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The sexual self-esteem inventory – short form (SSEI-SF): factor structure of the scale for the Portuguese population

Liliana Mendes^{1*}, Levi Leonido^{2,3**}, Inês Carvalho^{4***}, Ana Barbosa^{4****}, Ana Martins^{5*****}, Maria Ribeiro^{5******}, & Elsa Gabriel Morgado^{6,7******}

¹University of Combria, Coimbra Institute for Biomedical Imaging and Translational Research - CIBIT, Coimbra, Portugal

²University of Trás-os-Montes and Alto Douro, Vila Real, Portugal

³Catholic University of Portugal, Centre for Research in Science and Technology of the Arts, Porto, Portugal

⁴University of Minho: Master's Degree Student, Braga, Portugal

⁵University of Trás-os-Montes and Alto Douro: Master's Degree Student, Vila Real, Portugal

⁶Centre for Studies in Education and Innovation – CI&DEI, IPV, Portugal

⁷Polytechnic Institute of Bragança, Bragança, Portugal

Introduction. Sexuality plays a pivotal role in human life, shaping individuals' perceptions and practices, known as sexual self-esteem, which significantly influences attitudes and behaviours. Aim. This study aimed to examine the factor structure and reliability of the Sexual Self-Esteem Inventory (SSEI) in its abbreviated form for the Portuguese population, considering five distinct aspects: Skill/Experience, Attractiveness, Control, Moral Judgment, and Adaptiveness. Method. A cross-sectional, quantitative, comparative, and correlational study with a quasi-experimental design was conducted. A total of 901 individuals aged 18 to 39 years (M = 25.52, SD = 6.27), predominantly female (67.8%), participated in the study. The factor structure was analysed via exploratory factor analysis, and instrument reliability was assessed using Cronbach's alpha. Results. The exploratory factor analysis yielded 24 items organized into four factors – Emotional

Correspodence: Liliana Mendes, liliana.mendes@icnas.uc.pt

^{*}https://orcid.org/0000-0002-7938-6166

^{**} https://orcid.org/0000-0001-6603-034X

^{***} https://orcid.org/0000-0003-0030-9756

^{****} https://orcid.org/0009-0009-7729-5429

^{*****} https://orcid.org/0009-0001-7737-2123

^{******} https://orcid.org/0009-0007-3581-3449

^{******} https://orcid.org/0000-0002-3653-7876

Readiness, Competence and Experience, Attractiveness, and Adaptiveness - explaining 51.99% of the total variance. All factors exhibited good internal consistency. *Conclusion*. Thus, the inventory demonstrated adequate factor structure and reliability and is deemed suitable for assessing self-perceptions regarding sexuality across four dimensions in a Portuguese sample.

Keywords: sexual self-esteem, young adults, sexuality, Portuguese population

Introduction

Sexuality is a fundamental facet of human existence, shaped by a myriad of influences, including psychological, cultural, religious, and biological factors (WHO, 2015). It encompasses a broad spectrum of experiences and expressions, ranging from thoughts, beliefs, and values to desires and fantasies, not all of which are necessarily outwardly expressed or experienced by individuals. Moreover, sexuality encompasses the capacity for pleasure, particularly within the context of sexual activity, which includes elements such as sexual orientation, gender identity, and attitudes (APA, n.d.).

Integral to the concept of sexuality is sexual self-esteem, which denotes a positive attitude and self-assurance in one's ability to engage in fulfilling and pleasurable sexual experiences (Snell & Papini, 1989). Essentially, sexual self-esteem reflects an individual's perception of their own sexuality and their intrinsic value as a sexual being—whether they view themselves as sexually attractive or unattractive, sexually competent or incompetent. This encompasses the evaluation and acceptance of one's sexual identity and worth (Mayers et al., 2003; Moin et al., 2009).

The study of sexual self-esteem holds significant importance as it serves as a mediator in the relationship between sexual functioning and overall sexual satisfaction (Antičević et al., 2017; Ménard & Offman, 2009; Peixoto et al., 2018). Additionally, it influences body image and satisfaction (Hannier et al., 2018). Furthermore, sexual self-esteem plays a crucial role in predicting the ability to communicate about satisfying sexual behaviours between partners (Oattes & Offman, 2007), which, in turn, fosters effective communication that can positively impact body image and sexual function (Wu & Zheng, 2021).

Sexual Self-Esteem Inventory development and findings

The Sexual Self-Esteem Inventory (SSEI) was originally developed by Zeanah and Schwarz in 1996 to address the need for assessing self-perceptions of sexuality, distinct from sexual behaviours, beliefs, and attitudes. The authors recognized that while overall self-esteem and sexual behaviour may be linked to sexual self-esteem, existing measures of overall self-esteem lacked the sensitivity to capture these differences. As a result, they created the SSEI to specifically gauge sexual self-esteem. The initial validation of the SSEI focused

on women, resulting in the creation of the Sexual Self-Esteem Inventory for Women. This decision stemmed from the recognition of gender differences in both sexual behaviour and self-esteem that could potentially influence responses to the instrument (Zeanah & Schwarz, 1996). Zeanah and Schwarz (1996) introduced a distinct set of affective reactions to the concept of sexual self-esteem, which are crucial in subjectively evaluating individual sexual behaviours, thoughts, and feelings. These reactions include the following: (i) Skill/Experience: This dimension pertains to an individual's perceived ability to satisfy or derive satisfaction from a sexual partner, as well as the availability of opportunities for sexual involvement; (ii) Attractiveness: It reflects a person's perception of their own sexual attractiveness, regardless of external opinions; (iii) Control: Encompassing the ability to direct or manage one's thoughts. emotions, and sexual interactions; (iv) Moral Judgment: This dimension evaluates the alignment between an individual's thoughts, emotions, and sexual behaviours with their personal moral standards; (v) Adaptiveness: It concerns the compatibility or coherence between an individual's sexual experiences or behaviours and their needs and goals. These five dimensions are incorporated into both the long version (Sexual Self-Esteem Inventory - SSEI) and the short version (Sexual Self-Esteem Inventory - Short Form - SSEI-SF) (Zeanah & Schwarz, 2019).

In their 1996 study involving a sample of female university students, Zeanah and Schwarz explored the reliability and validity of the long version (SSEI-W) of the Sexual Self-Esteem Inventory, comprising 81 items. They tested hypotheses regarding the impact of variables such as experience, relationship commitment, sex guilt, and global self-esteem on sexual selfesteem to analyse the construct validity of the instrument. The authors observed positive correlations between the Skill/Experience, Attractiveness, Control, and Adaptiveness subscales and variables like dating frequency, sexual experience, and commitment in relationships. Additionally, sexual guilt showed a positive correlation with the Moral Judgment subscale, while the number of reported sexual partners was negatively correlated with the Control subscale. Furthermore, the study provided evidence of divergent validity. When examining the correlation between the Rosenberg Self-Esteem Scale (a measure of general self-esteem) and outcome variables, it was found to be weak, unlike the SSEI, which demonstrated moderate correlations with the same variables. The scale also exhibited high internal consistency, with a Cronbach's alpha value for the total scale of .96.

Regarding the short version of the SSEI, which encompassed both female and male university students, the subscales demonstrated strong internal consistency in both genders. The Cronbach's alpha value for the total scale was .94 for males and .92 for females. Moreover, the correlations between subscales were generally moderate to strong in both sexes. A recent meta-analysis conducted by Lloyd et al. (2022) underscores the strong reliability of the SSEI-W, drawing upon findings from 35 studies across 10 countries and diverse populations. This inventory, available in multiple languages, has found application in various research contexts, proving particularly valuable in investigating the antecedents and consequences of sexual behaviour. For instance, researchers have used it to explore the impact of childhood and adolescent sexual aggression on adult sexual self-esteem and sexual communication dynamics.

Both the long and short versions of the SSEI have undergone testing across various clinical samples. For example, Bornefeld-Ettmann et al. (2018) validated the short version of the SSEI in the German language within a clinical sample comprising women with post-traumatic stress disorder resulting from physical and sexual abuse, comparing them to a healthy control group. Confirmatory factor analysis results revealed an acceptable model fit for the models with five factors; the instrument also presented good reliability, with Cronbach's alpha between .78 and .94. Additionally, the authors found significantly lower scores of sexual self-esteem among the clinical sample compared to the control group, underscoring the measure's satisfactory convergent and discriminant validity.

In the university student population, Shapiro and Schwarz (1997) conducted a study involving 41 sexually abused women and 125 women who had not experienced abuse. The results provided evidence of the SSEI's validity, as the sexually abused women reported heightened trauma levels and lower self-esteem compared to the non-abused group. These findings highlight the relevance of employing the SSEI in this demographic, providing valuable insights for healthcare professionals managing such clinical cases. The value of the SSEI extends beyond clinical populations and has been explored in various non-clinical contexts. For example, Abbott et al. (2016) investigated the relationship between religious commitment and sexual self-esteem in women; Esmalian Khamseh and Nodargahfard (2020) studied the impact of cosmetic surgery on sexual self-esteem, body image, and well-being among married women in Tehran; Mohammadi et al. (2021) explored the influence of maladaptive schemas, sexual self-esteem, and anxiety on female orgasm disorder.

Demographically, research on the SSEI has primarily focused on university students, with a predominant representation of females and individuals identifying as heterosexual, as highlighted in Lloyd et al.'s (2022) recent meta-analysis. Furthermore, studies involving both sexes remain scarce, with notable exceptions (Lloyd et al., 2022; Schwarz et al., 1998; Swensen et al., 2012; Zeanah & Schwarz, 2019). Consequently, there is a clear need for investigations that encompass diverse participant demographics, including sexual orientation, such as the current study. Despite being examined across 10 countries, few studies seem to have examined the SSEI's factorial structure. Furthermore, research in Portugal is limited, with only a small sample contributing, and the instrument lacks validation for the Portuguese population (Lloyd et al., 2022). Given these

gaps, there is a justified interest in translating, adapting, and assessing the psychometric properties of the short Portuguese version of the SSEI for both genders. Such efforts not only support its clinical application, particularly in psychology, but also enhance its utility in scientific inquiry.

Aim

The main objective of this study is to examine the factor structure and reliability of the Sexual Self-Esteem Inventory [Short Version – SSEI-SF] within a Portuguese sample that encompasses a diverse population spectrum. Specifically, our goals are as follows: (1) to analyse the factorial structure of the instrument and (2) to assess the consistency of each subscale for the Portuguese population.

Method

Study Type

This is a cross-sectional, quantitative, comparative, and correlational study with a quasi-experimental design.

Participants and Sampling Techniques

Initially, data were collected online from a convenience sample of 915 participants using intentional non-probabilistic random sampling. Inclusion criteria comprised individuals aged 18 to 39 years, proficient in Portuguese reading and writing, active social media users, voluntarily agreeing to participate, and able to provide consent. Participants not meeting these criteria were automatically excluded. Fourteen participants were excluded: one failed to respond to the entire questionnaire, and subsequently, 13 were excluded as outliers. Thus, the final sample included 901 participants, aged 18 to 39 years (M = 25.52, SD = 6.27), with 67.8% (n = 611) being female. Regarding education, the majority were pursuing a bachelor's degree (n = 399, 44.3%) or not currently studying (n = 397, 44.1%); 8.8% (n = 79) were pursuing a master's degree, 1.6% (n = 14) a doctorate, and 1.3% (n = 12) were in high school. Concerning sexual orientation, 73.5% (n = 662) identified as heterosexual, 9.7% (n = 87) as bisexual. 5.9% (n = 53) as homosexual. 4.6% (n = 41) as "no labels." 3.2% (n = 29) as pansexual, 2.3% (n = 21) were questioning, and 0.4% (n = 4) identified as asexual or chose another option.

Instruments

The Sexual Self-Esteem Inventory-Short Form (SSEI-SF), whose translation and back-translation were validated by the authors (Zeanah & Schwarz, 1996), employs a Likert-type scale ranging from 1 to 6. In this scale, 1 corresponds to "Disagree" Strongly", 2 to "Disagree Moderately", 3 to "Disagree Mildly", 4 to "Agree Mildly", 5 to "Agree Moderately", and 6 to "Agree Strongly".

The translated version of the SSEI-SF in Portuguese contains a total of 35 items, for example: 1. I wish I could relax in sexual situations: 2. I am pleased with my physical appearance; 3. I feel emotionally vulnerable in a sexual encounter. Additionally, similar to the long version of this inventory, the SSEI-SF consists of five subscales, namely, Skill/Experience, Attractiveness, Control, Moral Judgement, and Adaptiveness. Regarding the items composing the five subscales: items 1, 6, 11, 21, 26, and 31 relate to the first subscale (Skill/Experience); items 2, 7, 12, 17, 22, 27, and 32 correspond to the second subscale (Attractiveness); items 3, 8, 13, 18, 23, 28, and 33 refer to the third subscale (Control); items 5, 10, 15, 20, 25, 30, and 35 concern the fourth subscale (Moral Judgement); finally, items 4, 9, 14, 19, 24, 29, and 34 compose the fifth subscale (Adaptiveness). It is worth mentioning that all subscales also include items with reverse scoring, with items 1, 16, and 26 corresponding to the Competence/ Experience subscale; items 7, 17, 22, and 27 relating to the Attractiveness subscale; items 3, 8, 18, 23, 28, and 33 concerning the Control subscale; items 5, 15, and 20 referring to the Moral Judgement subscale; and finally, items 14, 19, and 24 corresponding to the Adaptiveness subscale. The total score of the SSEI-SF is obtained by summing the scores of the subscales, considering the reverse scoring for the indicated items in each subscale.

The instructions given for completing the questionnaire are as follows: "This inventory asks you to rate your feelings about several aspects of sexuality. There are no right or wrong answers; reactions to feelings about sexuality are normally quite varied. From the rating scale near the top of each page, select the response that most closely corresponds to the way you feel about each statement. Write the number for that response in the space before the statement".

Procedures

The original authors of the scale were contacted (Zeanah & Schwarz, 1996) to request authorization for the use of the questionnaire in the present study and also to allow it to be validated for both female and male biological sexes. After obtaining authorization from the authors and in order to develop the Portuguese version of the Sexual Self-Esteem Inventory (short form), standard back-translation protocols were adopted (Bolaños-Medina & González-Ruiz, 2012). After comparing the translated and back-translated versions of the SSEI-SF, a final Portuguese version consisting of a total of 35 items was achieved. This inventory was sent to 10 participants to reinforce its validity and further refine the recently translated items. All items were presented to the participants following the order of presentation of the original instrument.

This study was approved by the Ethics Committee of the University of Trásos-Montes and Alto Douro (Doc25-CE-UTAD-2023), and the sample was collected over a period of 2 months (April 2023 to May 2023) through the form developed for this purpose on Google Forms and the dissemination of the study and its link on social media platforms, Instagram, Facebook, WhatsApp, Discord, and LinkedIn. Upon accessing the link, participants voluntarily consented to participate in the study and were informed that ethical-deontological principles, including anonymity and confidentiality of data, would be ensured for the sociodemographic questionnaire and the SSEI-SF. The email of the responsible researcher was also provided for any clarification of doubts or requests for additional information about the study. No rewards were offered for participation in the study.

Data analysis

Data analysis was performed using IBM SPSS, version 23.

Before conducting the data analysis, the univariate normality of the 35 items of the scale, the presence of outliers, and singularity, assumptions underlying multivariate analysis (Hutcheson & Sofroniou, 1999; Kline, 2011), were examined. Regarding the normality analysis, it was found that all items had absolute skewness and kurtosis values below 3 and 8, respectively (Kline, 2011), indicating an approximately normal distribution. To examine the presence of outliers, a standardized scale score was created by summing the items, with scores greater than ± 3 standard deviations considered outliers, as suggested by Hair et al. (2019); 13 outliers were found and excluded from the sample. Singularity was analysed by calculating the Pearson correlation coefficient for each pair of items, revealing that three items (5, 17, and 32) had correlation values greater than .90 with other items and were therefore excluded (Kline, 2011).

Next, as this is the first study of the Sexual Self-Esteem Inventory conducted with the Portuguese population, it was decided to analyse the factorial structure of the scale using exploratory factor analysis with Varimax rotation. The assumptions of this analysis were previously verified, including a KMO value greater than .50 and a statistically significant Bartlett's test (Field, 2017). The decision regarding the number of factors to retain considered theoretical criteria, the structure of the instrument in the original version (Zeanah & Schwarz, 1996), and statistical criteria, including inspection of the scree plot (Cattell, 1966) and parallel analysis (Horn, 1965), as suggested by Velicer et al. (2000). Items were analysed considering communalities, and factor loadings greater than .50 were considered adequate (Comrey & Lee, 1992; Field, 2017; Hair et al., 2019). The presence of items with very close factor loading values on two or more items (cross-loading) was analysed using the variance ratio, as suggested by Hair et al. (2019), and items with problematic cross-loading (ratio between 1.0 and 1.5) were excluded.

Reliability analysis, specifically internal consistency, was performed by calculating Cronbach's alpha (α) , considering a value greater than .70 as an indicator of adequate internal consistency (Field, 2017; Hair et al., 2019). Corrected itemtotal correlations were also analysed, with correlations equal to or greater than .30 considered adequate (Field, 2017).

Results

Factor Structure

An initial exploratory factor analysis with the 32 items extracted six factors, explaining 55.13% of the total variance. However, one of the factors contained only two items, and some items showed cross-loadings. Therefore, a new exploratory factor analysis with the same 32 items was conducted, forcing the extraction of five factors, as indicated by the original authors of this instrument (Zeanah & Schwarz, 1996); these explained 51.68% of the total variance. However, one of the factors consisted of only two items, and there were some cross-loadings. Additionally, inspection of the scree plot and results of parallel analysis suggested retaining four factors. Thus, a new analysis was conducted, forcing the extraction of four factors, which explained 48.10% of the total variance. Examining the communalities and factor loadings of the items, it was observed that items 10, 13, and 15 had low communalities (.291, .339, and .296, respectively) and factor loadings below .50 (.476, .494, and .464, respectively), and items 9, 22, and 34 exhibited cross-loading on two factors, leading to the decision to exclude these six items. A new exploratory factor analysis was then conducted with 26 items, revealing that the four factors explained 50.81% of the total variance. Analysing the item distributions by factor, it was decided to exclude two more items, 3 and 20, for theoretical reasons, as they did not fit with the other items in their respective factors. Thus, a final exploratory factor analysis was conducted with the remaining group of 24 items, resulting in a total explained variance of 51.99% (Table 1). The first factor consisted of 11 items related to a new conceptualization of the Control subscale, more from an emotional perspective (items seem to capture concerns about sex, feeling like a failure) and readiness perspective (i.e., emotional readiness for sexuality in general, not physical readiness), thus labelled Emotional Readiness, explaining 18.08% of the variance. The second factor, consisting of five items explaining 13.77% of the variance, pertained to an individual's competence and/or experience to sexually satisfy their partner, labelled Competence and Experience. The third factor, composed of four items, concerned the perception of an individual's sexual attractiveness, regardless of how others may perceive them, labelled Attractiveness, explaining 11.21% of the variance. The fourth factor, explaining 8.94% of the variance, also consisted of four items evaluating the agreement or consistency between a person's sexual experiences or actions in relation to meeting their needs and goals, labelled Adaptiveness. All factor loadings were above .50.

Table 1 Exploratory Factor Analysis, Factor Loadings after Rotation (N = 901)

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Items	Factor 1	Factor 2	Factor 3	Factor 4
item 23	.697			
item 28	.675			
item 26	.635			
item 14	.627			
item 16	.625			
item 19	.602			
item 24	.597			
item 18	.581			
item 33	.569			
item 1	.564			
item 8	.543			
item 6		.756		
item 21		.734		
item 11		.699		
item 31		.698		
item 4		.546		
item 2			.834	
Item 27			.830	
item 12			.801	
item 7			.655	
item 35				.666
item 25				.640
item 30				.631
item 29				.588
% of variance	18.08	13.77	11.21	8.94

Internal consistency

Table 2 presents the descriptive measures and internal consistency of the four factors. It can be observed that all factors have Cronbach's alpha values above .70, or close to it, in the case of the Adaptiveness factor, which presents a slightly lower value ($\alpha = .67$). Additionally, all items show item-total correlations higher than .30 across all factors. Therefore, the results indicate good internal consistency of the four factors.

Table 2Descriptive measures and internal consistency of the factors (N = 901)

Construct	M (SD)	Min-Max	α
Emotional Readiness	52.88 (9.99)	20-66	.84
Competence and Experience	20.59 (5.35)	5-30	.81
Attractiveness	16.51 (4.82)	4-24	.82
Adaptiveness	18.76 (4.14)	4-24	.67

Discussion

The aim of this study was to examine the factor structure and reliability of the Sexual Self-Esteem Inventory (SSEI), specifically its short version (SSEI-SF), for the Portuguese population and within a heterogeneous population spectrum. To the best of our knowledge, this is the first study to do so in this population. The exploratory factor analysis resulted in 24 items (Appendix A). organized into four factors, explaining 51.99% of the total variance: Emotional Readiness, Competence and Experience, Attractiveness, and Adaptiveness. All four factors showed good internal consistency, with Cronbach's alpha values above .70, except for the Adaptiveness subscale, which had a slightly lower value ($\alpha = .67$). Thus, the results indicate that the factor structure is not in line with the conclusions of the initial validation by Zeanah and Schwarz (1996). as well as subsequent studies such as that of Bornefeld-Ettmann et al. (2018). However, the meta-analysis by Lloyd et al. (2022) revealed that subsequent investigations after Zeanah and Schwarz's validation did not thoroughly examine the support for the characteristic five-factor structure of the scale, nor did they delve into factorial validity analysis. The model found, assuming four factors corresponding to the subscales, demonstrates an adequate fit. Consistent with the multifactorial structure of Zeanah and Schwarz (1996), these results suggest that different components of sexual self-esteem are affected by various circumstances and provide good evidence of the multidimensionality of the sexual self-esteem construct. It would be important to confirm this factor structure using confirmatory factor analysis in future studies with a more heterogeneous sample, also examining other psychometric properties such as convergent and discriminant validity, which could not be analysed in the present study. Furthermore, to obtain the model found, 11 items from the original 35item scale were excluded. Items 5, 17, and 32 were eliminated because they did not exhibit singularity in their constructs, potentially resulting in redundancy of items and consequent detriment to the validity and reliability of the measure. Additionally, items 10, 13, and 15 were excluded as the results indicated low communalities and factor loadings below .50, indicating that these items were not strongly related to the underlying structure measured by the other items

and their contribution was relatively weak to the factors identified in the factor analysis, respectively. Items 9, 22, and 34 exhibited cross-loading on two factors, not clearly associated with only one factor, which could compromise the interpretation of the results of the aforementioned analysis, leading to the decision to exclude these items. Finally, items 3 and 20 were also eliminated as they did not exhibit the expected behaviour in the factor in which they were placed upon examining the factor structure.

Moreover, it is necessary to highlight the limitations of this study and provide some guidelines for future studies. The use of an intentional nonprobabilistic sampling method may result in the analysed sample not being representative of the Portuguese population. Therefore, replicating the study using other sampling techniques may be pertinent for comparing the results (i.e., whether they vary or remain consistent). Additionally, to obtain a more representative sample of the diversity present in the Portuguese population, future research should include participants from different geographic regions. socioeconomic levels, ethnicities, and educational levels, among other relevant factors. It is also necessary to emphasize that the social, moral, and cultural context in which the individual is immersed can influence how they perceive themselves and the world around them, which can consequently impact how they interpret the SSEI items. In this regard, it is noted that the traditions, habits, and ideologies that characterize the traditionalism and conservatism of the Portuguese population may be associated with repressive experiences in individuals' lives, leading them to respond in a socially desirable manner. Furthermore, the authors of the original scale found that various sociodemographic variables, such as gender and age, may influence participants' interpretation of the items. Therefore, it would be interesting to examine the invariance of the instrument across gender and age groups to determine whether the structure of this measure is indeed the same for both sexes, as well as for different age groups. In this sense, it is emphasized that the disparate number of participants of both sexes constitutes another limitation of the current study. highlighting the need to develop research that encompasses an equal proportion of individuals regarding this variable. It is also relevant to examine predictive validity, requiring the collection of data related to variables such as emotional well-being, mental health, body satisfaction, interpersonal relationships, sexual relationship quality, marital relationship, self-confidence, among others, which may be influenced by sexual self-esteem.

Conclusion

Individuals' self-perception regarding their sexuality and sexual practices (i.e., their sexual self-esteem) constitutes a fundamental aspect of their lives. as it can influence their attitudes and behaviours. In this study, the SSEI-SF, consisting of 24 items, revealed a four-factor structure, with both similar and

different aspects from the original version, demonstrating good psychometric properties suitable for the Portuguese population. Finally, it is worth noting that this study fills a gap in instruments for measuring sexual self-esteem among individuals in this population, making the SSEI-SF applicable in future studies aiming to assess this construct.

References

- Abbott, D. M., Harris, J. E., & Mollen, D. (2016). The impact of religious commitment on women's sexual self-esteem. *Sexuality & Culture: An Interdisciplinary Quarterly*, 20(4), 1063-1082. https://doi.org/10.1007/s12119-016-9374-x
- American Psychological Association. (n.d.). Sexuality. In: *APA dictionary of psychology*. https://dictionary.apa.org/sexuality
- Antičević, V., Jokić-Begić, N., & Britvić, D. (2017). Sexual self-concept, sexual satisfaction, and attachment among single and coupled individuals. *Personal Relationships*, 24(4), 858-868. https://doi.org/10.1111/pere.12217
- Bornefeld-Ettmann, P., Steil, R., Höfling, V., Weßlau, C., Lieberz, K. A., Rausch, S., Priebe, K., Fydrich, T., & Müller-Engelmann, M. (2018). Validation of the German version of the Sexual Self-Esteem Inventory for Women and its application in a sample of sexually and physically abused women. *Sex Roles* 79, 109-122. https://doi.org/10.1007/s11199-017-0849-5
- Cattell R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276.
- Comrey, A. L., & Lee, H. B. (1992). A first course in factor analysis (2nd ed.). Erlbaum.
- Esmalian Khamseh, L., & Nodargahfard, M. (2020). The Effect of Cosmetic Surgery on Sexual Self-Esteem: Attitudes toward Body Image and Well-Being in Married Women. *World journal of plastic surgery*, *9*(2), 153-159. https://doi.org/10.29252/wjps.9.2.153
- Field, A.P. (2017). Discovering statics IBM SPSS Statistics (5th ed.). Sage.
- Hannier, S., Baltus, A., & De Sutter, P. (2018). The role of physical satisfaction in women's sexual self-esteem. *Sexologies*, 27(4), e85-e95. https://doi.org/10.1016/j. sexol.2017.09.010
- Horn J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, *30*, 179-185.
- Hutcheson, G. D., & Sofroniou, N. (1999). The Multivariate Social Scientist: An Introduction to Generalized Linear Models. Sage.
- Lloyd, A., Brown, G., & Pollet, T. V. (2022) A meta-analysis of the reliability of the Sexual Self-Esteem Inventory in Women (SSEI-W) measure. *Psychology & Sexuality*, 13(4), 1090-1104. https://doi.org/10.1080/19419899.2021.1984982
- Mayers, K. S., Heller, D. K., & Heller, J. A. (2003). Damaged sexual self-esteem: A kind of disability. Sexuality and Disability, 21, 269-282. https://doi.org/10.1023/ B:SEDI.0000010069.08844.04
- Ménard, A. D., & Offman, A. (2009). The interrelationships between sexual self-esteem, sexual assertiveness and sexual satisfaction. *Canadian Journal of Human Sexuality*, 18(1-2), 35-45.
- Mohammadi, S., Borjali, A., Raisi, F., & Yousefi, N. (2021). Early maladaptive schemas, sexual self-esteem, and anxiety in women with orgasmic disorders. *Iran J Psychiat Behav Sci.*, *15*(3) e108392. https://doi.org/10.5812/ijpbs.108392

- Moin, V., Duvdevany, I., & Mazor, D. (2009). Sexual identity, body image and life satisfaction among women with and without physical disability. Sex Disabil, 27, 83-95. https://doi.org/10.1007/s11195-009-9112-5
- Oattes, M. K., & Offman, A. (2007). Global self-esteem and sexual self-esteem as predictors of sexual communication in intimate relationships. *The Canadian Journal of Human Sexuality*, 16(3-4), 89+.
- Peixoto, M. M., Amarelo-Pires, I., Biscaia, M. S. P., & Machado, P. P. P. (2018). Sexual self-esteem, sexual functioning and sexual satisfaction in Portuguese heterosexual university students. *Psychology & Sexuality*, *9*(4), 305-316. https://doi.org/10.1080/19419899.2018.1491413
- Schwarz, J. C., Drwal, J., & Zeanah, P. D. (1998). *Initial reliability of the SSEI-short form*. Unpublished analyses. University of Connecticut, Storrs, CT.
- Shapiro, B. L., & Schwarz, J. C. (1997). Date rape: Its relationship to trauma symptoms and sexual self-esteem. *Journal of Interpersonal Violence*, *12*(3), 407-419. https://doi.org/10.1177/088626097012003006
- Snell, W. E., & Papini, D. R. (1989). The Sexuality Scale: An instrument to measure sexualesteem, sexual-depression, and sexual-preoccupation. *Journal of Sex Research*, 26(2), 256-263. https://doi.org/10.1080/00224498909551510
- Swensen, R. R., Houck, C. D., Barker, D., Zeanah, P. D., & Brown, L. K. (2012). Prospective analysis of the transition to sexual experience and changes in sexual self-esteem among adolescents attending therapeutic schools. *Adolescence*, *35*, 77-85. https://doi.org/10.1016/j.adolescence.2011.06.002
- Velicer W. F., Eaton C. A., & Fava J. L. (2000). Construct explication through factor or component analysis: A review and evaluation of alternative procedures for determining the number of factors or components. In Goffin R. D., & Helmes E. (Eds.), *Problems and solutions in human assessment: Honoring Douglas N. Jackson at seventy* (pp. 41-71). Kluwer Academic.
- World Health Organization. (2015). Sexual health, human rights and the law. https://apps. who.int/iris/bitstream/handle/10665/175556/9789241564984 eng.pdf?sequence=1
- Wu, T., & Zheng, Y. (2021). Effect of sexual esteem and sexual communication on the relationship between body image and sexual function in Chinese heterosexual women. *The journal of sexual medicine*, *18*(3), 474-486. https://doi.org/10.1016/j. isxm.2020.12.006
- Zeanah, P. D., & Schwarz, J. C. (1996). Reliability and validity of the Sexual Self-Esteem Inventory for Women. *Assessment*, *3*(1), 1-15.
- Zeanah, P. D., & Schwarz, J. C. (2019). Sexual Self-Esteem Inventory and the Sexual Self-Esteem Inventory Short Form. In R. R. Milhausen, J. J. Sakaluk, T. D. Fisher, C. M. Davis, & W. L. Yarber (Eds.), *Handbook of Sexuality-Related Measures* (4th edition, pp. 555-558). Routledge. https://doi.org/10.4324/9781315183169

Inventar seksualnog samopoštovanja – skraćeni oblik (SSEI-SF): faktorska struktura skale za portugalsku populaciju

Liliana Mendes¹, Levi Leonido^{2,3}, Inês Carvalho⁴, Ana Barbosa⁴, Ana Martins⁵, Maria Ribeiro⁵, & Elsa Gabriel Morgado^{6,7}

¹ Univerzitet Kombrija, Institut Koimbra za biomedicinsko snimanje i translaciona istraživanja – CIBIT, Koimbra, Portugal

² Univerzitet Tras-os-Montes i Alto Douro, Vila Real, Portugal

³ Katolički univerzitet Portugala, Centar za istraživanje nauke i tehnologije umetnosti, Porto, Portugal

⁴ Univerzitet Minjo: student master studija, Braga, Portugal

⁵ Univerzitet Tras-os-Montes i Alto Douro: student master studija, Vila Real, Portugal

⁶ Centar za studije u obrazovanju i inovacijama – CI&DEI, IPV, Portugal

⁷ Politehnički institut Braganse, Bragansa, Portugal

Uvod: Seksualnost ima kliučnu ulogu u liudskom životu, oblikujući percepcije i prakse pojedinaca, poznate kao seksualno samopoštovanje, koje značajno utiču na stavove ponašanja. Cilj: Ova studija imala je za cilj da ispita faktorsku strukturu i pouzdanost Inventara seksualnog samopoštovanja (SSEI) u njegovom skraćenom obliku za portugalsku populaciju, uzimajući u obzir pet različitih aspekata: Veština/Iskustvo, Atraktivnost, Kontrola, Moralni sud i Adaptivnost. Metod: Sprovedena je poprečna, kvantitativna, komparativna i korelaciona studija sa kvazieksperimentalnim dizajnom. U studiji je učestvovala ukupno 901 osoba starosti od 18 do 39 godina (M = 25.52, SD = 6.27), pretežno žene (67.8%). Faktorska struktura analizirana je putem eksploratorne faktorske analize, a pouzdanost instrumenta procenjena je pomoću Kronbahovog alfa koeficijenta. Rezultati: Eksploratorna faktorska analiza dala je 24 stavke organizovane u četiri faktora – Emocionalna spremnost, Kompetentnost i iskustvo, Atraktivnost i Adaptivnost – objašnjavajući 51.99% ukupne varijanse. Svi faktori pokazali su dobru unutrašnju konzistentnost. Zaključak: Dakle, inventar je pokazao adekvatnu faktorsku strukturu i pouzdanost i smatra se pogodnim za procenu samopercepcije u vezi sa seksualnošću u četiri dimenzije u portugalskom uzorku.

Ključne reči: seksualno samopoštovanje, mladi odrasli, seksualnost, portugalska populacija

Appendix A

Portuguese Version of the Sexual Self-Esteem Inventory - Short Form (SSEI-SF)

4 subscales:

1. Emotional Readiness Subscale

Items: 1, 6, 9, 10, 11, 12, 14, 15, 17, 19, 23 Reverse-scored items: 1, 6, 9, 10, 11, 12, 14, 15, 17, 19, 23

2. Competence and Experience Subscale

Items: 3, 4, 7, 13, 22

3. Attractiveness Subscale

Items: 2, 5, 8, 18

Reverse-scored items: 5, 18

4. Adaptiveness Subscale

Items: 16, 20, 21, 24

Itens do Inventário de Autoestima Sexual – Versão Curta	Subescala	Pontuação inversa (R)
1. Gostaria de conseguir relaxar em situações sexuais.	1	R
2. Estou satisfeito/a com a minha aparência física.	3	
3. Sinto-me bem com o lugar do sexo na minha vida.	2	
4. Acho que sou muito bom/a no sexo.	2	
5. Odeio o meu corpo.	3	R
6. Tenho medo de perder o controlo a nível sexual.	1	R
7. Acho que as "técnicas sexuais" são fáceis para mim.	2	
8. Estou satisfeito/a com a forma como o meu corpo se desenvolveu.	3	
9. Não me sinto pronto/a para algumas coisas que faço sexualmente.	1	R
10. Sexualmente, sinto-me um fracasso.	1	R
11. Sinto-me fisicamente vulnerável num encontro sexual.	1	R
12. Às vezes gostaria de poder esquecer o sexo.	1	R
13. Saio-me muito bem a expressar-me sexualmente.	2	
14. Receio não ser capaz de impedir algo que não quero fazer numa situação sexual.	1	R
15. Desejava que o sexo fizesse menos parte da minha vida.	1	R

Itens do Inventário de Autoestima Sexual – Versão Curta	Subescala	Pontuação inversa (R)
16. Nunca me sinto mal com os meus comportamentos sexuais.	4	
17. Tenho vergonha da minha falta de experiência sexual.	1	R
18. Seria mais feliz se tivesse uma aparência melhor.	3	R
19. Receio que as coisas se descontrolem porque nem sempre consigo perceber o que o/a meu/minha parceiro/a deseja numa situação sexual.	1	R
20. Fico feliz por os sentimentos sobre sexo fazerem agora parte da minha vida.	4	
21. Nunca me sinto culpado/a pelos meus sentimentos sexuais.	4	
22. Sinto-me bem com a minha capacidade de satisfazer o/a meu/minha parceiro/a sexual.	2	
23. Receio vir a ser usado/a sexualmente.	1	R
24. Do ponto de vista moral, considero os meus sentimentos sexuais aceitáveis.	4	

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