Optimism on the relationship between BF facets and factors and SWB in a sample of Spanish adolescents.

First, we explored the bivariate relationships between variables. Consistent with previous studies, Optimism was strongly and positively associated with SWB (Alarcón et al., 2013; Marrero-Quevedo et al., 2014) and each BF: moderate with Emotional Stability, Extraversion, and Conscientiousness, and lower with Agreeableness and Openness (Busseri & Choma, 2016; Miciuk et al., 2016; Rey & Extremera, 2014; Sharpe et al., 2011). Also,

Table 3
Fit indexes for Model 1, Model 2, and Model 3, and unrestricted (Model 2U) and restricted (Model 2R) versions of Model 2 in multi-group analysis

Model	S-Bχ^2	df	S-Bχ^2/df	RCFI	IFI	RNNFI	RMSEA [90% CI]	SRMR
Model 1	34.70	17	2.04	.99	.99	.97	.041[.021–.061]	.027
Model 2	61.93	33	1.88	.98	.98	.97	.038[.023–.052]	.034
Model 3	52.28	28	1.87	.99	.99	.98	.038[.021–.053]	.028
Model 2U	105.04	66	1.59	.98	.98	.96	.031[.019–.042]	.040
Model 2R	107.29	72	1.49	.98	.98	.97	.028[.016–.039]	.031

Thus, the effects of these facets were completely mediated by Optimism. Moreover, 47% of the variance of SWB was explained by the facets and Optimism.

Differences by sex

Factors. To evaluate whether the mediating role of Optimism varied by sex, we compared the relationship between factors for females and males. Two different versions of Model 2 were calculated (Table 2). The unrestricted model (Model 2U, with beta coefficient free to vary) showed a good adjustment. The differences between this model and Model 2R (beta values constrained between sexes) were not significant ($\Delta\chi_{(3)} = 1.03$, $p > .05$). Taken together, the results indicated that Optimism played an equal mediating role in the relationship of BF on SWB for both males and females.

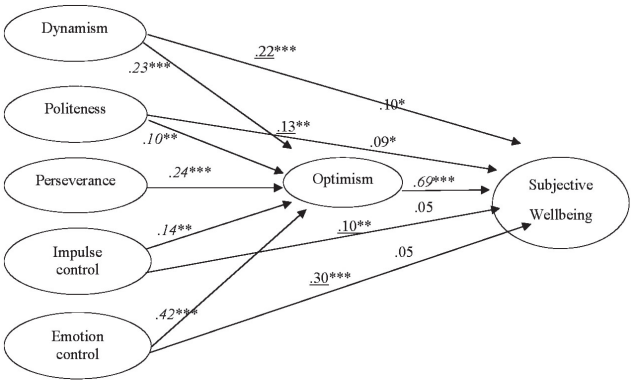

Figure 2. The standardized solution for Model 1, *Model 2*, and Model 3. Relation between perseverance and wellbeing in Model 1 ($\beta = .10$; $p < .05$) and Model 3 ($\beta = .07$; $p > .05$) and correlations between personality facets are omitted for the sake of simplicity. *** $p < .001$; ** $p < .01$; * $p < .05$

Table 4
Factor loadings and their significance levels of latent variables Optimism and SWB

Factor	Variables	Factor loadings
SWB	Some people are generally not very happy.	1[a]
	Some people are generally very happy.	.75**
	Compared with most of my peers.	.80**
	In general, I consider myself…	.86**
Optimism	Parcel 1 (items 1, 4, and 9)	1[a]
	Parcel 2 (items 3, 7, and 10)	.73**

Note: Robust statistics.
[a] Fixed to 1 during estimation.
* $p < .05$ (two-tailed test); ** $p < .01$ (two-tailed test)

according to previous results (DeNeve & Cooper, 1998; Steel et al., 2008), SWB was positively, and moderately to slightly, related to Extraversion, Emotional Stability, Conscientiousness, and Agreeableness. Virtually identical to that found for the factors was the intensity of positive associations between facets and Optimism and SWB. Moreover, only scrupulousness, cooperativeness, and openness to culture showed non-significant relationships with Optimism and/or SWB.

Attending to these associations, the mediating role of Optimism was tested using two models that explored both direct and indirect effects of factors and facets respectively on SWB. A first total mediation model in which Emotional Stability and Extraversion predicted SWB through Optimism showed good fit. Also, a second total mediation model that included dynamism, perseverance, politeness, emotion control, and impulse control facets showed a good fit and was able to explain a somewhat higher percentage of the SWB variance

Thus, the shaping of future positive expectations seems to be the mechanism through which personality characteristics such as expansiveness and enthusiasm, kindness and trust, capability to cope adequately with one's own anxiety and emotionality, control of irritation, discontent, and anger, as well as the ability of fulfilling one's own tasks and commitments impact SWB. In this sense, our results support the instrumental explanation of the relationship between personality and wellbeing to the extent that personality traits influence ways in which individuals perceive the world around them (Roberts, 2009). Particularly, development of a specific positive cognitive perspective such as optimistic expectations seems to play a key role, and explained almost half of the variance in SWB at both factor and facet levels.

The relevant personality traits in the resulting mediation models coincide broadly with the characteristics pointed out by Sharpe et al. (2011) in their three-way model. It is true that when the analysis is carried out at the factor level, only the affective pathway (Emotional Stability and Extraversion) and part of the social pathway (Extraversion) are reflected. However, when considering the facets, not only was the affective pathway maintained, but also the social way was widened and the persistence pathway emerged. Therefore, the low negative affectivity and high positive affectivity of an optimistic person (Boland & Cappeliez, 1997) is likely to be the outcome of the emotional stability and enthusiasm characteristic of their personality profile. Likewise, research has highlighted that generally optimistic people enjoy more positive social interactions (Assad, Donnellan, & Conger, 2007), and report greater social support (Vollmann, Antoniw, Hartung, & Renner, 2011), aspects which would respond to their higher sociability and cordiality. Finally, the perseverance characteristic of optimistic people supported by previous literature (Carver, Scheier, & Segerstrom, 2010) would be more a precedent than a consequence of believing that positive future results will be experienced. These results are congruent with those (Anglim & Grant, 2016) that highlight the importance of a facet-level analysis for a comprehensive understanding of the relationship between personality and SWB.

Our findings regarding the mediating role of Optimism between BF and SWB are in line (with slight variations) with the results obtained by Serrano, Andreu, Murgui, and Martínez (under review) for the mediating role of Optimism between BF and Perceived Stress. In that study, Optimism mediated the relationship between Emotional Stability, Extraversion, and Conscientiousness and Perceived Stress. It seems reasonable to believe that if the research had examined the facet level, the results could have been more similar. Notwithstanding, another possible rationale for the results could be that the significant role of BF as distal predictors of adjustment results depends on the criterion variable. Thus, it is remarkable that in that study, Optimism only partially mediated the relationship between Emotional Stability and Perceived Stress. Further research could examine the mediating role of Optimism between personality factors and facets and adjustment results contemplating different outcome variables.

Finally, a multi-group analysis revealed the total invariance of structural paths for males and females at both the facet and factor levels. Thus, sex differences in personality and SWB in adolescents (De Bolle et al., 2015; Serrano & Andreu, 2016), do not turn into differences in the relationships observed between these variables.

To our knowledge, this is the first study that has assessed the mediating role of Optimism between basic personality dimensions and SWB in adolescent sample. Other strengths of this study are the large number of participants, the focus on both facets and factors of personality, and the exploration of the possible modulation of the results by sex. Nevertheless, several limitations should be noted. First, the exclusive use of self-reporting measures and particularly the BFQ and SHS scales. BFQ is limited in its assessment of Neuroticism and Extraversion baseline affective levels. Although it addresses more broadly moods and emotions related to anger and anxiety, only one item on the BFQ Neuroticism subscale explores negative moods and emotions of sadness, melancholy, depression, etc. To an even greater extent, the positive affectivity component of Extraversion is only assessed by one of the items on the scale. Therefore, we must be cautious regarding the failure of empirical support for the temperamental hypothesis given the use of the BFQ. Likewise, the SHS scale does not allow the assessment of the affective component of the SWB; thus, preventing an analysis of relationships between Optimism and each of the components of this construct. In short, the insufficient representation of the affective component inherent to some of the constructs contemplated may have biased our results. More accurate contrast both the relevance of optimism mediating role and the temperamental pathway on wellbeing, requires the future use of instruments to overcome this limitation. An additional limitation is the cross-sectional design used that provides only correlational evidence. Further longitudinal studies are needed to clarify the mediating role of optimism in the influence of personality dimensions on wellbeing.

Lastly, study participants constitute a specific subgroup; thus, it should be explored the replication of our results in different age groups to advance understanding of the stability of the mediating function of Optimism between the BF and SWB throughout the life cycle.

Finally, some theoretical and practical implications can be derived from our results. While Optimism is a relatively stable construct, it has been considered more malleable than basic personality dispositions (Lauriola & Iani, 2015). Some authors suggest that cognitive constructs should be the focus of interventions because there is no doubt that such constructs can be fostered through interventions (Lazowski & Hulleman, 2016). This issue is relevant in two ways. First, if core beliefs as favorable expectations for the future feed into broader personality traits and can be changed, they contribute to personality malleability (Dweck, 2008). Second, this possibility increases the chances of improving individual SWB levels associated with the personality profile. While future research should examine different issues such as how long the benefits achieved by interventions last, findings from a recent meta-analysis show that psychological interventions are successful in increasing Optimism (Malouff & Schutte, 2017). Consequently, this sort of interventions could contribute to the optimal functioning of adolescents in this critical period of development (Cunsolo, 2017). In this regard, the greater malleability of Optimism during life transition periods suggested by Carver and Scheier (2014) would appear promising as a means to increasing SWB levels in a particular way in adolescent populations.

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