

Research Articles

Experienced saudade among brazilian college students: structure and correlates

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Abstract

This study examined the psychometric characteristics of the Experience of Saudade Scale (ESS) in a Brazilian sample, its measurement invariance across gender, and the relations of the experience of saudade with well-being and personality traits. The sample comprised 268 Brazilian participants aged 18-31 years. They completed the ESS, and other scales measuring satisfaction with life, satisfaction with love life, self-esteem, loneliness, and personality. The fit of the three-factor model of the ESS (Missing Close Others, Lack of Intimacy, and Longing for the Past) to the data was good, and reliability was adequate. Measurement invariance of the ESS across gender groups was supported. Gender had no effect, and model fit did not vary according to gender. The three factors of the ESS correlated positively with neuroticism. Additionally, (a) Missing close others correlated negatively with satisfaction with love life, (b) Lack of intimacy and Longing for the past correlated with the four measures of well-being. Well-being measures predicted experienced saudade over and above personality traits.

Keywords:

Brazil, measurement invariance, personality traits, saudade, well-being

INTRODUCTION

Saudade is a Lusophone concept concerning psychological reactions to situations related to the deprivation of loved ones and/or familiar places (Neto, 2021). Saudade has been present in thought and literature since medieval times (Lourenço, 1978; Teixeira, 2006; Vasconcelos, 1996). In Brazil, saudade is officially commemorated every year on January 30. However, there are few psychological studies on saudade (Neto & Mullet, 2014, 2023). The aim of this article was to analyze, among Brazilians, the psychometric characteristics of the recently developed Experience of Saudade Scale (ESS; Neto & Mullet, 2020b), and to assess the relationships between experienced saudade and demographic characteristics, personality traits, perceived well-being, and perceived loneliness.

Saudade

Saudade is a challenge to translate. In English, it is usually rendered as longing, yearning, missing, homesickness, and nostalgia (Silva, 2012). Nevertheless, these terms do not fully cover the specific meaning of this emotion as Lusophones generally apprehend it. Saudade has been defined as "a bittersweet, usually intense emotional experience that occurs when you remember a loved one from whom you are separated, an important place from which you are estranged, or a period that was happy and is now over" (Neto, 2021, p. 2). This is one of the most evoked emotions among Lusophones (Farrell, 2006). Around forty percent of participants in various Portuguese samples (teenagers, university students, and people working abroad) said they had experienced saudade often or very often (Neto & Mullet, 2023).

Saudade is a complex and multifaceted construct that covers emotions (e.g., sadness, loneliness), cognitions (e.g., memories, thinking), behaviors (e.g., crying, a new meeting), and motivations (e.g., wanting to go back in time, wanting to be close) (Neto & Mullet, 2014). In addition, saudade involves negative aspects (e.g., melancholy, sensation of loss) as well as positive aspects (joy, liking) (Neto & Mullet, 2022). It is, therefore, a mixed emotion (Braniecka et al., 2014).

A major roadblock to empirical research on saudade has been the lack of measures of its experience. Based on the findings from previous

prototype analyses of this concept, Neto and Mullet (2020b) created an indirect measure of saudade that they called *Experience of Saudade Scale* (ESS). This scale comprises three factors. The first factor – Missing Close Others – loaded statements such as “I suffer from being so far away from people I love” and “I would like to come back and see my family.” The second factor – Lack of Intimacy – loaded on statements such as “I suffer from lack of affection.” The third factor – Longing for the Past – loaded on statements such as “I keep remembering the past.”

The Present Study

The present study had three objectives. Firstly, we wanted to obtain, using a Brazilian sample, additional empirical evidence concerning the psychometric characteristics of the ESS. We, therefore, examined its factor structure, its measurement invariance (MI) between genders and its internal consistency. Ensuring measurement invariance between different groups, such as males and females, is essential if valid group comparisons are to be made (Han et al., 2019). Only empirical evidence that both genders understand statements that assess a latent trait (in our case, saudade) identically allows conclusions to be drawn with confidence to indicate gender differences.

The second objective of this work was to test further the relations between well-being constructs and experienced saudade. In this regard, four indicators of well-being or potential negative symptomatology were employed: satisfaction with life (SWL), satisfaction with love life (SWLL), self-esteem, and loneliness. SWL is a cognitive assessment of one's life satisfaction either globally or relatively to particular life domains (Diener, 2000). It is an important indicator of life quality given its positive links with health and social relationships (Diener et al., 2013). It has been shown that SWL correlates negatively with experienced saudade (Neto, 2019; Neto & Mullet, 2020b). SWLL is one of the particular domains of SWL (Nazzal et al., 2021). It has been defined as “a judgmental process in which individuals assess the quality of their love lives on the basis of their own set of criteria” (Neto, 2005, p. 4). It has also been shown to correlate negatively with experienced saudade (Neto & Mullet, 2020b).

Self-esteem refers, of course, to self-evaluation (Rosenberg & Kaplan, 1982). According to Orth and Robins (2022, pp. 13-14), a

“voluminous body of research suggests that high self-esteem helps individuals adapt to and succeed in a variety of life domains, including having more satisfying relationships, performing better at school and work, enjoying improved mental and physical health, and refraining from antisocial behavior.” Like well-being, self-esteem has been shown to correlate negatively with experienced saudade (Neto & Mullet, 2020b).

Loneliness is “the cognitive awareness of a deficiency in one’s social and personal relationships and ensuing affective reactions of sadness, emptiness or longing” (Asher & Paquette, 2003, p. 75). It is an unpleasant emotional experience that is linked to a range of negative physical outcomes (e.g., obesity and elevated blood pressure), negative mental health outcomes (e.g., depression, and anger), and high risk of mortality (Heinrich & Gullone, 2006; Holt-Lunstad et al., 2015). This is a key trigger for saudade (Neto & Mullet, 2014), which probably explains why loneliness has been found to predict experienced saudade beyond and above all other related psychological constructs (Neto & Mullet, 2020c).

The third objective is to scrutinize the relations of the saudade factors with personality traits (Gosling et al., 2003; McCrae & Costa, 1997). Personality traits are “dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions” (McCrae & Costa, 2003, p. 25). In a previous study with Portuguese adults (Neto & Mullet, 2020b) was examined the relation of self-reported saudade with personality utilizing the Portuguese form of the NEO-FFI (Barros & Marques, 1996). Findings indicated that the associations of the three ESS factors with personality were, above all, great regarding neuroticism. Specifically, the greater the levels of ESS scores, the greater the neuroticism score was. In another study in the same cultural context, neuroticism predicted saudade ($\beta = .42, p < .001$), explaining a large part of variance in saudade (Neto & Mullet, 2020c). These results were consonant with research showing that neuroticism predisposes negatively viewing one’s experience of life events (Widiger, 2009).

We expected that, in this Brazilian sample, (a) the ESS three-factor model would satisfactorily fit the data, (b) the internal consistency of each of the three factors would be good, (c) the invariance of the model as a function of gender would be established, (d) all well-being measures as well as neuroticism would correlate with experienced saudade, but that (e) the well-being measures would predict experienced saudade

over and above the personality measures.

METHOD

Participants

The sample included 268 college students (56% women) aged 18-31 years ($M = 21.60$, $SD = 2.81$) from the Universidade Estadual Vale do Acaraú, Brazil. Most of them (91%) were single.

Instruments

Experience of Saudade Scale (ESS). This scale includes 14 items measuring, as indicated earlier, three dimensions of experienced saudade: Missing close others (six items), Lack of intimacy (four items), and Longing for the past (four items) (Neto & Mullet, 2020b). Ratings range from 1 (“Rarely”) to 7 (“Very often”). Greater scores denote greater experienced saudade.

Satisfaction with Life Scale (SWLS). This scale (Diener et al., 1985) comprises five statements (e.g., “The conditions of my life are excellent”). Ratings range from 1 (“Strongly disagree”) to 7 (“Strongly agree”). The Brazilian Portuguese form of the SWLS demonstrated satisfactory reliability and validity (Gouveia et al., 2009). In the current study, internal consistency was found to be high ($\alpha = .86$, and $\omega = .86$).

Satisfaction with Love Life Scale (SWLLS). This scale (Neto, 2005; Neto & Dimitrova, 2017) includes five items derived from the SWLS (e.g., “The conditions of my love life are excellent”). Ratings also range from 1 (“Strongly disagree”) to 7 (“Strongly agree”). In the present study, internal consistency was found to be very high ($\alpha = .95$, and $\omega = .94$).

Self-esteem. Self-esteem was assessed with a single item (Robins et al., 2001; Neto & Fonseca, 2018). Despite this feature, its validity has been well established (Robins et al., 2001). Ratings range from 1 (“Strongly disagree”) to 7 (“Strongly agree”).

Loneliness (ULS-6). This measure used the short version of the Revised UCLA Loneliness Scale (Neto, 1992, 2014; Russell et al., 1980). The ULS-6 includes six items (e. g., “People are around me but not with me”). Ratings ranged from 1 (“Never”) to 4 (“Often”). A high score indicates greater loneliness. In the current study, internal consistency

was found to be high ($\alpha = .85$, and $\omega = .84$).

Personality. Each item of the Five-Item Personality Inventory (FIPI; Gosling et al., 2003) assesses one of the Big Five personality traits of Openness (“I see myself as open to new experiences”), Conscientiousness (“as dependable and self-disciplined”), Extraversion (“as extroverted and enthusiastic”), Agreeableness (“as warm and sympathetic to others”), and Neuroticism (“anxious and easily upset”). Response options range from 1 (“*Strongly disagree*”) to 5 (“*Strongly agree*”). It is the Portuguese form of the FIPI (Swami et al., 2020) that has been applied.

Demographic characteristics. Respondents gave information about their age, gender, and marital status.

Procedure

The study data was collected online between September and December 2023 using the online survey platform Google Forms. The survey was shared via social networks (i.e., WhatsApp, Facebook, and Twitter) and promoted by college centers. Participants provided digital consent and were unpaid volunteers. This work was realized in conformity with the Declaration of Helsinki, and with local ethical norms (Brasil, 2012).

Data Analysis

Data analysis comprised descriptive statistics, CFA, invariance analysis, analysis of variance, internal consistency, Pearson’s correlations, and hierarchical regression analyses. Mean, standard deviation, skewness, and kurtosis were computed for each item of the ESS. CFA was performed using the maximum likelihood estimation to assess the adequacy of the three latent factors of the scale. The following goodness-of-fit indices were computed: χ^2/df (ratio chi-square and degrees of freedom), CFI (comparative fit index), TLI (Tucker–Lewis index), SRMR (standardized root mean square residual), and RMSEA (root mean square error of approximation).

Measurement invariance of the ESS according to the gender of the participants was analyzed with multigroup CFA (MG-CFA), which applied increasing constraints to a base model (configural): equal factorial

loadings (metric invariance), and equal factor loadings and intercepts (scalar invariance). Scalar invariance is necessary for direct comparison of means across groups (i.e., gender). Analysis of variance was used to test potential gender impact.

Reliability was assessed by means of Cronbach's alpha and McDonald's Omega. The one sample *t*-test was computed to compare the ESS values with the neutral midpoint. Pearson correlations among the scales utilized were performed. Hierarchical regression analyses were conducted to examine the specific impact of personality traits, and well-being measures on saudade factors. IBM SPSS AMOS statistical software (version 29.0) was utilized. Significance levels were set at 0.05.

RESULTS

Descriptive Statistics

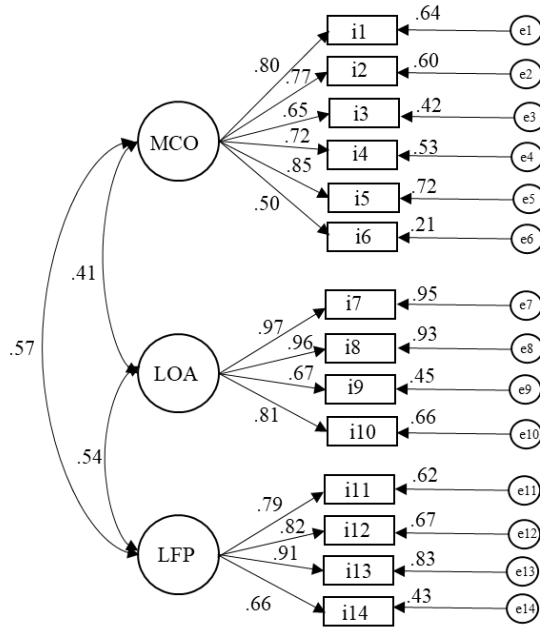
Descriptive statistics for the 14 items of the ESS were computed. Skewness (between -.82 and .31) and kurtosis (between -1.60 and -.60) coefficients indicated that univariate normality was met in all cases (Field, 2017). Mardia's multivariate kurtosis for the statements was 55.81 ($p < .001$).

Dimensionality

The three-factor model was tested through CFA. The fit of the model was good: $\chi^2 = 218.22$, $df = 74$, $\chi^2/df = 2.95$, CFI = 0.94, TLI = 0.93, SRMR = .07, and RMSEA = 0.08 [90% CI:.07-.09] (Hu & Bentler, 1999). As shown in Figure 1, all factor loadings (λ) were significant ($p < .001$). They ranged from .65 to .97 ($M = .78$). As expected, the construct validity of the ESS was supported.

Figure 1

Standardized regression weights for the three-factor model of Experience of Saudade Scale (ESS)



Note: MCO: Missing Close Others; LOA: Lack of Intimacy; LFP: Longing for the Past.

This three-factor solution was analyzed separately for each gender. As shown in Table 1, goodness of fit was similar for both genders. Configural, metric, and scalar invariance were subsequently scrutinized. To determine whether significant differences between models were present, we followed Chen’s (2007) recommendations according to which a $\Delta CFI < .010$, supplemented by $\Delta RMSEA < .015$, $\Delta SRMR_{metric} < .030$, $\Delta SRMR_{scalar} < .010$ would be indicative of invariance. As expected, measurement invariance across genders was supported. No gender differences in the Missing close others $F(1,267) = .01, p = .93$, Lack of intimacy $F(1, 267) = 1.57, p = .21$, and Longing for the past scores $F(1,267) = .26, p = .61$, were found.

Table 1

Confirmatory factor analysis fit statistics by gender and measurement invariance

Model				Goodness-of-fit statistics			Model comparison		
		χ^2 ^a	df ^a	CFI ^a	SRMR	RMSEA [90% CI] ^a	Δ CFI	Δ SRMR	Δ RMSEA
Gender									
CFA by group	Women	170.457	74	.927	.079	.094 [.075;.112]			
	Men	145.937	74	.941	.079	.091 [.069;.112]			
Measurement invariance	Configural	315.086	148	.934	.079	.066 [.055;.076]			
	Metric	319.683	159	.937	.080	.062 [.052;.072]	.003	.001	-.004
	Scalar	338.011	173	.935	.080	.060 [.051;.070]	-.002	.000	-.002

Note: ^a χ^2 = Chi-Square; *df* = degrees of freedom; CFI = Comparative fit index; SRMR = Standardized root mean square residual; RMSEA = Root mean square error of approximation; CI = Confidence interval; Δ CFI, Δ SRMR and Δ RMSEA = change in fit indices between contiguous nested models.

Reliability

For all three factors, reliability was, as expected, high: (a) $\alpha = .86$ and $\omega = .86$ for the Missing close others factor, (b) $\alpha = .92$ and $\omega = .92$ for Lack of intimacy, and (c) $\alpha = .87$ and $\omega = .87$ for Longing for the past. In summary, the ESS displays good psychometric properties.

Differences with the Neutral Point

Between the mean score of the Missing close others subscale ($M = 4.48$; $SD = 1.74$) and the neutral midpoint (4.00), the difference was significant, [$t(267) = 4.52$, $p < .001$, 95% CI .27, .69]. Significant differences were also observed regarding the Lack of intimacy subscale ($M = 3.61$; $SD = 1.99$), [$t(267) = -3.23$, $p < .001$, 95% CI -.63, -.15], and the Longing for the past subscale ($M = 4.45$; $SD = 1.83$), [$t(267) = 4.00$, $p < .001$, 95% CI .23, .67]. There were, therefore, slight, although significant deviations from the neutral point for each subscale.

Associations with Well-being and Personality Measures

As shown in Table 2, Missing close others correlated negatively with satisfaction with love life, $p < .05$, while Lack of intimacy and Longing for the past correlated negatively with SWL, SWLL, and self-esteem, and positively with loneliness, $p < .01$. Hierarchical multiple regression analyzes were used for determining whether well-being was associated with each of the experienced saudade sores beyond personality. Before carrying out these analyses, collinearity tests were conducted. Variance inflation factor was lower than 10 and tolerance statistic higher than .20 (Field 2017). The largest correlation predictor was far from the .80 threshold suggested by Myers and colleagues (2006).

Table 2

Correlations and descriptive statistics for variables of interest

Variables	1	2	3	4	5	6
	7					
1 Missing close others	---					
2 Lack of intimacy	.43***	---				
3 Longing for the past	.51***	.55***	---			
4 Satisfaction with life	-.03	-.29***	-.14*	---		
5 Satisfaction with love life	-.13*	-.31***	-.27***	.31***	---	
6 Self-esteem	.04	-.32***	-.16**	.36***	.24***	---
7 Loneliness	.11	.56***	.29***	-.48***	-.22***	-
.51***	---					
M	4.48	3.61	4.45	4-30	4.28	
	3.93	2.23				
SD	1.74	1.99	1.83	1.45	2.01	
	2.06	.72				

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

In Step 1, we examined which of the personality traits were predictors of each saudade factor. In Step 2, well-being measures were added. As shown in Table 3 (second column), in Step 1, openness, agreeableness, and neuroticism were significantly associated with Missing close others score. In Step 2, these personality traits remained significantly associated, and self-esteem emerged as significant

predictor, accounting for 3% of additional variance. As shown in Table 3 (third column), in Step 1, conscientiousness and neuroticism were significantly associated with the Lack of intimacy score. In Step 2, neuroticism remained significantly associated, and extraversion, satisfaction with love life, and loneliness, appeared as significant predictors, accounting for 19% of additional variance.

As shown in Table 3 (right-hand column), in Step 1, neuroticism was significantly associated with Longing for the past. In Step 2, it remained associated, and satisfaction with love life and loneliness appeared as significant predictors, accounting for 7% of additional variance. As expected, therefore, (a) neuroticism was significantly and positively related to the three saudade factors, and (b) well-being measures predicted experienced saudade beyond and above neuroticism and other personality traits.

Table 3

Hierarchical multiple regressions assessing the relationship between saudade factors and personality (first model) and between saudade factors, personality and well-being

Predictors	Missing close others		Lack of intimacy		Longing for the past	
	1	2	1	2	1	2
Personality						
Openness	.15*	.13*	-.03	-.03	.10	.08
Conscientiousness	.05	.06	-.22***	-.10	.01	.09
Extraversion	.01	.01	.03	.15*	.03	.07
Agreeableness	.14*	.15*	.07	.06	.03	.03
Neuroticism	.29***	.28***	.38***	.24***	.44***	
	.37***					
Well-being						
Satisfaction with life		-.02		-.01		-.01
Satisfaction with love life		-.12		-.18***		-
	.21***					
Self-esteem		.16*		.03		.05
Loneliness		.13		.47***		
	.20**					
R^2	.14	.17	.23	.42	.20	.27
ΔR^2	.14***	-.03*	.23***	.19***	.20***	
	.07***					

Note: beta standardized coefficients are reported; * $p < .05$; ** $p < .01$; *** $p < .001$.

DISCUSSION

As expected, the ESS, initially constructed from Portuguese samples (Neto & Mullet, 2020b), showed good psychometric properties on a new Brazilian sample of students. In addition, the measurement invariance test showed that this scale was capable of assessing the same concept for both genders. Despite the documented emotional differences between them, men and women conceptualize saudade in a similar way and experience it in the same way.

As in the original studies, well-being and personality traits were significantly related to experienced saudade. In particular, a high level of

lack of intimacy and a high level of longing for the past were linked to low SWL, low SWLL, low self-esteem and a high perception of loneliness.

As in the original studies, a high level of experienced saudade was significantly related to a high level of neuroticism, consistent with the idea that this personality trait predisposes people to experience negative affect (DeNeve & Cooper, 1998). Furthermore, in this new sample, (a) a high level of missing close others was linked to high levels of openness and agreeableness, and (b) a high level of lack of intimacy was linked to a low level of conscientiousness. In all cases, however, neuroticism remained the strongest predictor of each of the three factors of experienced saudade.

As expected, well-being measures were associated with experienced saudade over and above personality traits. Specifically, (a) self-esteem predicted, beyond personality traits, missing close others, and (b) satisfaction with love and loneliness predicted, beyond personality traits, lack of intimacy and longing for the past.

Limitations

This research has several limitations. First, the sample was one of convenience; it included only university students. Future work should examine the robustness of our findings with more representative samples. Secondly, the cross-sectional design of this study precludes causal explanations. Third, this research was based on self-report measures that may give rise to socially desirable responses. Future studies could use a tool to evaluate social desirability (He et al., 2014).

Despite these limitations, the study supports the idea that (a) the experience of saudade is a complex one that may involve various more or less independent aspects – separation from others, lack of intimate contact and flight of time, and not just one, (b) this experience is largely common to both women and men, and (c) it is associated, throughout the Lusitanian community (Brazil and Portugal), with the same psychological constructs.

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