

Life Aspirations, Personality Traits and Subjective Well-being in a Spanish Sample

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Abstract: This study examines the relationships between intrinsic/extrinsic aspirations and subjective well-being (SWB; positive affect, negative affect, satisfaction with life) in a sample of 583 Spanish adults. Firstly, the results showed that high scores for SWB are related to high scores for intrinsic aspirations and, to a lesser extent, to low scores for extrinsic aspirations; it was also found that intrinsic aspirations are mainly related to positive indicators of well-being, whereas extrinsic aspirations are mainly associated with negative indicators. Secondly, the study also enabled exploration of the links between the domains of the Five-Factor Model and aspirations; thirdly, the results showed that intrinsic/extrinsic aspirations predict SWB beyond the Five Factors. The results demonstrate the importance of studying the content of human aspirations for understanding psychological health. Copyright © 2011 John Wiley & Sons, Ltd.

Key words: intrinsic and extrinsic aspirations; self-determination theory; traits; Five-Factor Model; subjective well-being

INTRODUCTION

Goal-related constructs have received increasing attention within the study of personality in recent decades (Emmons, 1997; Pervin, 1989; Schmuck & Sheldon, 2001). Goals are now considered key factors in the regulation of behaviour and integration of personality, and their role in the determination of multiple behavioural and emotional outcomes has been repeatedly underlined by personality psychologists (e.g. Little, Salmela-Aro, & Phillips, 2007).

The role of people's priorities, goals and concerns in determining well-being has been emphasized by theorists and researchers (e.g. Bandura, 1997; Emmons, 1999). Several studies have analysed the specific aspects of goals that promote optimal states of well-being; dimensions such as efficacy in achieving goals, commitment to goals and conflicts between goals have been found to be important parameters in explaining levels of well-being (Emmons, 1986; Schmuck & Sheldon, 2001).

In addition to how goals are established and achieved, some lines of investigation have focused on the type of goals that people pursue (Grant & Gelety, 2009). For example, research on personal strivings has shown that the proportion of intimacy strivings in a person's striving system predicts greater levels of well-being, while the proportion of power strivings is associated with a low degree of well-being (Emmons, 1996).

The role of the type of goals in well-being is particularly well emphasized in the self-determination theory (e.g. Kasser & Ryan, 1993), in which it is considered that some types of goals favour well-being, while others have a

negative effect. The self-determination theory proposes that intrinsic goals (e.g. those related to personal growth, emotional intimacy and community involvement) are inherently rewarding, presumably because they directly satisfy innate, basic psychological needs as regards autonomy, competence and relatedness. By contrast, extrinsic goals (e.g. financial success, appealing appearance and social recognition) involve obtaining rewards and positive evaluation from others, and do not directly satisfy basic human needs. Attaching more importance to intrinsic than to extrinsic aspirations will therefore favour well-being, whereas investing more in extrinsic goals may not contribute to well-being and may even have a negative effect, even though the goals are achieved. These ideas are consistent with other classical models of personality. Rogers (1963) emphasized that goals and values may be more or less organismically based, and that this was related to psychological health, and Fromm (1976) suggested that focus on 'having', rather than 'being', reflected personal alienation.

In line with this hypothesis, previous research has confirmed that the distinction between the two types of aspirations is meaningful and relevant (Grouzet et al., 2005). Studies involving the hypothesis of Kasser and Ryan have used measures of self-perceived importance, expectancies and achievement of intrinsic/extrinsic goals. The results of such studies have shown that valuing, expecting to attain and perceiving oneself as having attained intrinsic goals is positively related to well-being (e.g. Kasser, 1996; Kasser & Ryan, 1993, 1996; Schmuck, Kasser, & Ryan, 2000). However, a predominance of extrinsic aspirations does not favour well-being and may even have a negative effect. Extrinsic goals have also been suggested to have deleterious effects on psychosocial adjustment, in studies on adolescents (López-Romero & Romero, 2010; Williams, Cox, Hedberg, & Deci, 2000).

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The positive effects of intrinsic goals, which satisfy innate human needs, should be observed universally in different cultures. The negative effects of extrinsic goals should also be observed cross-culturally, at least, as suggested by Ryan *et al.* (1999), in sufficiently market-based economies, which pressure individuals to consume and to 'have'. The core hypothesis regarding the relation between intrinsic/extrinsic aspirations and well-being has been tested in different countries other than the USA, such as the UK (Chan & Joseph, 2000), Russia (Ryan *et al.*, 1999) and Germany (Schmuck *et al.*, 2000). However, no such studies have been carried out in Southern European 'Mediterranean' countries, such as Spain. Such countries have market-based economies that have undergone great economic development in recent decades, although the cultures are considered more collectivist than Anglo-Saxon cultures (Hofstede, 2001), and in accordance with classical sociological analysis (Weber, 1930) are traditionally less orientated towards economic achievements than Northern European cultures. Do the predictions of the self-determination theory hold true in such cultures? The present study of the relation between intrinsic/extrinsic aspirations and well-being in a sample of Spanish adults will provide new data on the general cross-cultural applicability of the model.

Furthermore, studies concerning intrinsic/extrinsic aspirations have used a variety of measures of well-being, in a conceptually diffuse fashion. These measures include life satisfaction (Vansteenkiste, Duriez, Simons, & Soenens, 2006), self-esteem (Kasser & Ryan, 2001), positive and negative affect (Niemić, Ryan, & Deci, 2009), anxiety (Kasser & Ahuvia, 2002), self-actualization (Kasser & Ryan, 1993, 2001; Schmuck, 2001), vitality (Kasser & Ryan, 1993; Schmuck *et al.*, 2000) and relationship quality (Kasser & Ryan, 2001). Research in this field requires a more organized approach as regards the different indicators of well-being. In particular, there is now a recognized need to distinguish between 'subjective well-being' (SWB; corresponding to the so-called 'hedonic' tradition) and 'psychological well-being' (corresponding to the so-called 'eudemonic' tradition; Deci & Ryan, 2008; Waterman, 1993). The present study specifically examined the relation between intrinsic/extrinsic aspirations and SWB, a construct widely shown to be of value in the study of personality traits, and that is also worthy of systematic study in the field of goals. Specifically, three commonly considered facets of SWB were explored: two affective components (positive affect and negative affect) and a cognitive component (satisfaction with life; Diener, Suh, Lucas, & Smith, 1999). How do these components relate to intrinsic/extrinsic aspirations? Previous research has revealed that these facets are differentially related to personality dimensions (Lucas & Diener, 2008), and some studies have also suggested that these facets may be differentially related to aspirations (Niemić *et al.*, 2009).

In addition to the study of aspirations, the present research also explores personality traits. Different authors have discussed the connections between two types of personality 'units' (McCrae & Costa, 2008; Roberts & Robins, 2000; Romero, 2005): on one hand, traits, as broad, decontextualized units that reflect stable trends of behaviour; on the other hand, motivational units, which try to capture what individuals

desire and pursue throughout their lives. In fact, some studies have analysed the relation between traits (particularly the Five-Factor Model, FFM) and a variety of motivational units, such as values, projects, strivings and major goals. Such studies have revealed, for example, that Neuroticism is associated with pessimism and low achievement of personal goals (Little, Lecci, & Watkinson, 1992; Romero, Villar, Luengo, & Gómez-Fraguela, 2009). Extraversion has been associated with achievement of goals and values related to power, hedonism and stimulation (Roberts & Robins, 2000); extraverts also tend to perceive success in achievement of their goals (Romero *et al.*, 2009). Openness has been associated with values of self-direction (Olver & Mooradian, 2003). Agreeableness has been associated with achievement of goals and values related to benevolence and 'getting along' (Roccas, Sagiv, Schwartz, & Knafo, 2002). Conscientiousness has been associated with achievement of goals and conformity (Roberts & Robins, 2000), as well as with a high perception of success in personal projects (Little *et al.*, 1992).

Although increasing interest in these connections is being shown by researchers (Bleidorn, Kandler, Hülshager, Riemann, Angleitner, & Spinath, 2010), surprisingly little is known about the relation between traits and intrinsic/extrinsic aspirations. Which traits are related to intrinsic versus extrinsic aspirations? The present study aims to address this lack of knowledge by analysing the relationships between FFM traits and the importance, achievement and expectancy of extrinsic and intrinsic aspirations, as defined in the self-determination theory.

Moreover, use of the FFM in the present study will enable us to determine the extent to which intrinsic/extrinsic aspirations predict well-being beyond personality traits. Research has shown that there is a robust relationship between SWB and these traits. For example, it has consistently been observed that Neuroticism is mainly related to negative affect and Extraversion to positive affect; Agreeableness and Conscientiousness, have also been related (although to a lesser extent) to SWB indicators, such as positive affect and satisfaction with life (DeNeve & Cooper, 1998; Lucas & Diener, 2008; Steel, Schmidt, & Schultz, 2008). As the traits have been shown to be related to SWB, detailed knowledge of the explanatory power of aspirations in relation to SWB implies determining what aspirations provide once the effect of the traits has been controlled for. What is the incremental value of aspirations in the prediction of SWB over and above variables as powerful as personality traits?

In summary, although goal-related constructs are currently of interest in personality psychology, there are some unknowns in the study of intrinsic/extrinsic aspirations, which the present study aims to address. The specific aims of the present study were: (1) to examine how the types of aspirations that people pursue are related to the different facets of SWB, and to determine if the basic hypothesis of Kasser and Ryan (1996) on intrinsic/extrinsic aspirations and well-being holds true in a culture (Mediterranean) that has not been examined until now; (2) to examine the connections between aspirations and the main domains of the FFM and (3) to examine the contribution that intrinsic/extrinsic aspirations have in predicting well-being beyond the FFM traits.

MATERIALS AND METHODS

Participants

The participants in the study were 583 adults (416 women, 161 men and 6 participants did not report their gender), of ages between 22 and 56 years (mean age: 34.65 years; standard deviation: 9.54). Of these participants, 102 were university students undertaking advanced graduate studies in Educational Sciences at a public university in Galicia, NW Spain. The remaining participants (481, i.e. 82% of the sample) were adults recruited through a snowball procedure from the close environment of the students, to take part in a voluntary study on personality. As regards educational level, 17% of individuals in the latter group had only undergone primary education, 62% had undergone secondary education and 20% had attended university. The assessment instruments were provided in a notebook which the participants were asked to complete and return within 10 days; by way of recompense for participating the subjects received a brief report on their personality. The data were collected between April 2008 and March 2009. Although the shadow of the international crisis had begun to threaten Spain, and the end of a prosperous financial cycle was predicted by some analysts (Fernández & Laborda, 2008), the socioeconomic situation at the time of study was stable, with an active and well-consolidated market economy in place.

Variables and instruments

Aspiration index

This index was used to evaluate the different types of aspirations. The Aspiration Index is a flexible tool, different versions of which (Grouzet et al., 2005; Kasser & Ryan, 1993, 1996, 2001; Ryan et al., 1999; Schmuck, 2001) have commonly been used to evaluate the hypotheses central to the self-determination theory. The version consisting of 35 aspirations was used in the present study (e.g. 'Be physically healthy', 'To be famous', 'To keep up with fashions in hair and clothing', 'To help others improve their lives') grouped into seven domains: Personal Growth (aspirations for growth, meaning and competence in life), Relations (aspirations for close relationships with friends and lovers), Community (aspirations to help better the world and the lives of others), Health (aspirations to feel physically well), Wealth (aspirations to have a great deal of money and material possessions), Fame (aspirations to be famous, admired and well-known) and Image (aspirations to present an attractive 'look' or physical image). This version, which has been already used in other studies (e.g. Niemiec et al., 2009) is a revised version of the scale used in the pioneering article by Kasser and Ryan (1996), after omission and replacement of some items that had not worked in the first version (see details of the revised version in http://www.psych.rochester.edu/SDT/measures/ai_description.php, retrieved August 2010). The scale was translated from English to Spanish by two translators who translated the items individually, then compared results and negotiated complete agreement. Each of the 35 aspirations was rated by participants on three dimensions: importance (how important

is it to you?), likelihood (how likely it is that this will happen in your future?) and attainment (to what degree have you already attained this goal?). In all cases, the rating was made on a 7-point scale ranging from 'not at all' to 'very'. Average scores were obtained for importance, likelihood and attainment for each of the domains. The domains were factorized in this study and the results supported a two factor structure, with Wealth, Fame and Image loading on one factor ('extrinsic') and Personal Growth, Relations, Community and Health loading on another factor ('intrinsic'). This grouping was maintained for both importance and for likelihood and attainment. Summary scores for extrinsic aspirations and intrinsic aspirations were therefore calculated by averaging the corresponding domains in each of the dimensions of importance, likelihood and attainment. The reliabilities of the measures of extrinsic aspirations were 0.89, 0.89 and 0.86 for importance, likelihood and attainment, respectively. For extrinsic aspirations the corresponding values were 0.88, 0.89 and 0.82, respectively.

NEO-PI-R

For assessment of the traits in the FFM, the Spanish version of NEO-PI-R (Costa & McCrae, 1992) was used (TEA Ediciones, 1999). NEO-PI-R is a well known instrument for evaluating personality. Through 240 items, which are rated on a 5-point Likert-type scale anchored by 'Strongly disagree' and 'Strongly agree', the NEO-PI-R provides measures of the big five domains of personality: Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A) and Conscientiousness (C). The psychometric properties of NEO-PI-R and the previous version, NEO-PI, have been widely studied in Spain, and reasonable support has been found for their usefulness in psychometric analysis (Aluja, García, & García, 2002; Avia, Sanz, Sánchez, Martínez-Arias, Silva, & Graña, 1995; Romero, Gómez-Fraguela, Luengo, & Sobral, 2003; Romero, Luengo, Gómez-Fraguela, & Sobral, 2002). In the present study, the reliability of the trait domains ranged between 0.81 (Openness) and 0.92 (Neuroticism).

Measures of well-being

Two instruments were used to measure the different facets of well-being.

The Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) comprises 20 mood-related adjectives that measure positive (e.g. interested, excited, enthusiastic) and negative (e.g. afraid, nervous, ashamed) affect, which are commonly considered as emotional indicators of well-being. The adjectives are presented with a response scale ranging from 1 ('Very slightly or not at all') to 5 ('Extremely'). In the present study, the participants were asked to rate their mood over the last year. The reliabilities of the scales were 0.79 for positive affect and 0.84 for negative affect. The PANAS has been used in numerous studies in Spain, and its usefulness in psychometric analysis has been demonstrated on several occasions (e.g. Romero et al., 2002; Sandín, Chorot, Lostao, Joiner, Santed, & Valente, 1999).

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) is a brief scale consisting of five items (e.g. 'In most ways my life is close to my ideals'), designed to capture global cognitive judgements of one's own life. The items were rated on a 7-point scale, ranging from 'Strongly disagree' to 'Strongly agree'. The reliability of the scale in the present study was 0.78. The scale has been used in diverse studies in Spain, and has been found to be valid as an indicator of well-being (Atienza, Pons, Balaguer, & García-Merita, 2000; Romero *et al.*, 2009).

In the present study, in addition to considering each indicator of SWB separately, an aggregated index was also examined, following the procedure used in other studies (Brunstein, 1993; Sheldon & Elliot, 1999): firstly by standardizing the three scores, then subtracting Negative Affect from the sum of Positive Affect and Satisfaction with Life. This provided both a more global vision and a more detailed vision of how aspirations are related to SWB.

RESULTS

Descriptives and pairwise correlations

The descriptive statistics for the variables examined (aspirations, traits and SWB) and the correlations between each are shown in Table 1.

The results show that with regard to the importance given to aspirations, intrinsic aspirations were more highly appreciated than extrinsic aspirations in this Spanish sample (6.29 compared with 3.61). The same pattern was observed for likelihood and attainment: the participants expected to be more successful in achieving intrinsic aspirations than extrinsic aspirations, and perceived that they have achieved their intrinsic aspirations more successfully than their extrinsic aspirations¹.

¹The relationships between the variables considered and gender and age were also examined. The results showed that women attached more importance than men to Intrinsic aspirations ($t = 6.83$, 575 df, $p < .001$; $d = 0.57$) and no differences were detected in the extrinsic score. However, separate analysis of extrinsic aspirations showed that men attached more importance than women to wealth and fame, whereas women gave more importance than men to image. The same pattern was found for the likelihood and attainment scores. Significant gender-related differences were also detected in three of the Big Five traits, with women scoring higher than men for Neuroticism ($t = 7.53$, 572 df, $p < .001$; $d = 0.62$), Openness ($t = -2.06$, 572 df, $p < .05$; $d = -0.17$) and Agreeableness ($t = -6.67$, 572 df, $p < .001$; $d = -0.35$). With regard to the measures of SWB, significant differences were obtained in negative affect, with women scoring higher than men ($t = -4.23$, 569 df, $p < .001$; $d = -0.35$). The variables considered were also significantly related to age. Perception of the future likelihood of achieving aspirations decreased with age ($-.21$, $p < .001$, for Intrinsic; $-.11$, $p < .01$ for extrinsic aspirations). By contrast, the perception of past attainment increased with age for intrinsic (.23, $p < .001$) and extrinsic aspirations (.28, $p < .001$). With regard to the traits, Neuroticism, Extraversion and Openness were negatively related to age (correlations between $-.17$, $p < .001$, and $.41$, $p < .001$) and Agreeableness and Conscientiousness were positively related to age (.09, $p < .05$ and $.16$, $p < .001$, respectively). This pattern is consistent with that observed in other cross-sectional studies on traits (e.g., McCrae *et al.*, 2000; Romero *et al.*, 2009). Age was also related to emotional indicators of SWB: $-.08$ ($p < .05$) for positive affect and $-.10$ ($p < .05$) for negative affect. Thus, gender and age were significantly related to aspirations, traits and SWB, and were therefore partialled out in the central analyses carried out in the study.

The pairwise correlations revealed that the intrinsic and extrinsic aspiration measures were correlated with each other, with coefficients of .17 ($p < .001$) for the measures of importance, .42 ($p < .001$) for measures of likelihood and .52 ($p < .001$) for the measures of attainment.

The correlation analysis also enabled an initial approach to the relation between aspirations and SWB. Significant correlations between aspiration measures and SWB measures were observed; the highest correlations were those between attainment of intrinsic aspirations and global SWB (.49), between attainment of intrinsic aspirations and satisfaction with life (.47) and between likelihood of intrinsic aspirations and global SWB (.44).

The FFM traits were also related to the aspiration measures; the highest correlations were those between Extraversion and likelihood of intrinsic aspirations (.39), between Conscientiousness and attainment of intrinsic aspirations (.32) and between Neuroticism and attainment of intrinsic aspirations ($-.31$). As expected, the FFM traits were also related to SWB measures; the highest correlations were those between Neuroticism and global SWB ($-.56$), Neuroticism and negative affect (.53) and Extraversion and positive affect (.46). The pattern of correlations between the traits and facets of SWB was consistent with that observed in other studies (Lucas & Diener, 2008): Neuroticism was most closely correlated with negative affect, and Extraversion with positive affect. The correlations between the other traits and the facets of SWB were not as strong; Agreeableness and Conscientiousness were most closely correlated with satisfaction with life, and Openness was only correlated with positive affect.

Regression analyses to examine the relation between aspirations and SWB

Given that the aspiration measures were correlated with each other, and that both aspirations and SWB were related to age and gender, regression analysis (ordinary least squares) was carried out by entering age, gender and aspiration measures as predictors of each of the SWB measures. This shows how the importance, likelihood and attainment of extrinsic and intrinsic aspirations are related to SWB in the sample of Spanish adults (first objective of the present study). The results are shown in Table 2.

Positive affect was significantly predicted by the three measures of intrinsic aspirations, with coefficients ranging between .13 (attainment) and .22 (importance); the importance of extrinsic aspirations also significantly predicted positive affect (although negatively). Negative affect was significantly predicted by the importance and attainment of extrinsic aspirations (positively in both cases) and by attainment of intrinsic aspirations (negatively). Satisfaction with life was positively predicted by the three measures of intrinsic aspirations (coefficients between .15 for importance and .31 for attainment). Considering the global score for SWB, the regression analysis showed that the global SWB was related to high scores for importance, likelihood and attainment of intrinsic aspirations, and with low scores for importance of extrinsic aspirations.

Table 1. Descriptive statistics and pairwise correlations between the measures used in the study

| | Mean (SD) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|----------------------------|----------------|---------|--------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|----|
| Importance (I) | | | | | | | | | | | | | | | | |
| 1. I-Extrinsic | 3.61 (1.02) | 1 | | | | | | | | | | | | | | |
| 2. I-Intrinsic | 6.29 (0.54) | .17*** | 1 | | | | | | | | | | | | | |
| Likelihood (L) | | | | | | | | | | | | | | | | |
| 3. L-Extrinsic | 3.24 (0.91) | .75*** | .18*** | 1 | | | | | | | | | | | | |
| 4. L-Intrinsic | 5.38 (0.78) | .10* | .56*** | .42*** | 1 | | | | | | | | | | | |
| Attainment (A) | | | | | | | | | | | | | | | | |
| 5. A-Extrinsic | 2.71 (0.85) | .50*** | .07 | .65*** | .23*** | 1 | | | | | | | | | | |
| 6. A-Intrinsic | 4.64 (0.86) | .02 | .38*** | .23*** | .62*** | .52*** | 1 | | | | | | | | | |
| FFM traits | | | | | | | | | | | | | | | | |
| 7. N | 95.40 (21.76) | .15*** | -.00 | -.04 | -.21*** | -.18*** | -.31*** | 1 | | | | | | | | |
| 8. E | 110.15 (19.75) | .13** | .29*** | .25*** | .39*** | .11* | .23*** | -.21*** | 1 | | | | | | | |
| 9. O | 113.89 (19.26) | -.10* | .15*** | .00 | .24*** | -.16*** | -.03 | -.01 | .47*** | 1 | | | | | | |
| 10. A | 120.69 (16.48) | -.27*** | .28*** | -.23*** | .18*** | -.13** | .19*** | -.10* | .09* | .07 | 1 | | | | | |
| 11. C | 115.74 (21.63) | .02 | .20 | .14*** | .25*** | .22*** | .32*** | -.27*** | -.09* | -.11** | .24*** | 1 | | | | |
| SWB measures | | | | | | | | | | | | | | | | |
| 12. PANAS-Positive Affect | 34.47 (0.45) | .05 | .30*** | .13** | .40*** | .13** | .36*** | -.34*** | .46*** | .28*** | -.00 | .22*** | 1 | | | |
| 13. PANAS-Negative Affect | 23.62 (7.10) | .12** | -.02 | -.01 | -.08 | -.07 | -.18*** | .53*** | -.12** | -.03 | -.13** | -.15** | -.14** | 1 | | |
| 14. Satisfaction with Life | 23.65 (6.02) | -.03 | .22*** | .08 | .40*** | .17*** | .47*** | -.35*** | .28*** | .06 | .17** | .28*** | .45*** | .27*** | 1 | |
| 15. Global SWB | 0.00 (2.17) | -.04 | .25*** | .15*** | .44*** | .15** | .49*** | -.56*** | .39*** | .17*** | .13** | .30*** | .73*** | .65*** | .78*** | 1 |

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

Table 2. Regression analyses for predicting well-being from aspiration measures

| | PANAS-Positive Affect | PANAS-Negative Affect | Satisfaction with Life | Global SWB |
|----------------|-----------------------|-----------------------|------------------------|------------|
| Age | -.12** | -.08 | -.05 | -.04 |
| Gender | -.14** | .17*** | .01 | -.13** |
| I-Extrinsic | -.12** | .19*** | -.04 | -.15** |
| I-Intrinsic | .22*** | -.00 | .15** | .17** |
| L-Extrinsic | .07 | .07 | -.09 | .08 |
| L-Intrinsic | .14** | .00 | .19** | .15* |
| A-Extrinsic | .09 | .16** | .08 | .03 |
| A-Intrinsic | .13** | -.12** | .31*** | .32*** |
| R ² | .22 | .10 | .24 | .30 |

Age and gender are included as covariates.

The values shown in the columns are the beta values corresponding to each regression equation, along with the significance level: * $p < .05$; ** $p < .01$; *** $p < .001$. Gender was coded as 1 = male; 2 = female.

Regression analyses to examine the relation between the FFM traits and aspiration measures

The results of the regression analyses for predicting the aspiration measures from the Big Five traits assessed by the NEO-PI-R (second objective of the present study) are shown in Table 3. Again, taking into account that age and gender are significantly correlated with both traits and aspirations, age and gender were included as covariates in the regression analyses.

The importance of extrinsic aspirations was significantly predicted by the Big Five traits: positively by Neuroticism, Extraversion and Conscientiousness, and negatively by Openness and Agreeableness. The importance of intrinsic aspirations was significantly predicted by Extraversion, Openness, Agreeableness and Conscientiousness, in all cases positively. The perceived likelihood and past attainment of extrinsic aspirations were positively predicted by Extraversion and Conscientiousness, and negatively by Openness and Agreeableness. The perceived likelihood and past attainment of intrinsic aspirations was positively predicted by Extraversion and Conscientiousness, and negatively by Neuroticism.

In general, the results suggest that individuals with high scores for Neuroticism attach high importance to extrinsic aspirations and that they perceive themselves as unsuccessful, in terms of both past and future achievement of intrinsic aspirations. Individuals scoring high in Extraversion and those scoring high in Conscientiousness attach high importance to extrinsic and intrinsic aspirations; they also

perceive a high degree of efficacy (past and future) in achieving both types of aspirations. Individuals scoring high in Openness and those scoring high in Agreeableness attach high importance to intrinsic aspirations, and little importance to extrinsic aspirations, and perceive themselves as unsuccessful in achieving extrinsic aspirations.

Hierarchical regression analyses to examine the predictive power of aspiration measures beyond the FFM traits

After examining the relations between the FFM traits and aspirations, a joint analysis of traits, aspirations and SWB was carried out. The extent to which the measures derived from the self-determination theory are able to predict SWB beyond the FFM domains, widely established as being related to SWB, was explored (third objective of the present study). Hierarchical multiple regression models were performed to regress the SWB measures onto age, gender and the Big Five in step 1, and the six intrinsic and extrinsic aspiration measures were then added in step 2. The results are shown in Table 4.

The regression analyses revealed that, in the second step, the importance of intrinsic aspirations contributed to predicting positive affect. The importance of extrinsic aspirations and attainment of both extrinsic aspirations (positive) and intrinsic aspirations (negative) contributed to predicting negative affect. The likelihood and attainment of intrinsic aspirations (positive), and the likelihood of attaining extrinsic aspirations (negative) predicted satisfaction with

Table 3. Regression analyses for predicting aspiration measures from the FFM traits

| | I-Extrinsic | I-Intrinsic | L-Extrinsic | L-Intrinsic | A-Extrinsic | A-Intrinsic |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Age | .02 | .01 | -.07 | -.13* | .28*** | .24*** |
| Gender | .01 | .19** | .05 | .13* | .03 | .11* |
| N | .22*** | .06 | .02 | -.12* | -.06 | -.22*** |
| E | .30*** | .29*** | .30*** | .27*** | .25*** | .26*** |
| O | -.20*** | .12* | -.13* | .06 | -.14* | -.05 |
| A | -.29*** | .16** | -.30*** | .06 | -.22*** | .05 |
| C | .11* | .16** | .20** | .21*** | .17** | .17** |
| R ² | .18 | .23 | .18 | .26 | .20 | .26 |

Age and gender are included as covariates.

The values shown in the columns are the beta values corresponding to each regression equation, along with the significance level: * $p < .05$; ** $p < .01$; *** $p < .001$. Gender was coded as 1 = male; 2 = female.

Table 4. Hierarchical regression analyses to examine the predictive power of aspirations on SWB beyond the FFM traits

| | PANAS-Positive Affect | | PANAS-Negative Affect | | Satisfaction with Life | | Global SWB | |
|-----------------------|-----------------------|---------|-----------------------|---------|------------------------|---------|------------|---------|
| | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 |
| Age | .03 | .00 | -.01 | -.03 | .01 | -.05 | .02 | .01 |
| Gender | .02 | .02 | .04 | .04 | .12** | .09* | .05 | .00 |
| N | -.21*** | -.18*** | .52*** | .51*** | -.28*** | -.20*** | -.47*** | -.41*** |
| E | .33*** | .24*** | .02 | .03 | .23*** | .14** | .24*** | .15*** |
| O | .17*** | .17*** | -.05 | -.05 | -.01 | -.02 | .09* | .09* |
| A | -.13** | -.17*** | -.09 | -.09* | -.02 | -.07 | -.02 | .07 |
| C | .21*** | .15** | .03 | .04 | .17*** | .11** | .16*** | .10** |
| I-Extrinsic | | -.05 | | .15** | | -.01 | | -.05 |
| I-Intrinsic | | .16** | | -.00 | | .04 | | .06 |
| L-Extrinsic | | -.02 | | .09 | | -.10* | | .02 |
| L-Intrinsic | | .08 | | .05 | | .15** | | .08 |
| A-Extrinsic | | .09 | | .14* | | .08 | | .00 |
| A-Intrinsic | | .07 | | -.09* | | .24*** | | .21*** |
| R ² change | .32*** | .06*** | .29*** | .05*** | .21*** | .09*** | .42*** | .06*** |

The values shown are the beta values corresponding to each regression equation, along with the significance level: * $p < .05$; ** $p < .01$; *** $p < .001$. Gender was coded as 1 = male; 2 = female.

life. The total score for SWB was predicted, after incorporating the Big Five traits, by the attainment of intrinsic aspirations.

In general, it was found that the contribution of personality traits in Step 1 (with R^2 ranging between .21, $p < .001$, for satisfaction with life and .42, $p < .001$, for global SWB) was much larger than the incremental contribution of the aspiration measures in Step 2 (with changes in R^2 ranging between .05, $p < .001$, for negative affect and .09, $p < .001$, for satisfaction with life). Overall, the results of the regression analyses showed that the aspirations contributed, although modestly, to explaining SWB 'over and above' the strong predictors constituted by the broad five domains of personality.

DISCUSSION

In recent years research on goals and well-being has addressed 'what' people pursue. The content of goals as a determinant of psychological health has been emphasized in the self-determination theory. This theory proposes that some 'intrinsic' aspirations, such as personal growth, relations, community and health, satisfy basic human needs, thus promoting well-being. People also pursue 'extrinsic' aspirations (e.g. wealth, fame, image) to obtain external rewards, such as admiration or recognition by others, and emphasis on such extrinsic aspirations is damaging to psychological health.

Although in recent years several studies have explored this hypothesis, the aim of the present study was to clarify some aspects as yet not addressed in previous research. Firstly, in accordance with the theory, the assumptions of the self-determination theory should be cross-culturally replicable, as basic human needs are universal and therefore the damaging effects of an over-intense extrinsic orientation should be generally applicable to all cultures in which a market-economy predominates (Ryan et al., 1999) and where

materialistic values drive individuals to pursue wealth and social recognition. The present study provides new data on the relationships between extrinsic/intrinsic orientation and well-being in a type of culture (southern European) in which the self-determination theory has not yet been systematically tested. The present study was carried out in Spain, a society that has undergone strong economic and financial development in recent decades, with the establishment of a liberal market-based economy, especially since integration in the European Union, in 1986. In addition, these relations were studied by examining three commonly recognized components of SWB, to explore how extrinsic/intrinsic aspirations may be differentially related to these three facets. Secondly, the study explored how the Big Five domains of personality and extrinsic/intrinsic aspirations were related to each other. The links between traits and various types of middle-level units (projects, strivings and values) have been investigated in previous studies; however, it is not specifically known how the units proposed in the self-determination theory are related to the 'map' of general personality traits. Thirdly, the study explored the effect of aspirations on SWB, beyond the effect of the Big Five domains, to determine whether aspirations have an independent and irreducible effect, or if their effect on SWB can be totally explained in terms of their relations with traits. As other authors have indicated (e.g. Sheldon & Hoon, 2007), this type of analysis is still scarce; so far, very little research on SWB has simultaneously considered the effects of multiple determinants, located at different levels of personality. Given the wide range of variables suggested to predict SWB following the landmark article by Diener (1984), the specific contribution of each category of constructs is worthy of systematic analysis.

The results of the present study show, in the first place, that as found in other cultures (e.g. Chan & Joseph, 2000; Ryan et al., 1999; Schmuck et al., 2000), intrinsic aspirations are the most highly valued and are also those for which the greatest probability of success is perceived (likelihood), and

for which the greatest past achievements have been obtained (attainment). This was expected, in accordance with the theory, as these aspirations contribute most to satisfying psychological needs in individuals in any culture².

With regard to the central hypothesis of the model, the results of this study show that importance given to intrinsic aspirations is related, as expected from the self-determination theory, to SWB: particularly, the importance attached to intrinsic aspirations predicts a more positive affect, greater satisfaction with life and greater overall SWB. This is consistent with the results of previous studies (e.g. Kasser & Ryan, 1993, 1996; Ryan *et al.*, 1999), which in other cultures have shown the positive effect of intrinsic goals in favouring well-being. Moreover, the importance attached to extrinsic aspirations predicts a lower level of SWB.

The results of the present study also showed that SWB is associated with a perceived high probability of achieving intrinsic aspirations in the future, and also with a high attainment of intrinsic aspirations. In both cases (likelihood and attainment) it was found that extrinsic aspirations do not contribute to a high SWB, and even that the attainment of extrinsic aspirations is related to a higher level of negative emotions. This trend contrasts with the classical assumptions of the theories of goals and self-regulation (e.g. Bandura, 1997; Carver & Scheier, 1998), in which it is assumed that the achievement of goals is in itself a source of well-being (Wiese, 2007). In fact, many studies have shown that success in achieving aspirations is positively related to diverse indicators of mental health (e.g. Emmons, 1986). However, the theory of self-determination and related studies suggest that the content of the goals is an important parameter; the perceived success in achieving certain goals may not stimulate well-being (Sheldon, Ryan, Deci, & Kasser, 2004) or may even be associated with negative affect, as shown in the present study.

In general, separate analysis of the three facets of SWB showed that the measures of intrinsic aspirations tended to be more closely correlated with positive indicators of well-being (positive affect, satisfaction with life), whereas the measures of extrinsic aspirations tended to be more closely related to negative affect. This is consistent with the findings of other studies, which have related extrinsic aspirations in particular, to measures of anxiety, negative affect and physical symptoms (Niemic *et al.*, 2009). In fact, the need to differentiate between well-being and ill-being has been suggested, in order to obtain a more accurate picture of the relation between psychological health and extrinsic/intrinsic aspirations (Niemic *et al.*, 2009). In accordance with the present findings, extrinsic aspirations may generate negative

affect, whereas intrinsic aspirations may be associated with the emergence of positive emotional states and human flourishing.

The second objective of the study was to explore the relation between the FFM traits and life aspirations; the study therefore contributes to the establishment of links between different 'levels' of personality (McAdams, 1995; McCrae & Costa, 1996).

It was found that individuals who obtained high scores for Neuroticism tended to show a high appreciation for extrinsic aspirations; they also perceived little likelihood of achieving their intrinsic aspirations in the future, and little success with regard to past attainment of intrinsic aspirations. This is consistent with the hypothesis of Kasser and Ryan (1993), who suggested that individuals with high scores in Neuroticism, with a low sense of self-security, may attach more importance to extrinsic aspirations as a means of self-enhancement.

Extraversion is related to a greater degree of importance given to aspirations in general, whether intrinsic or extrinsic; moreover, extraverts also perceive that they are more likely to achieve their goals in the future, and that they have achieved a great degree of success in the past. These findings are consistent with the profile of extraverts as optimists; other studies involving motivational units have reported that extraverts display a high degree of commitment to and success in achieving their goals (Little, Lecci, & Watkinson, 1992; Romero *et al.*, 2009).

Openness was associated with a greater degree of importance for intrinsic aspirations and low importance of extrinsic aspirations. Studies on traits and values (Olver & Mooradian, 2003; Roccas *et al.*, 2002) have also shown that Openness is related to values that emphasize self-direction, change and personal autonomy, which resemble the contents of the intrinsic aspirations; moreover, the low conventionality of individuals with high scores in Openness is also consistent with low importance attached to extrinsic aspirations.

Individuals who obtain high scores in Agreeableness also favour intrinsic aspirations, which is consistent with interpersonal content for both Agreeableness and intrinsic aspirations (Hirsch & Dolderman, 2007; Roberts & Robins, 2000). At the same time individuals with high scores in Agreeableness attached little importance to extrinsic aspirations and perceived themselves as unsuccessful in achieving these aspirations. In accordance with this finding, other studies have also shown that narcissism and machiavellianism (situated, in accordance with the FFM, in the opposite position to Agreeableness) are associated with extrinsic aspirations (Kasser & Ryan, 1996; McHoskey, 1999). However, the role of Agreeableness in extrinsic aspirations is worthy of further investigation. In recent years, the HEXACO model has been shown to be useful for examining multiple criteria of an interpersonal nature (Ashton & Lee, 2008a), including narcissism, machiavellianism and the so-called 'dark triad' of personality (Lee & Ashton, 2005); the low pole of the H factor (Honesty–Humility), rather than Agreeableness, has been found to be closely related to these dimensions. Additionally, there is

²A similar pattern to that observed in other studies was also found with regard to gender-related differences (e.g., Kasser & Ryan, 1993; King & Broyles, 1997; Roberts & Robins, 2000): women give more importance than men to intrinsic aspirations such as relations, community and personal growth. Men, however, attach more importance than women to some extrinsic aspirations such as wealth and fame. However, image, another extrinsic aspiration, is considered more important by women than by men, a finding that is consistent with the importance that physical appearance has traditionally played in feminine roles (e.g., Jackson, 1992). These results appear to corroborate the greater tendency for men to 'get ahead', and for women to 'get along', and are compatible with the evolutionary explanations for gender roles (Buss, 1995).

evidence suggesting that materialistic tendencies are also negatively related to Honesty–Humility (Ashton & Lee, 2008b), and therefore the relation between the HEXACO model and aspirations is a line of investigation that should be developed further.

Finally, individuals with high scores in Conscientiousness (responsible, with a well-developed sense of self-competence in accordance with the FFM), display a high degree of appreciation for both types of aspirations, and perceive a high degree of success (past and future) in achieving their aspirations. Other studies have also shown that individuals with high scores in Conscientiousness pursue their goals with a high degree of intensity (Romero et al., 2009), and have a well-developed sense of achievement and progress in their goals (Little et al., 1992).

Thus, in general, the results paint an image consistent with the meaning of the FFM personality traits and also with previous studies that have explored the relation between traits and motivational units. Units situated at different levels of personality show relations that are conceptually logical, and that contribute to defining the coherence of personality.

The third objective of the study was to analyse the extent to which extrinsic/intrinsic aspirations contribute to predicting SWB, beyond the shared variance with FFM. Several studies have demonstrated the relation between FFM traits and SWB, as also found in the present study. As stated above, in order to analyse the space occupied by aspirations in determining SWB, it must be established whether they make a unique contribution, beyond the influence of the traits. The results show that, although the independent links between aspirations and SWB are quite modest in strength, intrinsic/extrinsic aspirations do contribute significantly to predicting all measures of SWB, once the traits have been partialled out. These findings are consistent with the approaches made by other authors with regard to the ‘irreducibility hypothesis’ (Sheldon, 2004; Sheldon & Hoon, 2007): different personality ‘levels’ have independent effect, and some levels cannot be subsumed by others. Different aspects of personality are involved in understanding well-being, and both traits and motivational units must be considered.

The present study suffers from a series of limitations. The correlational and cross-sectional nature of the study does not enable the dynamics of the relations (perhaps reciprocal) between aspirations and well-being to be captured (for discussion of whether intrinsic/extrinsic aspirations determine well-being, or low well-being takes refuge in materialistic aspirations; Kasser, 2002). Experimental and longitudinal studies (e.g. Niemiec et al., 2009) are required in order to clarify the direction of these relationships. The exclusive use of self-reports also limits the conclusions that can be reached from the study; although the majority of studies in this field rely on self-reported data, the use of a wider range of data would take into account the method variance that may be involved in the correlations calculated exclusively from self-reports. In addition, in relation to the particular scales used in the present study, reverse-keyed items are not included in either the aspiration measures or the well-being measures, so that individual differences in the elevation of responses to items in general might have biased

correlations in the positive direction. On the other hand, a word of caution should be added regarding the comparison between this study and those carried out in other cultures; comparison of several cultures, in the same study and using the same methods, would be desirable as stronger proof of the cross-cultural replicability of the self-determination hypothesis.

However, despite the limitations, the present study enabled us to show that the basic approaches regarding intrinsic/extrinsic aspirations and SWB, derived from the self-determination theory, are supported in the Spanish culture. In addition, the links between the Five Factors and aspirations were established, and it was found that the effect of aspirations is not only due to traits. The relevance of motivational units in psychological adjustment has been underlined, from different perspectives, in recent decades, and its role is worthy of detailed study by personality psychologists.

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