



## Big Five and psychological and subjective well-being in Colombian older adults



Juan Carlos Meléndez<sup>a,\*</sup>, Encarna Satorres<sup>a</sup>, Maria-Angelica Cujíño<sup>b</sup>, Maria-Fernanda Reyes<sup>b</sup>

<sup>a</sup> *Developmental Psychology, University of Valencia, Av. Blasco Ibañez 21, Valencia, ES 46010, Spain*

<sup>b</sup> *Faculty of Psychology, University El Bosque, Av. Cra 9 No. 131A – 02, Bogota, Colombia*

### ARTICLE INFO

#### Keywords:

Personality traits  
Psychological well-being  
Subjective well-being

### ABSTRACT

The goal of the current study was to investigate the relationships between the Five Factor Model of personality and the dimensions of subjective well-being (positive affect, negative affect, and life satisfaction), and psychological well-being (self-acceptance, personal growth, environmental mastery, autonomy, positive relations with others, and purpose in life). Participants included 618 Colombian adults aged 60–92 years. Multiple linear regression analyses were conducted. Regarding the subjective well-being, neuroticism was associated with lower scores on life satisfaction, and positively associated with negative affect, whereas extroversion and conscientiousness were associated with higher scores on life satisfaction and positive affect. For psychological well-being, neuroticism showed a negative and significant association with all of the psychological well-being dimensions, except purpose in life, whereas extroversion and conscientiousness showed a significant and positive relationship with the six dimensions. Neuroticism, extraversion, and conscientiousness represent personality predispositions for general well-being. Extraversion and conscientiousness are predictors of optimal aging. Neuroticism was the only significant predictor of negative affect.

### 1. Introduction

In recent years, there has been an increasing interest in the study of well-being. This interest is especially relevant for older adults because they have a greater probability of facing difficult situations such as health problems (Meléndez, Satorres, Redondo, Escudero, & Pitarque, 2018), loss of loved ones, or economic difficulties (Sugisawa, Harada, Sugihara, Yanagisawa, & Shinmei, 2018). Nevertheless, many older adults are able to adapt to such changes, rethinking their goals and adjusting their social, psychological, and physical abilities, and achieving high levels of well-being. In this regard, it is interesting to know whether the personality characteristics can predict the presence and magnitude of the dimensions that make up the psychological (PWB) and subjective well-being (SWB) (Strickhouser, Zell, & Krizan, 2017) particularly in elderly population (Hentschel, Eid, & Kutscher, 2017). In general, a large body of research has mapped Big Five onto SWB (Steel, Schmidt, & Shultz, 2008) and a smaller number, but still substantial number of studies has mapped Big Five onto PWB (Anglim & Grant, 2016). One aspect to be highlighted is that in this study we have studied both types of well-being, trying to elucidate how personality factors predict the dimensions of both SWB and PWB in a sample of

non-clinical older adults.

In psychological and medical research, the two main perspectives on well-being are: the hedonic approach (SWB), which focuses on happiness and defines well-being in terms of achievement and avoidance of pain; and the eudaimonic approach (PWB), which focuses on meaning and self-realization and defines well-being in terms of the degree to which a person is fully functioning (Ryan & Deci, 2001).

With regard to SWB, Diener (2012) proposed that it involves frequent pleasant emotions, infrequent unpleasant emotions, and life satisfaction. Commonly, these three components have been grouped into two: a cognitive component and an affective-emotional component (Deci & Ryan, 2008; Diener, Oishi, & Tay, 2018). Cognitive component is based on beliefs and attitudes about one's life (Schimmack, 2008), it is more stable in time, and it refers to the person's judgment about his/her evolutionary trajectory. Affective-emotional component is related to the person's feelings of pleasure and displeasure (positive affect and negative affect). This component would be subject to changes in the short and medium term, and it refers to what the person thinks and feels about his/her life, whether he/she is moving towards a desired life, and the cognitive and affective conclusions reached when evaluating his/her existence (Diener, 2012).

\* Corresponding author.

E-mail addresses: [melendez@uv.es](mailto:melendez@uv.es), [Juan.C.Melendez@uv.es](mailto:Juan.C.Melendez@uv.es) (J.C. Meléndez), [Encarna.Satorres@uv.es](mailto:Encarna.Satorres@uv.es) (E. Satorres), [cujinomaria@unbosque.edu.co](mailto:cujinomaria@unbosque.edu.co) (M.-A. Cujíño), [reyesmariafr@unbosque.edu.co](mailto:reyesmariafr@unbosque.edu.co) (M.-F. Reyes).

<https://doi.org/10.1016/j.archger.2019.01.016>

Received 27 October 2018; Received in revised form 15 January 2019; Accepted 26 January 2019

Available online 29 January 2019

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PWB consists of perfecting human potential as a goal that develops throughout the life cycle of each individual (Ryff, 2014). Thus, PWB includes six dimensions that make it possible to fulfil this goal (Ryff & Keyes, 1995): (a) self-acceptance; (b) positive relations with others; (c) autonomy; (d) environmental mastery; (e) purpose in life; and (f) personal growth. Some of its dimensions clearly show the effects of age: positive relations and self-acceptance have been shown to be relatively stable; environmental mastery tends to be higher in older and middle-aged; autonomy exhibits a similar pattern, although less marked; purpose in life and personal growth, considered the most characteristic dimensions of PWB, decrease as development progresses (Ryff, 2014).

Well-being is considered to be determined by factors that are universal, as personality (Diener, 2012) or the fulfilment of basic needs (Tay & Diener, 2011) and others that are cultural specific (Stephens, Deaton, & Stone, 2014), as self-esteem, self-determination, control over the environment and social support (Triandis, 2000).

The study of the relationship between personality and SWB has a long tradition, but in recent decades, interest in the relationship between personality and PWB has begun to emerge. The Five Factor Model (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) is the personality trait structure that has received the most theoretical and empirical attention, and it has been used in this study. The relationship between personality and well-being is dynamic and, therefore, should be examined from an aging perspective. Although personality is a construct that remains fairly stable throughout the life cycle, there are some variations: neuroticism, extraversion, openness to experience, and agreeableness all follow an inverted U-shaped function, reaching a peak between the ages of 40 and 60 and decreasing afterward, whereas conscientiousness continuously shows an increasing rank-order stability throughout adulthood (Specht, Egloff, & Schmukle, 2011).

Two meta-analyses (DeNeve & Cooper, 1998; Steel et al., 2008) showed that neuroticism is the trait most strongly associated with negative affect, as an indicator of poor subjective well-being, whereas extraversion is associated with positive affect, indicating higher subjective well-being. In addition, agreeableness and conscientiousness are positively associated with SWB, but less strongly than neuroticism and extraversion, whereas for openness to experience, the effects were the smallest, although also in the direction of a positive association with well-being. In general, neuroticism is negatively related to subjective well-being; extraversion, conscientiousness, and agreeableness are positively related to subjective well-being; and openness is positively correlated with both positive and negative affect (Friedman & Kern, 2014; Kahlbaugh & Huffman, 2017; Kokko, Rantanen, & Pulkkinen, 2015; Magee, Miller, & Heaven, 2013). The findings of Strickhouser et al. (2017) highlight the heretofore underappreciated importance of agreeableness, which has received less theoretical attention than conscientiousness and neuroticism but predicted well-being to nearly the same degree.

Regarding psychological well-being, the first studies that associated this type of well-being with the personality traits found that extraversion and neuroticism were more related to it (Costa & McCrae, 1980; Kokko, Tolvanen, & Pulkkinen, 2013). Recently, this association has been confirmed by different researchers (Anglim & Grant, 2016; Sun, Kaufman, & Smillie, 2018). Moreover, Bardi and Ryff (2007) found that neuroticism predicted lower autonomy, personal growth, positive relations, and purpose in life. In addition, participants who were low on neuroticism and high on openness to experience reported greater personal growth. Some pairs of personality and PWB dimensions have larger or more consistent correlations than others (Grant, Langan-Fox, & Anglim, 2009): extraversion with positive relations with others and conscientiousness; openness to experience with purpose in life and personal growth. More recently, neuroticism was showed as the strongest predictor of self-acceptance, environmental mastery, and autonomy; openness to experience was the strongest predictor of personal growth; extraversion was the main predictor of positive relations with

others; and conscientiousness predicted purpose in life (Marrero & Carballo, 2011).

The study of personality and wellbeing in the Latin America context is limited, and has been focused on the association between health (i.e. Mella et al., 2004), sociodemographic variables (Ramírez-Pérez & Lee-Maturana, 2012) and wellbeing, rather than personality, which is considered as a predictor of wellbeing in many cultures. This study explores if this association is extended to Colombian older adults. Colombia is experiencing a demographic transition, the group of people of 60 years and older makes up close to 12%, and life expectancy is currently 76 years (Fedesarrollo & Fundación Saldarriaga Concha, 2015). Notwithstanding, the elderly population in Colombia is one of the age group that live in worst socioeconomic conditions, have low rate of pension coverage and are more likely to be in poverty than other age groups (Dulcey-Ruiz, Arrubla-Sánchez, & Sanabria-Ferrand, 2013). Nonetheless, despite the worrisome situation, there is evidence that Colombia tend to have high scores in happiness, this has been attributed to cultural characteristics related to the family, social connectedness and the expression of emotions of Latin American culture (Diener, 2012).

The aim of this study was to investigate to what degree the personality traits (Big Five) predict SWB and PWB in a sample of Colombian older adults. Considering the Big Five traits individually, we hypothesized that (H1) neuroticism would reveal the strongest association with negative affect of SWB and would negatively predict all the dimensions of PWB, especially environmental mastery and autonomy; (H2) extraversion would predict positive affect and life satisfaction dimensions of SWB and all the dimensions of PWB especially positive relations with others; (H3) conscientiousness would be the main positive predictor of self-acceptance, personal growth, and purpose in life dimensions of PWB; we expected that (H4) openness to experience would predict both the positive affect and negative affect of SWB and the most typical dimensions of PWB (personal growth and purpose in life); we hypothesized that (H5) agreeableness would predict all the dimensions of SWB and the positive relations with others of PWB.

## 2. Method

### 2.1. Participants

The sample consisted of 618 people between 60 and 92 years old ( $M = 70.15$ ;  $SD = 7.26$ ), of whom 35.9% were men, and 64.1% were women. Regarding the level of education, the distribution was as follows: 36.7% unfinished primary, 32.4% complete primary, 20.2% high school, 10.6% university studies.

In order to evaluate the general cognitive status of the elderly adults, the validated version of the Mini Mental State Examination in Colombia was used (Rosselli et al., 2000). The inclusion criteria were the cut-off point's  $\geq 24$  for people with primary education or higher,  $\geq 21$  for people without studies, but who can read and write.

### 2.2. Instruments

Psychological well-being scale (Ryff, 1989). These scales conceptualize and measure wellbeing in six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth; all of the items were scored from 1 (strongly disagree) to 6 (strongly agree). Moreover, these scales have been adapted and validated for elderly people in Spain with structural equations models (Tomás, Meléndez, & Navarro, 2008).

To evaluate subjective well-being, two scales were used; the Satisfaction with Life Scale (SWLS) for the cognitive component and the Positive and Negative Affect Scale (PANAS) to evaluate the affective component.

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) consists of 5 positively-worded statements that participants

respond to on a 7-point Likert-type response scale ranging from (1) strongly disagree to (7) strongly agree, depending on the person's overall judgment of his/her life. In the present study, high internal consistency was found for this scale ( $\alpha = .800$ ).

Positive and Negative Affect Scale (PANAS), is a self-applied instrument that consists of two sections with 20 adjectives each, 10 measuring positive affect and 10 measuring negative affect (Watson, Clark, & Tellegen, 1988). The same adjectives are used to evaluate how the subject feels at two time points (during the past week and in general). High internal consistency was found for the NA of the past week ( $\alpha = .809$ ) and generally ( $\alpha = .822$ ).

To evaluate personality, the NEO-FFI was used (Costa & McCrae, 2008). It makes it possible to evaluate five personality traits: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. Its Spanish version has been used, which consists of 60 items rated on a 5-point Likert scale ranging from (0) strongly disagree to (4) strongly agree.

### 2.3. Procedure

#### 2.3.1. First phase: recruitment

The older adults were contacted through community leaders, local mayors, and leisure and recreation groups. They were invited to participate and informed of the purpose, voluntary nature, and confidentiality of the study. Then, those who were interested in participating gave their informed consent.

#### 2.3.2. Second phase: implementation of questionnaires

First of all, the MMSE was applied to screen the cognitive status of the participants and, thus, determine whether they could participate in the study; five participants were excluded. After that, the tests described in the instruments section were administered.

### 2.4. Statistical analyses

As the dependent variables of SWB and PWB were continuous, multiple linear regression analyses to study the association between the Big Five personality traits and each of the six dimensions of psychological well-being and the three dimensions of SWB were performed using the standard method. In addition, zero-order correlations between the Big Five traits were conducted. All the analyses were carried out with the SPSS 21 program.

## 3. Results

Correlations between the Big Five traits are presented in Table 1. Significant associations were found among the five traits, although the

**Table 1**  
Pearson correlations between traits of the Big Five.

	N	E	O	A	C
Neuroticism (N)	–				
Extraversion (E)	–.46**	–			
Openness to experience (O)	–.14**	.45**	–		
Agreeableness (A)	–.37**	.36**	.21**	–	
Conscientiousness (C)	–.48**	.44**	.24**	.38**	–
Life satisfaction	–.30**	.31**	.16**	.24**	.37**
Positive affect	–.24**	.45**	.31**	.24**	.38**
Negative affect	.55**	–.23**	–.06	–.24**	–.32**
Self-acceptance	–.36**	.37**	.19**	.32**	.45**
Environmental mastery	–.47**	.35**	.15**	.20**	.37**
Positive relations	–.35**	.42**	.23**	.25**	.31**
Autonomy	–.46**	.30**	.08*	.17**	.33**
Personal growth	–.32**	.34**	.26**	.24**	.40**
Purpose in life	–.31**	.44**	.28**	.29**	.50**

\*\*  $p < .001$ .

correlations were moderate and did not indicate collinearity issues. As expected, neuroticism was negatively correlated with extraversion, openness to experience, agreeableness, and conscientiousness. All the dimensions of psychological well-being, and life satisfaction and positive affect of the subjective well-being were positively correlated with extraversion, openness to experience, agreeableness and conscientiousness and negatively with neuroticism, while negative affect correlated positively with neuroticism and negatively with extraversion, agreeableness and conscientiousness.

Three multiple linear regression models using the enter method were conducted to predict the components of subjective well-being: life satisfaction and positive and negative affect from the Five Factor Model. As Table 3 shows, the three models were significant, and a large proportion of the variance of the PANAS scales was explained by the personality model, in comparison with life satisfaction. Regarding the cognitive component of subjective well-being, the results showed that neuroticism was associated with lower scores on the life satisfaction scale, whereas extraversion and conscientiousness were associated with higher scores.

On the other hand, results showed that extraversion, openness to experience, and conscientiousness were related to higher scores on the general positive affect scale, whereas neuroticism was the only trait that showed a significant and positive association with negative affect and presented the largest effect size (see Table 2).

The association between the Big Five personality traits model (neuroticism, extraversion, openness to experience, agreeableness, conscientiousness) and the six dimensions of psychological well-being (self-acceptance, environmental mastery, positive relations with others, autonomy, personal growth, and purpose in life) was evaluated using linear multiple regression analysis with the enter method or forced entry. A multiple linear regression model for each dimension of psychological well-being was performed. The enter method was selected in order to give the same level of importance to each predictor, by simultaneously including all the traits in the model.

The result showed that the Five Factors Model were significant models for the six dimensions of psychological well-being (PWB); the models explained the variance in PWB in a range from 22% to 31%.

As Table 3 shows, when each trait was evaluated, neuroticism presented a negative and significant association with all of the psychological well-being dimensions, except purpose in life, and this relationship was stronger with environmental mastery and autonomy. On the other hand, extraversion and conscientiousness showed a significant and positive relationship with the six dimensions. A stronger association between extraversion and positive relations with others was found, whereas conscientiousness presented a stronger association with purpose in life, self-acceptance, and personal growth, and a weak relationship with positive relations with others. Openness to experience only showed a positive and weak relationship with personal growth and purpose in life.

## 4. Discussion

The aim of this research was to test whether personality traits predict well-being in a sample of Colombian older adults, and if so, how this occurs. After carrying out the relevant analyses, personality traits were found to be good predictors of both subjective well-being (SWB) and psychological well-being (PWB). In addition, the personality traits that show the greatest predictive power would be neuroticism, extraversion, and conscientiousness, suggesting that these traits represent personality predispositions for general well-being. Therefore, our findings are consistent, at least partially, with previous studies (Grant et al., 2009).

Furthermore, after observing the results of this study, and based on what was proposed by Grant et al. (2009), we can state that personality traits predict psychological well-being to a greater extent (PWB) than subjective well-being (SWB). One reason for this assertion is that, whereas the variance in the emotional-affective component of

**Table 2**  
Multiple linear regression coefficients between the Big Five traits and three dimensions of subjective well-being.

Dependent variable	Predictors	B	SE B	β	t	95% CI for B	
						Lower	Upper
Life satisfaction: <i>R</i> <sup>2</sup> <i>adj</i> = .176 <i>F</i> (5,570) = 24.35***	Neuroticism	-.07	.03	-.10	-2.23*	-.125	-.008
	Extraversion	.10	.03	.14	2.80**	.028	.158
	Openness to experience	.00	.03	.01	.16	-.056	.067
	Agreeableness	.07	.04	.07	1.66	-.013	.156
	Conscientiousness	.20	.04	.23	5.02***	.121	.277
General Positive Affect <i>R</i> <sup>2</sup> <i>adj</i> = .273 <i>F</i> (5,573) = 42.97***	Neuroticism	.00	.00	.03	.77	-.005	.011
	Extraversion	.03	.00	.29	6.37***	.019	.036
	Openness to experience	.01	.00	.13	3.10**	.005	.021
	Agreeableness	.01	.01	.06	1.54	-.002	.020
	Conscientiousness	.02	.01	.23	5.40***	.018	.038
General Negative Affect <i>R</i> <sup>2</sup> <i>adj</i> = .315 <i>F</i> (5,573) = 52.63***	Neuroticism	.04	.00	.53	12.49***	.037	.050
	Extraversion	.00	.00	.05	1.09	-.003	.012
	Openness to experience	.00	.00	.01	.22	-.006	.008
	Agreeableness	-.01	.01	-.05	-1.44	-.017	.003
	Conscientiousness	-.07	.01	-.06	-1.46	-.016	.002

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

subjective well-being explained by the personality traits shows similar values to the explained variance of the psychological well-being dimensions, in the evaluative-cognitive component of subjective well-being, the variance explained by the personality traits shows a lower value.

Considering the Big Five traits individually, the results show that neuroticism is by far the best predictor of well-being. In fact, the variance in negative affect explained by neuroticism was the highest in the

current research. The explanation for this strong relationship coincides with what Costa and McCrae proposed (Costa & McCrae, 1980), that those who score high on neuroticism are more likely to have negative feelings, experience low tolerance to stress, live intensely negative emotions, and have anxiety problems. Therefore, given the reliable and negative relationships found between neuroticism and well-being indices, we can think that if we try to mitigate or diminish characteristic attitudes of neurotic people we would be indirectly influencing well-

**Table 3**  
Multiple linear regressions between the Big Five and each dimension of PWB.

Dependent variable	Predictors	B	SE B	β	t	95% CI for B	
						Lower	Upper
Self-Acceptance <i>R</i> <sup>2</sup> <i>adj</i> = .269 <i>F</i> (5,577) = 43.93***	Neuroticism	-.04	.01	-.13	-3.08**	-.076	-.017
	Extraversion	.04	.01	.14	2.87**	.015	.081
	Openness to experience	.01	.01	.03	.72	-.020	.043
	Agreeableness	.06	.02	.12	3.13**	.025	.111
	Conscientiousness	.13	.02	.29	6.60***	.093	.172
Environmental mastery <i>R</i> <sup>2</sup> <i>adj</i> = .268 <i>F</i> (5,577) = 43.45***	Neuroticism	-.16	.02	-.37	-8.51***	-.208	-.130
	Extraversion	.05	.02	.11	2.34*	.008	.095
	Openness to experience	.02	.02	.04	.93	-.021	.061
	Agreeableness	-.02	.02	-.03	-.85	-.080	.032
	Conscientiousness	.09	.03	.16	3.72***	.046	.149
Autonomy <i>R</i> <sup>2</sup> <i>adj</i> = .242 <i>F</i> (5,577) = 38.06***	Neuroticism	-.26	.03	-.39	-8.90***	-.319	-.204
	Extraversion	.07	.03	.11	2.29*	.011	.140
	Openness to experience	-.02	.03	-.04	-.93	-.090	.032
	Agreeableness	-.05	.04	-.05	-1.20	-.134	.032
	Conscientiousness	.10	.04	.13	2.79**	.032	.186
Positive relations others <i>R</i> <sup>2</sup> <i>adj</i> = .224 <i>F</i> (5,577) = 33.24***	Neuroticism	-.10	.03	-.17	-3.82***	-.159	-.051
	Extraversion	.16	.03	.25	5.21***	.100	.221
	Openness to experience	.04	.02	.06	1.62	-.010	.104
	Agreeableness	.05	.04	.05	1.29	-.027	.129
	Conscientiousness	.07	.03	.10	2.16*	.007	.151
Personal Growth <i>R</i> <sup>2</sup> <i>adj</i> = .223 <i>F</i> (5,577) = 33.21***	Neuroticism	-.04	.01	-.12*	-2.61**	-.072	-.010
	Extraversion	.04	.01	.13*	2.50*	.009	.079
	Openness to experience	.05	.01	.12*	2.98**	.017	.082
	Agreeableness	.02	.02	.03	.86	-.025	.064
	Conscientiousness	.12	.02	.26**	5.77***	.080	.163
Purpose in life <i>R</i> <sup>2</sup> <i>adj</i> = .316 <i>F</i> (5,577) = 54.68***	Neuroticism	-.01	.01	-.02	-.49	-.047	.028
	Extraversion	.09	.02	.20	4.44***	.053	.137
	Openness to experience	.05	.02	.10	2.5*	.012	.092
	Agreeableness	.04	.03	.05	1.66	-.008	.100
	Conscientiousness	.22	.02	.36	8.79***	.174	.275

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

being indices. In this sense, aspects such as improving mood, reducing levels of anxiety, increasing impulse control, delaying gratification and reducing social anxiety could be worked on. A suitable tool for this type of objective could be reminiscence therapy, which is a type of intervention applied mainly in older adults (Meléndez, Fortuna, Sales, & Mayordomo, 2015).

In the case of psychological well-being, our hypothesis was almost completely supported because neuroticism predicts all the dimensions of PWB, except purpose in life, and in all cases, in a negative way. On this point, we emphasize the predictive power of this personality trait on the environmental mastery and autonomy dimensions. The environmental mastery dimension is understood as the personal ability to choose or create favourable environments to meet one's desires and needs. People with high environmental mastery have a greater sense of control and a high degree of self-efficacy when tackling everyday responsibilities, whereas people with a high level of autonomy are characterized by sustaining their own individuality in different contexts and situations, maintaining their independence and their own personal authority, resisting social pressure, and self-regulating their behaviour (Ryff & Keyes, 1995). By contrast, the trait of neuroticism is characterized by marked emotional instability, and its definition includes characteristics that are opposite to those of the autonomy and environmental mastery dimensions, which explains the negative sign of the prediction. Some of these characteristics would be lack of responsibility for one's actions and emotions, avoiding changes in order to stay in one's comfort zone, constantly seeking approval from others, and low tolerance for frustration.

As for the extraversion trait, it is consistently found to be positively related to well-being. Except for the negative affect dimension of the SWB, it predicts the remaining dimensions of the SWB and all the dimensions of the PWB, although generally with less strength than the neuroticism trait. Extraversion particularly predicts the positive affect dimension of SWB and the positive relation with others dimension of PWB. This makes sense considering that extraversion is characterized by high sociability, a tendency to look for positive emotions, and a tendency to be in contact with people and avoid loneliness. In this regard, it would be important to promote the extraversion trait because, social support has a positive influence on the health of older adults through its direct effect on PWB (Guindon & Cappeliez, 2010). These findings were as expected, due to the fact that Latin American culture is characterized for having strong family ties and easiness in the expression of emotions, factors which had been reported generators of well-being (Diener, 2012).

In addition, the extraversion trait would also be a good predictor of purpose in life, a dimension of psychological well-being that tends to decrease with age (Ryff, 2014). This leads to considering the importance of the relationships and social support perceived by older adults in continuing to have a purpose in life, i.e. to continue to be motivated to set their own goals and objectives because this will give them meaning in their lives. This result is particularly relevant to the Colombian context, because it gives evidence about the importance of continuing strengthening social connectedness and participation of this group of age.

Regarding conscientiousness, this personality trait is usually positively related to well-being (DeNeve & Cooper, 1998). McCrae and Costa (1991) suggested that conscientiousness can instrumentally affect well-being because it facilitates a positive experience of achievement. People who possess this personality trait are characterized by having self-control and a personal management capacity, and they are usually planners, perfectionists, hardworking, and highly organized. Due to these characteristics, they are able to create conditions that indirectly promote well-being. Regarding the influence that the conscientiousness trait has on SWB, as in other studies (Marrero & Carballo, 2011; Steel et al., 2008), it significantly predicts the cognitive-evaluative component of SWB, namely life satisfaction. Moreover, the variance in the positive affect dimension explained by the conscientiousness trait was

identical to that of the life satisfaction dimension.

As for PWB, in the current study, conscientiousness was a significant predictor of PWB because it explained each of the dimensions of psychological well-being to a greater or lesser extent. This finding supports what was found by Grant et al. (2009), who stated that, along with neuroticism and extraversion, conscientiousness is a personality trait that can discriminate between people with high and low PWB. More specifically, on the two dimensions that have the greatest predictive power, this personality trait was on the personal growth and purpose in life dimensions, which are two of the most characteristic dimensions of PWB. Conscientiousness may facilitate personal growth and purpose in life through task-oriented behaviours, to the extent that the person sets goals in his/her life that he/she strives to achieve, and each challenge is considered an achievement that makes the person feel fulfilled and in continuous development.

In the case of openness to experience, we expected that it would predict both the positive affect and negative affect of SWB, suggesting that people who score high on openness experience both good and bad events more intensely, thus amplifying positive and negative emotional reactions. In the current study, the openness to experience trait only predicted positive affect. A possible explanation for this result would be the positivity bias observed in the elderly population because, according to the Theory of Social-Emotional Selectivity), as the age increases, the preference for positive versus negative information also increases. In addition, older adults use positive reevaluation as a strategy to adapt to stressful events, such as those involved in the aging process (Mather & Carstensen, 2005), and so the openness to experience trait could affect well-being indirectly via its effect on the subjective experience of events (Ellis & Grieger, 1977). As for the ability of this personality trait to predict PWB, our results agree with previous studies (Bardi & Ryff, 2007; Grant et al., 2009; Marrero & Carballo, 2011) that observed that openness to experience predicts the most typical dimensions of PWB (personal growth and purpose in life). Although older adults are usually more resistant to change and more conservative, this personality trait's prediction of these two dimensions of well-being indicates that this trait would be linked to the personal development of the elderly. The conceptualization of personal growth includes the idea that growth and change are positive, which would help us to explain the relationship between this dimension of the PWB and the openness to experience trait. Moreover, openness to experience may facilitate personal growth through experience seeking, to the extent that it helps the person to have greater self-knowledge and, therefore, greater effectiveness in developing his/her full potential.

Finally, regarding the predictive power of the agreeableness personality trait on SWB, contrary to previous studies in which this trait predicted all its components (Steel et al., 2008), in the current study this personality trait did not predict SWB. Regarding the prediction of PWB, given that agreeableness is associated with the interest in interpersonal interactions and greater social cohesion (Anglim & Grant, 2016), one would expect it, as in other studies, to predict the positive relation with others dimension, but this did not occur in our sample. Ryff's positive relations with others dimension measures both presence and satisfaction with interpersonal relationships. Although, as mentioned above, the dimension of positive relations with others is quite stable, due to the characteristics of the sample, composed of people aged 60 or more, it is likely that these people have lost some of their significant friendships due to death or change of address, among others. Thus, they may have been forced to create a new social network and, as a result, their satisfaction with it might have decreased. In the current study, the only dimension of PWB predicted by agreeableness was self-acceptance. Agreeableness is related to adjustment in an instrumental way by promoting conditions of high quality of life (McCrae & Costa, 1991). This perception of living a quality life would help people to have a positive attitude toward the self, make a positive comparison between oneself and others, recognize and accept aspects of oneself, including good and bad qualities, and have positive feelings about one's past life.

#### 4.1. Limitations

This study has a number of limitations. One of them is that both the personality and well-being measures were self-reports, which could produce a bias in some answers. Another limitation is that study gathered the data only in at one time. Therefore, as future lines of research, a longitudinal study could be proposed to observe the changes that occur as people get older or a comparative study could be proposed with two samples, one with younger subjects and another with older adults.

However, despite these limitations, this study has provided a more complete picture of the relationships among personality, SWB, and PWB in a sample specifically composed of Colombian older adults, context where there is a need of developing knowledge, concepts, and theories that truly respond to the social and cultural context. These results suggest that more studies are needed on personality, well-being, and aging.

#### 4.2. Conclusions

The current study indicated that personality explained 17–31% of the variance in SWB, with positive affect showing the highest explained variance; and 22–31% of the variance in PWB, with purpose in life obtaining the greatest explained variance. Moreover, our results showed that extraversion and conscientiousness predicted all the PWB measures and the positive affect and life satisfaction dimensions of SWB, but not the negative affect dimension, so that these personality traits were more strongly associated with PWB. Therefore, we can conclude that these traits are predictors of optimal aging. Neuroticism was the only significant predictor of negative affect, and it also explained the most variance in the entire study.

#### Declaration of conflicting interests

The Author(s) declare(s) that there are no conflicts of interest.

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