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RESEARCH ARTICLE (ORIGINAL)

Translation and Validation of the Selfitis Behavior Scale for the Portuguese Population

Tradução e Validação da Selfitis Behavior Scale para a População Portuguesa
Traducción y Validación de la Selfitis Behavior Scale para la Población Portuguesa

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Abstract
Background: Excessive use of social media among young individuals can trigger obsessive behaviors, such as the obsessive compulsion to take selfies.
Objective: To translate, culturally adapt, and validate the Selfitis Behavior Scale (SBS) among Portuguese higher education students.
Methodology: Psychometric study in which the SBS underwent apparent validity assessment, internal consistency analysis, confirmatory factor analysis, measurement invariance testing, as well as convergent and discriminant validity assessment.
Results: Confirmatory factor analysis of the original six-factor model revealed an adequate fit. Global internal consistency was high (Cronbach's α and McDonald's ω = 0.94; CR = 0.97), with subscales ranging from 0.79 to 0.89. Evidence of convergent validity, discriminant validity, and invariance between groups with different selfie-taking frequencies was found. Statistically significant differences were observed between the groups, with higher scores in participants who reported taking selfies frequently.
Conclusion: The Portuguese version of the SBS exhibited good psychometric properties, proving to be a valid and reliable instrument for assessing selfitis behavior among higher education students.

Keywords: validation study; psychometrics; social networking

Resumo
Enquadramento: O uso excessivo das redes sociais entre os jovens pode desencadear comportamentos obsessivos, como a compulsão de tirar selfies.
Objetivo: Traduzir, adaptar culturalmente e validar a *Selfitis Behavior Scale* (Escala de Comportamento de Selfite - SBS) entre estudantes do ensino superior em Portugal.
Metodologia: Estudo psicométrico no qual a SBS foi submetida a uma avaliação de validade aparente, análise de consistência interna, análise fatorial confirmatória, teste de invariância de medida, bem como avaliação de validade convergente e discriminante.
Resultados: A análise fatorial confirmatória do modelo original de seis fatores revelou um ajuste adequado. A consistência interna global foi elevada (α de Cronbach e ω de McDonald = 0,94; CR = 0,97), com subescalas que variavam entre 0,79 e 0,89. Verificaram-se evidências de validade convergente e discriminante, bem como de invariância entre grupos com diferentes frequências de tirar selfies. Observaram-se diferenças estatisticamente significativas entre os grupos, com pontuações mais elevadas nos participantes que relataram tirar selfies com frequência.
Conclusão: A versão portuguesa da SBS apresentou boas propriedades psicométricas, tendo-se revelado um instrumento válido e fiável para avaliar o comportamento de selfite em estudantes do ensino superior.

Palavras-chave: estudo de validação; psicometria; rede social

Resumen
Marco contextual: El uso excesivo de las redes sociales entre los jóvenes puede desencadenar comportamientos obsesivos, como el impulso recurrente de hacerse selfies.
Objetivo: Traducir, adaptar y validar la *Selfitis Behavior Scale* (SBS) para la población universitaria portuguesa.
Metodología: Estudio psicométrico en el que la escala fue sometida a análisis de validez aparente, consistencia interna, análisis factorial confirmatorio, medir la invarianza, así como validez convergente y discriminante.
Resultados: El análisis factorial confirmatorio del modelo original de seis factores reveló un ajuste adecuado. La consistencia interna global fue alta (α de Cronbach y ω de McDonald = .94; CR = .97), con subescalas que oscilaron entre .79 y .89. Se encontraron evidencias de validez convergente, validez discriminante e invarianza entre grupos con diferentes frecuencias de selfies. Se observaron diferencias estadísticamente significativas entre los grupos, con puntuaciones más altas en los participantes que se tomaban selfies con mayor frecuencia.
Conclusión: La versión portuguesa del SBS mostró buenas propiedades psicométricas, demostrando ser un instrumento válido y confiable para evaluar el comportamiento de la selfitis en estudiantes universitarios.

Palabras clave: estudio de validación; psicometría; red social

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Introduction

In recent decades, the Internet and digital technologies have profoundly transformed the dynamics of communication, social interaction, and personal development, particularly among young individuals. According to data from Statista (2024), there were approximately 5.3 billion internet users worldwide, of which approximately 5 billion were active social media users in January 2024. Platforms such as X® (formerly Twitter®), Instagram®, TikTok®, Facebook®, and YouTube® are privileged spaces for content sharing, individual expression, and establishing interpersonal relationships, assuming a central role in daily life (Kanchan & Gaidhane, 2023). During the COVID-19 pandemic, the use of social media intensified, becoming an essential resource for the dissemination of information, maintenance of social relationships, and provision of psychosocial support (Bozzola et al., 2022). At the same time, these platforms have been integrated into health promotion, digital education, and emotional support strategies. However, the intensive and sometimes unregulated use of social media has raised concerns regarding its impact on mental health, particularly with respect to self-image, self-esteem, and risk behaviors, particularly in young populations (Kanchan & Gaidhane, 2023). Given the high prevalence of social media use among Portuguese youth and the lack of validated instruments to assess the dysfunctional behaviors associated with selfie-taking in this context, the cultural adaptation and validation of the Selfitis Behavior Scale (SBS) developed by Balakrishnan and Griffiths (2018) for the Portuguese population becomes imperative.

Accordingly, the aim of this study is to translate, culturally adapt, and validate the SBS in a sample of Portuguese higher education students.

Background

One of the emerging behavioral manifestations associated with excessive social media use is the phenomenon of selfies – self-portraits captured with mobile devices and shared online. Although this practice may represent a form of self-expression and personal affirmation, several studies have associated it with indicators of narcissism, digital addiction, search for external validation, and low self-esteem (Morciano et al., 2022). The term selfitis first emerged in the media following fake news published in 2014, which incorrectly claimed that it had been classified as a mental disorder by the American Psychiatric Association. Despite this non-scientific origin, the concept was later appropriated and operationalised in academic literature to describe, in a non-diagnostic way, problematic patterns of engagement with the practice of taking and sharing selfies, associated with processes such as the search for social validation, emotional regulation and the reinforcement of social identity (Balakrishnan & Griffiths, 2018; Lin et al., 2019; Varma et al., 2020; Ciplak & Atici, 2021). The literature distinguishes three levels of severity – borderline, acute, and chronic – identifying motivations such as stress reduction, the need for belonging, self-affirmation, and adjustment to sociocultural norms as key factors underlying this behavior (El Khoueiry et al., 2020). In extreme cases, selfie-taking can involve dangerous situations and lead to fatal consequences. In addition, the aesthetic manipulation of shared images – often adjusted to socially valued beauty standards – can increase feelings of body dissatisfaction and self-image distortion (McLean et al., 2015). In order to assess behaviors associated with selfitis, Balakrishnan and Griffiths (2018) developed the SBS, consisting of 20 items distributed across six dimensions: mood modification, attention seeking, self-confidence, subjective conformity, social competition, and environmental enhancement. The scale has demonstrated robust psychometric properties in different cultural contexts, including India, Iran, Afghanistan, Turkey, and Italy, with high levels of internal consistency and construct validity (Lin et al., 2020; Monacis et al., 2020; Ciplak & Atici, 2021).

Research question

What are the psychometric properties (specifically reliability and validity) of the Portuguese version of the SBS?

Methodology

Participants and Procedure

The SBS was culturally and linguistically adapted into Portuguese, ensuring conceptual equivalence. Two independent experts in psychology and instrument translation produced separate forward translations, which were reconciled into a single version and then back-translated into English by a bilingual translator. Semantic, idiomatic, conceptual, and cultural equivalence was reviewed by three linguistics experts. A pre-test with 10 higher education students confirmed clarity of the items, with no comprehension issues identified. The study used a convenience sample of 280 higher education students. Data were collected between May and September 2024 through an online questionnaire distributed via institutional email. Inclusion criteria were being at least 18 years old, being enrolled in higher education, and providing informed consent. Sociodemographic information collected comprised age, sex, marital status, study cycle, working student status, perceived academic performance, social media use, daily time spent on social media, and number of selfies taken per day.

Instrument

The SBS is a 20-item instrument, rated on a five-point Likert scale (1 = strongly agree; 5 = strongly disagree), developed to assess selfitis, understood as a behavioural pattern characterised by the compulsion to take and share selfies. In the original version, the authors identified six factors: environmental enhancement and social competition (both with four items), and attention seeking, mood modification, self-confidence, and subjective conformity (each with three items). The scores for the factors and the

total scale are obtained by summing the respective items, with higher scores indicating higher levels of involvement in behaviours associated with selfitis. In the original study, the internal consistency of the total scale (α = 0.88) and all six factors (α = 0.75−0.84) was considered adequate. The same pattern was observed in this study, with α = 0.94 for the total scale and α = 0.79−0.88 across all factors. The Portuguese version used in this study corresponds to the culturally adapted and linguistically validated translation of the original SBS.

Procedures for data analysis

Confirmatory factor analysis (CFA) and measurement invariance testing were conducted using the *lavaan* package (version 0.6-16) in R (version 4.4.0). Descriptive statistics, reliability analyses, and validity evidence based on relations with other variables were obtained using IBM SPSS Statistics (version 29.0). Item-level data were treated as continuous, given that the variables are ordinal with at least five response categories (Flora, 2020). Normality was assessed using skewness (*Sk*) and kurtosis (*Ku*) coefficients, with $|Sk| < 2$ and $|Ku| < 2$ indicating no severe deviations from the normal distribution (Marôco, 2021a). The six-factor model of the SBS was then examined through CFA, using a robust maximum likelihood regression (MLR) estimator to account for minor deviations from normality. Model fit was evaluated using the chi-square statistic (χ^2) and degrees of freedom, Comparative Fit Index (CFI), Tucker−Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA; 90% CI), and Standardized Root Mean Square Residual (SRMR). The following thresholds were considered indicative of acceptable fit: $\chi^2/df \leq 2$, CFI ≥ 0.90, TLI ≥ 0.90, RMSEA ≤ 0.08, and SRMR ≤ 0.08 (Marôco, 2021a). Convergent validity was evaluated through the Average Variance Extracted (AVE) and composite reliability (CR). AVE values ≥ 0.50 or AVE < 0.50 accompanied by CR ≥ 0.60 across all factors were considered acceptable (Fornell & Larcker, 1981; Marôco, 2021a). Discriminant validity was examined using the Heterotrait-Monotrait ratio of correlations (HTMT), with HTMT < 0.90supporting adequate discriminant validity (Henseler et al., 2015). Reliability was assessed using Cronbach's alpha (α), McDonald's omega (ω), and CR. Corrected item–total correlations were also calculated. Values of α, ω, and CR ≥ 0.70 (Marôco, 2021a) and corrected item−total correlations ≥ 0.30 (De Vaus, 2002) were considered adequate. Measurement invariance across key subgroups was assessed using multi-group CFA. First, model fit was assessed within each group. Configural invariance was then tested by assessing the model fit when the unconstrained model is fitted simultaneously across groups. Subsequently, metric invariance (equality of factor loadings) and scalar invariance (equality of intercepts) were evaluated. At each step, constrained and unconstrained models were compared using the Satorra-Bentler scaled chi-square difference test (Satorra & Bentler, 2001), ΔCFI, and ΔRMSEA. A significant chi-square difference combined with ΔCFI ≤ -0.005 and ΔRMSEA ≥ 0.010 was considered indicative of lack of invariance (Chen, 2007). Following measurement invariance analyses, validity evidence based on relations with other variables was assessed by comparing SBS scores across subgroups. Independent-samples t-tests and non-parametric Multivariate Analysis of Variance (MANOVA) were used, since the assumptions for parametric MANOVAs were not met (Marôco, 2021b). When the non-parametric MANOVAs were statistically significant, follow-up Mann-Whitney tests for each dependent variable were performed, with Bonferroni-adjusted *p*-values based on the number of comparisons. Cohen's *d* was used to estimate effect sizes, with values of 0.20, 0.50, and 0.80 interpreted as small, moderate, and large effects, respectively (Cohen, 1988). Additional validity evidence based on relations with other variables was assessed by correlating SBS scores with daily time spent on social media and with age. All correlations were interpreted according to Cohen's guidelines: $0.10 \leq |r| \leq 0.29$ (weak), $0.30 \leq |r| \leq 0.49$ (moderate), and $0.50 \leq |r| \leq 1.00$ (strong) (Cohen, 1988). In order to evaluate the interpretability of the total score, a bifactor model was also estimated through CFA. Explained Common Variance (ECV), Percentage of Uncontaminated Correlations (PUC), and omega hierarchical (ωH) were calculated using Dueber's (2017) calculator, with ECV > 0.70, PUC > 0.70, and ωH > 0.80 supporting the use of the total score. A significance level of 0.05 was adopted for all analyses.

Ethical procedures

Approval was obtained from the Ethics Committee of a higher education institution (Ref. 2024/04-08). Participants were informed about the objectives of the study and invited to provide Free and Informed Consent via Google Forms. Participation was voluntary, and individuals could withdraw from the study at any time by contacting the principal investigator via email. Anonymity, data confidentiality, and full respect for the participants' autonomy were ensured.

Results

All 280 participants were between 18 and 57 years old, with a mean age of 26.95 years (*SD* = 9.77). The sample comprised 226 females (80.7%), 51 males (18.2%), and three individuals (1.1%) who preferred not to report their sex. All participants were enrolled in higher education programs: nine (3.2%) in higher professional technical courses, 225 (80.4%) in bachelor's programs, 11 (3.9%) in non-degree postgraduate programs, 26 (9.3%) in master's programs, and nine (3.2%) in doctoral programs. The majority of the participants were single (*n* = 219; 78.2%), 53 (18.9%) were married or cohabiting, seven (2.5%) were divorced, and one (0.4%) was widowed. The participants reported spending between one and six hours per day on social media (*M* = 2.99; *SD* = 1.42). Regarding selfitis behavior, 149 participants (53.2%) reported never or rarely taking selfies, while 131 (46.8%) reported taking selfies more frequently. Similar patterns in sociodemographic characteristics and social media use were observed when the sample was analyzed separately by sex and by selfie-taking frequency.

Reliability

Table 1 presents descriptive statistics for all SBS items, as well as for the total scale and subscales. Cronbach's α, McDonald's ω, and corrected item–total correlations are also reported for the total scale and each subscale.

Table 1

Reliability (alpha, omega, and composite reliability, and corrected item–total correlations) and descriptive statistics of the Portuguese version of the Selfitis Behavior Scale

Total scale/Subscales	Item	Range	*M (SD)*	*Sk*	*Ku*	α	ω	*CR*	cITC
SBS - PT		20-82	43.96 (14.31)	0.34	-0.21	0.94	0.94	0.97	
	1	1-5	2.61 (1.04)	0.08	-0.61				0.66
	2	1-5	1.99 (0.96)	0.69	-0.36				0.63
	3	1-5	2.18 (1.06)	0.54	-0.65				0.67
	4	1-5	1.86 (0.98)	1.02	0.34				0.72
	5	1-5	2.67 (1.19)	-0.13	-1.21				0.66
	6	1-4	1.79 (0.88)	0.86	-0.13				0.73
	7	1-5	2.25 (0.96)	0.37	-0.57				0.69
	8	1-5	2.01 (1.03)	0.74	-0.42				0.70
	9	1-5	1.96 (0.95)	0.82	0.03				0.72
	10	1-5	2.31 (1.10)	0.31	-0.98				0.72
	11	1-5	2.40 (1.12)	0.28	-0.88				0.75
	12	1-4	1.73 (0.86)	1.03	0.33				0.75
	13	1-5	3.42 (1.10)	-0.72	-0.12				0.49
	14	1-5	1.83 (0.89)	0.94	0.30				0.69
	15	1-5	2.40 (1.15)	0.26	-1.16				0.59
	16	1-5	2.09 (0.97)	0.49	-0.69				0.74
	17	1-5	2.43 (1.22)	0.36	-1.04				0.67
	18	1-5	1.81 (1.02)	1.28	1.08				0.45
	19	1-5	2.31 (1.10)	0.46	-0.68				0.62
	20	1-5	1.91 (0.99)	0.83	-0.30				0.54
Environmental enhancement		4-19	10.59 (3.27)	-0.05	-0.32	0.79	0.79	0.80	
	1								0.68
	7								0.66
	13								0.55
	19								0.50
Social competition		4-20	7.74 (3.06)	0.89	0.92	0.80	0.80	0.81	
	2								0.64
	8								0.58
	14								0.71
	20								0.56
Attention seeking		3-14	6.54 (2.68)	0.33	-0.70	0.80	0.81	0.83	
	3								0.68
	9								0.74
	15								0.55

Mood modification		3-14	6.26 (2.71)	0.53	-0.28	0.87	0.87	0.87	
	4								0.75
	10								0.74
	16								0.76
Self-confidence		3-15	7.50 (3.16)	0.14	-0.88	0.88	0.88	0.89	
	5								0.76
	11								0.85
	17								0.70
Subjective conformity		3-12	5.34 (2.43)	0.84	-0.02	0.85	0.86	.088	
	6								0.78
	12								0.82
	18								0.60

Notes. SBS - PT = Portuguese version of the Selfitis Behavior Scale; *M* = Mean; *SD* = Standard deviation; cITC = Corrected item−total correlation; Sk = Skewness coefficient; Ku = Kurtosis coefficient; α = Cronbach's alpha; ω = McDonald's omega; CR = Composite reliability

According to Table 1, Cronbach's α, McDonald's ω, and CR values were all ≥ 0.79 for each subscale and total scale. Additionally, all corrected item−total correlations exceeded 0.30. These results provide evidence of good internal consistency and reliability of the original six-factor model. For each item, *Sk* and *Ku* values were indicative of no severe deviations from the normal distribution.

Factorial validity

In addition to the original six-factor model ($\chi^2(155) = 286.62$, $p < .001$; $\chi^2/df = 1.85$; RMSEA (90% CI) = 0.06 (0.05−0.06); SRMR = 0.06; CFI = 0.95; TLI = 0.94) a bifactor model ($\chi^2(150) = 335.73$, $p < .001$; $\chi^2/df = 2.24$; RMSEA (90% CI) = 0.07 (0.06−0.08); SRMR = 0.06; CFI = 0.93; TLI = 0.91) was also considered. Due to high correlations between some of the original factors, a second-order model ($\chi^2(164) = 382.81$, $p < .001$; $\chi^2/df = 2.33$; RMSEA (90% CI) = 0.07 (0.06−0.08); SRMR = 0.07; CFI = 0.92; TLI = 0.90) was also examined. Among these three competing structures, the original six-factor model demonstrated the best fit, with all indices indicating an acceptable fit. All standardized factor loadings were statistically significant ($p < .001$) and exceeded 0.60. AVE values were higher than 0.50 for most factors, with the exception of environmental enhancement (AVE = 0.49), just slightly below 0.50. All HTMT values were lower than 0.90, providing evidence of good convergent validity and discriminant validity for all six factors. Convergent validity for environmental enhancement was considered acceptable because, despite its AVE value being lower than 0.50, the CR exceeded 0.60 for all factors (Table 1). Although the multidimensional structure showed the best fit, the bifactor model yielded ECV = 0.71, PUC = 0.87, and ωH = 0.91, supporting the calculation of a total score in addition to the subscale scores.

Measurement invariance

In order to compare SBS scores between participants who reported never or rarely taking selfies ($n = 149$) and those who reported taking selfies frequently ($n = 131$), measurement invariance across these two groups was first analyzed. The model showed an acceptable fit in both groups (never/rarely: $\chi^2/df = 1.71$, RMSEA = 0.07, SRMR = 0.06, CFI = 0.92, TLI = 0.91; more frequently: $\chi^2/df = 1.66$, RMSEA = 0.07, SRMR = 0.07, CFI = 0.92, TLI = 0.90). Furthermore, when the unconstrained model was fitted simultaneously to both groups, the CFA results supported configural invariance ($\chi^2/df = 1.68$; RMSEA = 0.07; SRMR = 0.07; CFI = 0.92; TLI = 0.90). The chi-square difference test ($\Delta\chi^2$), together with ΔRMSEA and ΔCFI values, revealed evidence of metric invariance ($\Delta\chi^2(14) = 22.188$, $p = .075$; ΔRMSEA = -0.000; ΔCFI = -0.003) and scalar invariance ($\Delta\chi^2(14) = 26.813$, $p = .020$; ΔRMSEA = 0.000; ΔCFI = -0.004) , thus allowing SBS scores comparisons between the two groups.

Evidence of validity based on relations to other variables

Significant differences were found in the SBS total score between participants who reported never or rarely taking selfies ($M = 38.68$; $SD = 12.80$) and those who reported taking selfies frequently ($M = 49.96$; $SD = 13.60$), $t(278) = -7.149$; $p < 0.001$; $d = 0.856$. Similarly, when considering all six subscales as dependent variables, differences were also found, $\chi^2(6) = 65.286$; $n = 280$; $p < 0.001$. Mann-Whitney tests revealed statistically significant differences between the two groups for all subscales, with participants who reported taking selfies frequently always presenting higher mean and median scores (Table 2).

Table 2

Differences in the Portuguese version of the Selfitis Behavior Scale subscale scores between participants who reported never or rarely taking selfies and those who reported taking selfies frequently

Subscale	Selfie-taking frequency	*M (SD)*	*Me*	Effect[a]
Environmental enhancement	Never or rarely	9.38 (3.01)	9.00	U = 14197.500; z = 6.595; p = .004
	frequently	11.97 (3.02)	12.00	
	Total	10.59 (3.27)	11.00	
Social competition	Never or rarely	6.89 (2.65)	7.00	U = 13070.000; z = 4.944; p = .004
	frequently	8.69 (3.22)	8.00	
	Total	7.74 (3.06)	8.00	
Attention seeking	Never or rarely	5.93 (2.51)	6.00	U = 12429.500; z = 3.997; p = .004
	frequently	7.22 (2.72)	7.00	
	Total	6.54 (2.68)	6.00	
Mood modification	Never or rarely	5.42 (2.46)	6.00	U = 13494.000; z = 5.623; p = .004
	frequently	7.22 (2.68)	7.00	
	Total	6.26 (2.71)	6.00	
Self-confidence	Never or rarely	6.15 (2.65)	6.00	U = 14819.000; z = 7.539; p = .004
	frequently	9.02 (3.02)	9.00	
	Total	7.50 (3.16)	8.00	
Subjective conformity	Never or rarely	4.90 (2.10)	4.00	U = 11566.500; z = 2.782; p = .020
	frequently	5.83 (2.68)	6.00	
	Total	5.34 (2.43)	5.00	

Note. M = Mean; *SD* = Standard deviation; Me = Median; (a) Mann-Whitney tests were performed; U = Mann-Whitney U statistic; z = standardized z-score; p = significance level (< 0.05).

Although the number of male participants was insufficient to assess measurement invariance by sex, SBS scores were also compared between females and males. No significant differences were found in SBS total score between females (M = 44.32; SD = 13.23) and males (M = 42.75; SD = 17.98), $t(62)$ = 0.592; p = 0.556; d = 0.111. When the six subscales were analyzed simultaneously as dependent variables, a non-parametric MANOVA was conducted and, again, no significant differences were found between sexes ($\chi^2(6)$ = 8.004; n = 277; p = 0.238). The correlations between SBS scores (subscales and total score) and age were mostly weak but statistically significant (r between -0.26 and -0.14). The only non-significant correlations were between age and Attention Seeking (r = -0.08) and Subjective Conformity (r = -0.03). As all coefficients were negative, SBS scores tended to decrease with age. The correlations between SBS scores (subscales and total score) and daily time spent on social media were mostly weak and statistically significant (r between 0.15 and 0.26). The only non-significant correlation was between daily time spent on social media and Subjective Conformity (r = 0.08). As all coefficients were positive, SBS scores tended to increase with greater daily time spent on social media.

Discussion

While technological progress has brought about many positive changes, it also poses everyday challenges. Excessive technology use can manifest as internet addiction, overuse of online games and social media, nomophobia, technoference, and cyberchondria (Balakrishnan & Griffiths, 2018). These behaviors - now increasingly visible - are described as digital disorders and can affect mental health and well-being. The SBS was translated and culturally adapted to Portuguese, with CFA supporting its six-factor structure and strong reliability. Higher SBS scores were observed among frequent selfie-takers across all six subscales: Environmental Enhancement, Social Competition, Attention Seeking, Mood Modification, Self-Confidence, and Subjective Conformity. These findings are in line with previous research. For example, Ciplak and Atici (2021) reported similar differences between rare and frequent selfie-takers. Likewise, Lin et al. (2020) observed a positive association between SBS scores and the number of selfies taken per day. Other studies, such as Monacis et al. (2020), suggest that taking selfies may be closely linked to a desire for social approval and recognition.

In this study's sample, no significant differences in SBS scores were found between males and females, although previous research has shown that women tend to post more selfies on social media and that selfie-taking may correlate with narcissism, particularly in men (Arpaci et al., 2018). Taking selfies can be a form of self-expression and social connection, which may explain the higher scores in Environmental Enhancement and Social Competition subscales (Balakrishnan & Griffiths, 2018). Age also influenced SBS scores, suggesting selfie behaviors decrease with age, consistent with findings by Ciplak and Atici (2021). Younger individuals may use selfies as a means of social interaction and identity expression, while older adults tend to engage with social media in a more reserved and less self-focused manner. Another finding is the positive correlation between daily time spent on social media and SBS scores: the more time individuals spend online, the more likely they are to engage in selfie-related behaviors—a pattern that has also been reported in previous studies (Lin et al., 2020; Monacis et al., 2020). These results highlight the importance of understanding the psychological impact of online activity on self-perception and social relationships. Overall, the Portuguese version of the SBS demonstrated strong validity and reliability, consistent with validation studies conducted in Iran, Afghanistan (Lin et al., 2020), and Turkey (Ciplak & Atici, 2021), supporting its cross-cultural applicability.

In addition to its psychometric contribution, the SBS has practical implications for mental health, education, and public policy. It can be used as a screening tool for psychologists and counsellors to identify students at risk of problematic selfie-related behaviors and associated issues such as low self-esteem, anxiety, or compulsive social media use. Cross-contextual comparisons can provide insights into cultural norms, gender roles, and digital practices that shape the meaning and role of selfies, informing culturally sensitive interventions and policies aimed at promoting healthier technology use among young individuals. This study has some limitations. The use of a convenience sample composed of higher education students limits the representativeness and external validity of the results. The predominance of women, age homogeneity, and reduced socioeconomic diversity may restrict the generalisation of the findings. The limited size of the pre-test sample prevented a more comprehensive assessment of semantic equivalence. Additionally, the use of self-assessment measures and online data collection may introduce biases, particularly social desirability, affecting internal validity. Finally, the cross-sectional design and the use of self-administered questionnaires limit the possibility of making causal inferences. Despite these limitations, this study provides valuable insights for nursing practice. The Portuguese version of the SBS is a valid and reliable tool for assessing selfitis behaviors, enabling nurses to identify early signs of excessive social media use and its impact on mental health. Its use can guide preventive and educational interventions aimed at promoting digital literacy, emotional self-care, and psychological well-being, particularly among young individuals in academic and community settings. In clinical contexts, the instrument may assist mental health nurses in assessing psychosocial risks associated with compulsive social media use, contributing to individualized care plans and strategies to enhance digital self-awareness and psychological well-being.

Conclusion

This study highlights the importance of understanding the motivational factors behind selfitis behavior and its impact on the well-being of social media users. It provides the first validated Portuguese version of the SBS, a reliable and culturally adapted tool to assess selfie-related behaviors among higher education students. The SBS can help researchers, psychologists, and educators to identify problematic patterns associated with social media use, self-esteem, and mental health, informing targeted interventions and digital education policies. The six-factor structure demonstrated strong validity and reliability among Portuguese higher education students, allowing comparisons between rare and frequent selfie-takers, with higher scores suggesting associations with Social Competition, Mood Modification, and Self-Confidence. Promoting self-esteem, relationships, and healthy competitiveness may foster balanced social media use and help prevent negative mental health outcomes in young individuals.

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