GRATITUDE'S IMPACT ON LIFE SATISFACTION: INSIGHTS FROM ANDALUSIAN ADULT POPULATION

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1. INTRODUCTION

One of the most important indicators of psychological well-being is satisfaction with life, conceptualized as a "...cognitive evaluation of one s life" (Diener, 1984, p. 550). It is an evaluative judgement based on one's own goals, expectations, values, and interests, interacting all these factors with the meanings of the cultural context of reference (Pérez-Escoda, 2013). Unlike the affective dimensions of subjective well-being, pleasant and unpleasant emotional experiences related to happiness (Diener, 2000; Diener & Suh, 1997), satisfaction with life as the cognitive and global evaluation that people make about their satisfaction with lives in several domains such as work, marriage, and health (Pavot & Diener, 1993; Diener et al., 2017). It is a relatively more stable trait that has broad benefits for individuals psychological health and quality of life of individuals (Murat Yildirim & Zainab Alanazi, 2018). At the same time, it is an important predictor of well-being (Helliwell et al., 2013), allowing individuals to make long-term life evaluations based on based on their own criteria (Eid & Diener, 2004; Pavot & Diener, 1993). Diener (1984) suggested that there are two basic approaches explaining the concept of satisfaction with life: bottom-up, which interprets people as satisfied because they experience many satisfying situations or moments, and top-down, which suggests that the general

predisposition to experience things in a positive way is responsible for the individual's particular interactions with the world.

People who reported high levels of satisfaction with life were higher on desirable attributes such as health, social skills and energy, and have stronger social relationships (Amati et al., 2018), higher marital satisfaction (Kasapoğlu, & Yabanigül, 2018), greater occupational success (Hagmaier et al., 2018; Lindblom et al., 2020), better health (Bakkely, 2021; Lombardo et al., 2018), and even delayed mortality (Diener & Chan, 2011), higher perception of social support (Marrero, & Carballeira, 2010; Moreno-Jimenez, & Hidalgo, 2010; Sarriera et al., 2015), higher resilience and self-esteem (Lee et al., 2016; Martínez-Martí & Ruch, 2017). At the same time satisfaction with live seems to be related with lower addictions and unhealthy habits such as tobacco, drugs, and alcohol (Lew et al., 2019; Maccagnan et al., 2020), suicidal attempts and ideation (Morales-Vives, & Dueñas, 2018), sleep complaints (Wang, & Boros, 2020), burnout (Marcionetti, & Castelli, 2023), mortality rates (Ma, & Gu, 2023; Soares et al., 2019), anxiety (Doung, 2021; MacDonald, & Park, 2022) and depression (Gigantesco et al., 2019; Thompson et al., 2022).

Furthermore, studies revealed satisfaction with life is associated with optimism (Kardas et al., 2019; Oriol et al., 2020), coping strategies (Cabras, & Mondo, 2018), social support (Kong et al., 2015; Mishra, & Bharti, 2023), health and health promoting behaviors (Chatzisarantis et al., 2021; Ozvurmaz et al., 2022) and gratitude (Armenta et al., 2022; Oriol et al., 2020). Understood either as an emotion or as a trait, gratitude has been characterized as a stable inclination that refers to "a general tendency to recognize and respond with grateful emotion to the roles of other people's benevolence in the positive experiences and outcomes that one obtains" (McCullough, et al., 2002). It involves showing others that we value them, something they have done or something they have given us (Emmons, 2016), and fosters a sense togetherness, responsibility, and affiliation (Watkins, 2014). It is a virtue that goes beyond mere emotion, taking root in character and personal ethics. In this sense, Emmons (2013) stresses that gratitude is not just a passing feeling, but a disposition that involves recognizing the generosity of others and responding appropriately. Morgan et al. (2017) suggested that the construct of gratitude can be understood and experienced in multiple ways, demonstrating that those four different dimensions of gratitude coexist within an individual: cognitive, emotional, behavioural, and attitudinal. As result, they came up with the Multi-Component Gratitude Measure (MCGM), which provides a holistic approach to measuring gratitude as a multi-component virtue with three subscales that encompass the cognitive component in a transversal way, and these three subscales/dimensions are: emotional (already proposed by McCullough et al., 2002), behavioral (consisting of both expressing and not expressing gratitude to one's benefactors), and attitudinal (focusing on when to show gratitude and how gratitude is perceived in the context of values). Furthermore, they illustrated the importance of each dimension of the MCGM through its relationship to well-being: scoring below the mean on all four dimensions as assessed by the three well-being scales is associated with the lowest levels of well-being, this increases in a linear fashion culminating in those individuals scoring above the mean on all four dimensions reporting the highest levels of well-being.

Gratitude it is not only associated with greater psychological well-being but can also be a motivator to pursue happiness and well-being in everyday life (Watkinss et al., 2021). More than this, grateful individuals tend to be more socially oriented, prosocial, empathetic, forgiving, helpful and supportive of others, and to seek less materialistic outcomes (McCullough, et al., 2002). There has been evidence that gratitude intervention trials have been shown to increase levels of life satisfaction, positive affect, happiness, prosocial behavior and perceived support (Wood et al., 2010). They also reduce levels of depression, anxiety, stress, negative affect, worry and physical symptoms. Furthermore, these results have been obtained in clinical and non-clinical populations of different ages, including people with neuromuscular diseases (O Leary, 2013). Several studies have shown that gratitude is associated with overall life satisfaction (Armenta et al., 2022; Kardas et al., 2019; Robustelli, & Whisman, 2018), but no studies designed to identify how the three dimensions of gratitude (emotional, behavioural, and attitudinal) of satisfaction with life has been conducted to date.

2. AIMS

The aim of this research was to identify how the three dimensions of gratitude (emotional, behavioural, and attitudinal) affect satisfaction with life in the adult population of Andalusia, and to support it with upto-date bibliographical references.

3. METHOD

PARTICIPANTS

Three hundred and twenty-four people participated in this study with the following inclusion criteria: being of legal age, having been born in Andalusia, currently living in this same part of Spain, and not suffering psychological disturbance. Regarding gender, 73.5% were women and 26.5% men. The average age was 45.06 years (SD=16.88). As for the breakdown by employment situation, 52.2% were working, 21% were students, 12.7% were retired, 9.9% unemployed, 3.1% were retired early due to disability and 1.2% took care of the house.

INSTRUMENTS

Gratitude. Spanish version of the original MCGM (The Multicomponent Gratitude Measure Questionnaire by Morgan et al., 2017) validated by Scurtu et al. (2022, in press) with 28 items was applied. The distribution in relation to the original scale was: Emotional sub-scale which includes the Feelings of Gratitude subscale (items 1-6; example: "There are many things that I am grateful for"); Attitudinal sub-scale is composed of two factors: Attitudes to appropriateness (items 7-12; example: "I only show gratitude towards people who clearly intended to benefit me") and Attitudes of gratitude (items 26-28; example: "There are so many people that I feel grateful for"), and Behavioral component grouped into three factors: Behavioral shortcomings (items 13-16; example: "I forget to let others know how much I appreciate them"), Rituals / Notes benefits (items 17-21; example: "I recognize how many things I have to be grateful for"), and Expressions of gratitude (items 22-25; example: "I express thanks to those who helped me"). All items are answered through a 7-point Likert ranging from

1(*strongly disagree*) to 7 (*strongly agree*). The original Spanish version showed good reliability (α =.95); in this study, alpha of Cronbach was a little bit higher (α =.96).

Life satisfaction. Spanish version of Satisfaction With Life Scale (SWLS; Diner et al., 1985) proposed by Atienza et al., (2000) composed by five items that are answered on a 7-point Likert scale (- strongly disagree, up to - strongly agree). According to the original version of the scale, scores between 5 and 9 indicate extreme life dissatisfaction, while scores between 31 and 35 indicate extreme life satisfaction. Atienza et al. (2000) informed a value of alpha de Cronbach of 87. In the current study, it was a top tenth (α = .94). The scale demonstrates long-term stability, capturing the effects of stable influences such as personality, while being sensitive enough to capture actual changes throughout the lifespan (Pavot & Diener, 1993).

Sociodemographic data. Additional questions about gender, age and employment situation were included through an ad hoc questionnaire at the beginning of the booklet.

PROCEDURE

The data collection process was carried out through intentional non-probabilistic sampling. All participants gave their informed consent prior to completing the questionnaire, which was presented through Google Forms. The link and QR code to access it was distributed through email, smartphone applications, posters, etc., and respecting the Spanish Organic Law 3/2018, of 5th December, on the Protection of Personal Data and guarantee of digital rights.

DESIGN

Following the classification proposed by Montero and León (2007), the design was a retrospective ex post facto. In these designs, researchers only select values of the "dependent" variable (life satisfaction) and look for possible variables that explain this (in the current study, three dimensions of gratitude – emotional, attitudinal, and behavioral- and sociodemographic variables –gender, age, and employment situation-).

DATA ANALYSES

Data cleaning was carried out to detect any possible missing values or outliers. Basic descriptive statistics (mean and standard deviation) were calculated. Then the normality of the variables was estimated with Kolmogorov-Smirnov. Given the non-normality of the variable gratitude (and its dimensions) and life satisfaction (p < 0.05) Spearman correlations and stepwise linear regression tests were run. The assumption of non-collinearity was verified through the tolerance values (.900) and the inflation factor of the variance (FIV; 1.111).

In order to analyze the influence of gender, age, and employment situation, means comparison are executed (Mann-Whitney U test for gender, and Kruskal Wallis test for age and employment situation because of non-normality -checked this with Shapiro-Wilks tests-). With the variables that showed effect into life satisfaction, regression analyses were replicated.

The statistical analyses were carried out using version 26 of IBM SPSS Statistics.

4. RESULTS

A preliminary analysis was carried out to detect if there was incomplete information or out of range in any of the items, without finding missing or atypical values. Table 1 shows means, standard deviations, and range of scores.

TABLE 1. Basic descriptive statistics and bivariate correlations

Variables	M	SD	Min	Max	1	2	3	4	5
Life satisfaction	21.83	8.41	5	35	-	.61**	.62**	.46**	.59**
2. Emotional gratitude	32.12	11.21	6	42	-	-	-	.49**	.69**
3. Attitudinal gratitude	30.51	10.29	9	63	-	-	-	-	.61**
4. Behavioral gratitude	56.53	18.00	13	91	-	-	-	-	1

Note: **p<.0.01; M = Mean; SD = Standard Deviation; Min = Minimum; Max = Maximum Source: Authors' own elaboration

Relation between life satisfaction and gratitude

Spearman's correlations were carried out to analyze the possible relationship between life satisfaction and gratitude. Significant statistical results were found between all variables (Table 1).

To find the dimensions of gratitude that predict life satisfaction, a step-wise linear regression analysis was performed taking as the different dimensions of gratitude as independent variables and life satisfaction as dependent variable. The model with greater explanatory power integrates the dimensions behavioral gratitude and emotional gratitude (Table 2). This equation in the prediction of life satisfaction explains 47.8% ($R^2 = 0.478$; $F_{2,321} = 147.07$, p < .001), the behavioral gratitude having a value of $\beta = .38$ (t = 4.79, p < .001) and emotional gratitude a value of $\beta = .24$ (t = 4.24, t = 0.001). Finally, the constant A was 3.68 with a typical error of 1.12 (t = 3.68, t = 0.001).

TABLE 2. Coefficients of the stepwise regression analysis

Variables	R	R2	Adjusted R2	SEE
Behavioral Gratitude	.670	0.449	0.447	6.252
Behavioral Gratitude + Emotional gratitude	.691	0.478	0.475	6.093

Note: SEE = Standard Error of Estimate Source: Authors' own elaboration

Influence of sociodemographic variables

The results didn't show statistically significant differences in life satisfaction in terms of gender and age (Table 3).

TABLE 3. Descriptive and inferential statistics of life satisfaction regarding gender and age

Variables	Levels	N	M	SD	M rank	Statistic		р
Gender	Female	238	21.34	8.53	157.24	U	8981.00	.09
	Male	86	23.16	7.94	177.07			
Age	18 - 25	74	24.04	7.06	185.42			
	26 - 46	74	21.62	8.72	161.19	Н	7.39	.06
	47 - 55	77	21.84	8.43	162.47			
	>56	99	20.31	8.84	146.37			

Note: M = Mean; SD = Standard Deviation Source: Authors' own elaboration Since there are significant differences in employment situation (H=19.31; p<0.01; Table 4), a pairwise comparison is executed with t test based on the assumption of normality (unemployed-retired due to disability; unemployed-housewife; retired due to disability-houseworkers) and U de Mann Whitney at those levels that were not normally distributed. The significant statistical differences are between students-retired early due disability (U=95.50; p<.01) and workers - retired early due disability (U=374.50 p<.01).

TABLE 4. Descriptive and inferential statistics of life satisfaction regarding employment situation

Variable	Levels	N	М	SD	M rank
Life satisfaction	Unemployed	32	20.88	8.458	151.13
	Students	68	24.29	7.016	188.14
	Workers	169	21.66	8.444	161.03
	Retired	41	20.78	9.411	152.73
	Retired early due to disability	10	13.30	7.349	71.90
	Housewife	4	26.50	1.291	206.38

Note: M = Mean; SD = Standard Deviation; Min = Minimum; Max = Maximum Source: Authors' own elaboration

5. DISCUSSION

The present study aimed to explore the relationship between satisfaction with life and gratitude and the three of its aspects -emotional, attitudinal and behavioral- in a sample of Andalusian adults. The results revealed significant correlations between satisfaction with life and all gratitude dimensions. A stepwise regression analysis demonstrated that the combination of behavioural and emotional gratitude accounted for a substantial percentage (47.8%) of the variance of satisfaction with life. These results were similar in the study of UK participants proposed by Morgan et al. (2017), where emotional and behavioural dimensions were preponderant, and all three dimensions of gratitude accounted for 27% of the variance of satisfaction with life. As Morgan et al. (2017) state, studies of gratitude that do not measure at least these two aspects of gratitude will miss important information (especially studies that explore the relationship between gratitude and well-being). This finding underscores the importance of both emotional and behavioural facets of

gratitude in influencing individuals' overall satisfaction with life. Indeed, a recent study on the mediating effects of life satisfaction and emotional gratitude on a large sample of Spanish adults showed that emotions of gratitude covered 57% of the variance of satisfaction with life (Obispo-Diaz et al., 2024). As noted by Morgan et al. (2017), gratitude is not only an emotional experience, and attitudinal and behavioural aspects are also important in assessing gratitude. Attitudinal dimension seems to contribute less at the model. Perhaps this is because ways of showing gratitude and how gratitude is perceived are more likely to be different at an intra-subject level and may be influenced by cultural aspects. For example, Floyd et al. (2018) linked gratitude to social reciprocity, arguing that the role of gratitude in social reciprocity is tied to saying thank you, which appears to be largely based on attitudes towards politeness in English-speaking societies rather than systematic empirical observation, and this may also be the case in Andalusia. The same authors suggested that we need to distinguish between a possibly universal feeling of gratitude and more culturally variable practices of expressing gratitude. Despite attitude in some cultures that emphazise saying thank you often, such practices do not appear to be necessary for maintaining everyday social reciprocity.

Contrary to some existing literature emphasizing age-related differences in emotional gratitude and life satisfaction (for example Carstensen et al., 2003, who noticed higher levels of emotional gratitude and satisfaction with life in older adults), this study did not observe significant variations across age groups in the Andalusian sample, as in a study on a sample of Korean adults about the relationship between gratitude and well-being proposed by Yoo (2020). This suggests that the impact of gratitude on satisfaction with life might be consistent across different age brackets within this population. Despite the absence of age-related differences in our sample, it is crucial to acknowledge the potential influence of cultural and regional factors on the relationship between gratitude and satisfaction with life.

Gender differences in the mediating model were not evident, indicating that both men and women s expressions of gratitude contribute equally to the explanatory model of life satisfaction. This contradicts the findings of Obispo-Díaz et al. (2024), which reported gender-specific patterns in the predictive role of gratitude emotions of satisfaction with life, where men scored higher than the women. Our results highlight the need for further investigation into the nuanced role of gender in the interplay between gratitude and satisfaction with life.

The employment situation emerged as a significant factor influencing satisfaction with life, with notable differences observed in pairwise comparisons. Specifically, students and workers exhibited higher satisfaction with life compared to those unemployed or retired early due to disability. In fact, Aliyev (2021) in a study among unemployed people from Azerbaijan about satisfaction with live, in a percentage of 75% they displayed dissatisfaction with their life. These findings about the unemployed and those who have retired early due to disability are because they have lost income and the deprivation of social rewards such as social relationships, identity in society and individual self-esteem, which are non-pecuniary, are the two main channels through which unemployment affects satisfaction according to Winkelmann and Winkelmann (1998). In this regard, Helliwell and Huang (2014) found that the second outweighs the first. This underscores the importance of considering employment status when exploring satisfaction with life in this context. The significant role of employment status in shaping satisfaction with life emphasizes the need for targeted interventions and support systems, particularly for those unemployed or retired early due to disability. Future research could delve deeper into the specific mechanism through which employment influences individual s perceptions of satisfaction with life.

6. CONCLUSIONS

In conclusion, our study contributes valuable insights into the intricate relationship between satisfaction with life and gratitude dimensions in Andalusian adults. The robust correlations and regression analysis highlight the predictive power of both emotional and behavioural gratitude in shaping individuals overall satisfaction with life. These

findings underscore the multi-dimensional nature of gratitude and its profound impact on subjective well-being.

Of the socio-demographic variables studied in relation to gratitude and satisfaction with life, only the employment situation showed differences in favor of students and workers. The variables gender and age showed no differences between groups. The gender-neutral impact of gratitude on satisfaction with life challenges previous research, warranting further exploration to unravel the complex interplay between gender, gratitude, and subjective well-being. Understanding the nuances can inform tailored strategies to enhance satisfaction with life in specific demographic groups.

In summary, our findings underscore the importance of considering various dimensions of gratitude, including both emotional and behavioural aspects, in interventions aimed at enhancing satisfaction with life. As gratitude proves to be a substantial predictor of well-being, further research and practical applications in diverse populations can refine our understanding and contribute to the development of effective strategies to promote satisfaction with life and overall mental health.

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