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Dimensionality and Measurement Invariance of the Sexually Aggressive Behaviors Scale across Male and Female Portuguese College Students

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Abstract: There is growing interest on the topic of Sexual Violence (SV) perpetrated by community samples; movements, as the Me Too, have triggered such focus. Researching the validity of core SV measures is now fundamental. Accordingly, this study aimed to assess the structure of the Portuguese version of the Sexually Aggressive Behaviors Scale (SABS-PT) while testing for measurement invariance across gender. The SABS-PT was tested among a sample of 2540 Portuguese college students (48.5% males and 51.5% females). All participants identified as heterosexual, and their ages ranged between 18 and 39 years old. To assess the construct validity and test for measurement invariance across gender, single and multigroup Confirmatory Factor Analyses were performed. Results support the internal consistency and convergent/discriminant validity of the SABS-PT in relation to external variables. Overall, the findings suggest a good fit of data to the model. The partial scalar invariance of the measurement was obtained and further analyses on latent means differences indicated that men scored higher on SV compared to women. The SABS-PT may constitute a useful instrument for screening sexual initiation by aggressive means and associated risk factors and may play an important role as an outcome measure in programs preventing sexual violence.

Keywords: construct validity; measurement invariance; latent means; college students; psychometrics; reliability; sexual violence

1. Introduction

1.1. Sexual Violence in Community Samples

Sexual violence (SV) covers a wide range of behaviors of a sexual nature and a plurality of contexts in which it can occur. Overall, SV can be defined as nonconsensual sexual acts [1,2]. It is important to stress that such behaviors are not limited to the perpetration of rape, as that represents the extreme of a wide spectrum of sexually aggressive behaviors. Behaviors of attempted nonconsensual sexual contact or abusive sexual contact (e.g., unwanted touching), and of non-contact sexual abuse (e.g., verbal sexual harassment) are also included in the definition of sexual violence [1].

SV as committed by men is a very well-known phenomenon, as literature places increasing evidence of this type of violence perpetrated by men against women. Data reveals that men's sexual violence against women occurs across the whole globe, both in developed (e.g., [3–5]) and developing countries (e.g., [6–8]). In fact, the World Health Organization estimates that more than 31% of women worldwide have experienced either

physical or sexual partner violence and that 6% of women worldwide have experienced non-partner sexual assault [9].

When it comes to men, several studies reveal high rates of self-reported perpetration of SV. In one study conducted with young college men, approximately 32% of participants reported perpetrating at least one type of sexually aggressive behavior. Among these men, the most serious type of sexual aggression reported was forced sexual contact (5.4%), the engagement in sexual intercourse by verbal coercion (17.2%), and completed or attempted rape (9.6%) [10]. Additionally, 48% had engaged in one type, 22% had engaged in two types, and 30% had engaged in three or more types of sexual aggression [10].

In another study conducted with a Portuguese sample of male college students, 52.6% of participants reported having attempted sexual interaction using aggressive means [11]. More specifically, 87.7% of those men resorted to the use of sexual coercion (e.g., verbal pressure), 41.4% engaged in sexual abuse/use of power (e.g., inducing intoxication), and 7.4% used physical force (actual use of force or weapons) [11].

In addition to evidence on SV perpetrated by men against women, high prevalence rates of perpetration of SV have also been found among women. A similar investigation conducted with a Portuguese sample of female college students [12] revealed that 32.7% of women reported initiating sexual intercourse by using sexually aggressive strategies against men. More precisely, 72.3% reported to have engaged in strategies of sexual coercion, 46.5% reported to have resorted to sexually abusive behaviors, and 13.1% reported the use of physical force. In fact, SV as perpetrated by women against men is becoming as equally noticeable as SV perpetrated by men against women. Studies with college students have revealed self-reported victimization rates of 34% for women and varied from 28% to 31% for men. Overall, men and women appear to engage in various forms of SV in the same way.

1.2. Risk Factors

Research on perpetrators of SV has aimed to identify risk factors that underpin such behavior. Existing data on sexual offenders highlights the interpersonal deficits that characterize these individuals [11,13,14]. Intimacy deficits, such as conflicts in intimate relationships, were found to be a predictor of sexual recidivism in a meta-analysis [15]. Therefore, it can be considered that the difficulty to establish and maintain intimate relationships can leave individuals prone to the perpetration of sexually aggressive behaviors.

Regarding the characterization of perpetrators at an individual level, the literature reveals that a wide range of personality characteristics are associated with SV. Research conducted with college students revealed that psychopathic personality traits (such as self-centered impulsivity) were predictors of positive attitudes toward sexually predatory behaviors in both college men and women [16]. Additionally, in a meta-analysis regarding risk factors for SV, Mann and colleagues [17] identified some personality characteristics (such as offense-supportive attitudes, lack of emotionally intimate relationships, impulsivity, recklessness, and hostility) as risk factors for recidivism. This information adds to previous research that has shown psychopathic personality traits (e.g., hostility, aggressiveness, manipulativeness, erratic lifestyle, and antisocial behavior) are associated with sexually aggressive behaviors among both male and female samples (e.g., [11,18–21]).

Additionally, within this regard, an investigation with a sample of college men [21] revealed a significant and positive association between psychopathy and rape myth acceptance (RMA). Rape myths were defined in 1980 by Burt [22] as prejudiced, stereotyped, or false beliefs about rape, rape victims, and rapists. These myths most commonly serve to deny and justify male sexual assault against women [23]. Literature also provides evidence that RMA is higher among perpetrators of sexual aggression than non-perpetrators (e.g., [21,24]). Consequently, RMA seems to be a risk factor for sexual violence (e.g., [25]). Even though most research about rape myths has been conducted with a focus on male offenders, literature on female criminal samples recognizes the endorsement of a distorted cognitive style about the sexual offenses and the victims as a motivational factor for SV [26,27]. Moreover, in 2016 Bouffard and colleagues [18] have found that rape myth

acceptance was significantly correlated with self-reported use of past sexual coercion in a sample of female college students. In fact, a very recent meta-analysis has found a moderate relationship between sexual coercion perpetration and RMA that is both consistent across gender and persistent over time, reinforcing RMA's role as a risk factor for sexual coercion perpetration [28].

1.3. This Study

In all, the topic of SV, whether that is perpetrated by men or by women, is of paramount interest. However, researching SV as committed by community/non-criminal samples requires a set of measures capturing sexual violence dynamics at the community level, and particularly among young adults who are believed to be an at-risk population regarding SV perpetration [29]. Accordingly, this investigation seeks to determine the psychometric properties of the Sexually Aggressive Behaviors Scale in a sample of Portuguese male college students. The Sexually Aggressive Behavior Scale was firstly designed to assess sexually aggressive behaviors as committed by women, given the lack of measures available for the study of female sexual offending behavior, particularly in community/non-criminal samples. The authors adapted the 13-item Sexual Experience Survey developed by Koss and Oros in 1982 [30], which is a gold standard measure in the field, changing the original items' gender specificity from the man as the initiator to the woman as the initiator of sexual offending behavior. Additionally, other changes were made, such as considering the respondent as an initiator of sexual contact; including behaviors other than sexual intercourse (e.g., kissing and fondling), and the addition of questions regarding the context of sexual behaviors (e.g., while someone was intoxicated) and motivations (e.g., to retaliate or to hurt someone else) [31]. The SABS consists of 26 items addressing the initiation of sexual contact through distinct behaviors that ranged from arousing someone to encouraging intoxication or using physical force. Items 1–6 and 11–18 (which relate to sexual contact with mutual consent, simple seduction, or attempts at arousal) are theoretically considered non-relevant items used to conceal the critical items. On the other hand, the measure's critical items address three different dimensions of sexually aggressive behaviors by questioning how many times they had ever initiated sexual contact for each motive or by engaging in each behavior: sexual coercion (five items, e.g., "you pressured with verbal arguments"), sexual abuse (four items, e.g., "by getting your partner intoxicated") and use of physical force (three items, e.g., "by using physical force"). Although the author suggested the measure integrates these three factors (sexual coercion, sexual abuse, and physical force), the acceptable internal consistency of the scale was established for the unifactorial model [31]. Within this regard, and despite the SABS was originally created to capture women's sexual initiation by aggressive means, that scale has been considered in the context of male sexual violence as well (e.g., [11,32]). Thus, there is a need to evaluate the psychometric properties of the SABS with men, as well as to assess measurement invariance across gender. Indeed, evidence on gender invariance can highlight if sexual perpetration by community samples stands similar across male and female gender, and ultimately it may help to refine research strategies as well as the design of prevention actions.

This research proposed to investigate the psychometric properties of the SABS with a sample of male college students, using a confirmatory factor analysis and exploring the one-factor solution previously proposed by Rosa and colleagues [33]. This one-factor solution has not been studied with males and so, before it can be used to assess sexually aggressive behaviors as committed by men against a reluctant partner, there must be evidence that such behaviors are being assessed properly. The current study advanced on previous works by investigating the measurement invariance of the SABS across gender. In addition, the validity evidence in relation to external variables, namely the perception of intimacy, psychopathic traits, and rape myths, was also explored. We expected that the one-factor solution fits the sample of male college students, and that this model would be invariant across gender. Concerning the construct validity and considering the aforementioned literature, the SABS scores were expected to associate positively with rape myths,

psychopathic traits, and poor relationship validation, and negatively with communication and openness to outward.

2. Materials and Methods

2.1. Participants and Procedures

The sample of this study consisted of 2540 heterosexual Portuguese college students. From those, 1232 were males and 1308 were females. The participants age ranged between 18 and 39 (*M* = 22.80; *SD* = 4.60). Most participants were attending undergraduate courses (*n* = 1947; 76.65%). Additionally, most of the sample reported being single (*n* = 1722; 67.80%) and to have one current sexual partner (*n* = 1806; 71.10%). The average age of the participants at their first sexual intercourse experience was 17 years old (*M* = 17.28; *SD* = 2.06).

The present study was approved by the Ethics Committee of Lusófona University (School of Psychology and Life Sciences). The study was advertised through all the Portuguese universities' mailing lists and social networks, between February 2019 and March 2020. To participate in the investigation, individuals reported their informed consent and then proceeded to complete an online survey. The survey included questions regarding sociodemographic data (such as age, gender, relationship status, and college year) and the translated and adapted items from the following measures: Sexually Aggressive Behaviors Scale (SABS); Rape Myths Scale (RMS); Youth Psychopathic Traits Inventory—Short Version (YPI-S); and the Personal Assessment of Intimacy in Relationships Scale (PAIR). None of the items has been modified. The participants did not receive any incentives for participating in the study.

2.2. Measures

2.2.1. Sexually Aggressive Behaviors Scale

The SABS is a self-report measure, consisting of 26 items that assess lifelong use of sexually aggressive behaviors (SABS; [31]). As previously mentioned, this scale was first developed aiming the perpetration of such behaviors by community women (i.e., from the general population) against men. It was then adapted to address men as perpetrators against women. The measure contains 12 critical items addressing three different dimensions of sexually aggressive behaviors: sexual coercion (e.g., "How many times have you attempted to have sexual contact with a man by threatening to end your relationship?"); sexual abuse (e.g., "How many times have you attempted to have sexual contact with a man by using your position of power or authority?"); and physical force (e.g., "How many times have you attempted to have sexual contact with a man by threatening her with a weapon?"). In each item, participants are questioned about how many times they had ever initiated sexual contact for each motive or by engaging in each behavior. Then, the responses to the items are scored dichotomously either as (1) when a behavior occurred and (0) when the behavior did not occur. The remaining 14 items (1–6 and 11–18) are considered non theoretically relevant items used to conceal the critical items, since their content refers either to sexual contact with mutual consent, simple seduction or attempts at arousal, or reasons for behaviors that were not part of the analysis. Finally, the scores for sexual aggression are calculated by adding up the scores obtained on the items that correspond to the different behaviors. The face validity of the SABS was originally established with a KR-20 of 0.75. The SABS was previously translated and adapted for use within the Portuguese context and conceptual, item and semantic equivalence were established (see [33]). Psychometric properties of the SABS-PT were also established in a previous investigation with a female sample [33]. The one-factor 10-item version of SABS-PT established with that same female sample was used for the present study. The results of the analysis for the current sample will be further presented in the destined section.

2.2.2. Rape Myths Scale

The RMS aims to evaluate the acceptance of stereotypical and prejudicial beliefs regarding rape (RMS; [34]). It consists of 30 self-report items regarding different beliefs (e.g., "Most of the times, offenders are unknown to the victims"), and the respondents are asked to express their agreement with each statement. Answers are given accordingly to a five-point scale, ranging from 1 = strongly disagree and 5 = strongly agree.

The original version of the scale revealed a high internal consistency (α = 0.91) and one factor solution [34]. In the current study, internal consistency was 0.95.

2.2.3. Youth Psychopathic Traits Inventory—Short Version

The YPI-S contains 18 items addressing psychopathic traits such as grandiosity-manipulative (i.e.,: interpersonal dimension; e.g., "When I need to, I use my smile and my charm to use others"), callous-unemotional (i.e.,: affective dimension; e.g., "I don't let my feelings affect me as much as other people's feelings seem to affect them"), and impulsive-irresponsible (i.e.,: behavioral dimension; e.g., "It often happens that I do things without thinking ahead") (YPI-S; [35]). The respondents are asked to express their position regarding each statement, with the answers ranging from "0 = Does not apply at all" to "4 = Applies very well". The items are then scored accordingly to that four-point Likert scale. The psychometric properties of the YPI-S have been established within both community and forensic youth samples (e.g., [36,37]) and with adult samples (e.g., [38]), presenting good internal consistency. The alphas in the current study were 0.78 for the grandiosity/manipulative; 0.82 for the callous-unemotional and 0.72 for the impulsive-irresponsible dimensions.

2.2.4. Personal Assessment of Intimacy in Relationships Scale

The PAIR scale was designed to assess the perception of intimacy in relationships. This measure is composed by 36 self-report items that address personal validation (i.e., validation/acceptance by the partner; e.g., "I feel neglected at times by my partner"), communication (i.e., expressing opinions, feelings, and desires within the relationship; e.g., "My partner can really understand my hurts and joys"), and openness to outward (i.e., sharing time with the outgroup; e.g., "Many of my partner's closest friends are also my closest friends") (PAIR; [39]). Internal reliability and factor structure were established for the original version [39]. Regarding the Portuguese version of the PAIR, the obtained values ranged from 0.71 to 0.92 suggesting good internal consistency [40]. For the present sample, the Cronbach alphas were as follows: 0.94 for personal validation, 0.88 for communication, and 0.56 for openness.

2.3. Data Preparation and Statistical Analysis

Firstly, descriptive statistics (frequencies and percentages) were computed for each item of the SABS for gender and total sample. No missing data was found, as all survey questions were mandatory.

Second, we examined the construct validity of the SABS-PT through a Confirmatory Factor Analysis (CFA) with a total sample of 2540 volunteers. Considering that SABS-PT items are dichotomous, the weighted least square mean and variance adjusted estimator (WLSMV) with THETA parameterization was used to examine the fit of the single-factor structure [33] for the total sample. Our sample showed an adequate size as we guaranteed a subject–to-item ratio of >20 [41]. To evaluate the overall fit of the factor structure four indices were chosen: (a) the Chi-Square (χ^2) statistic; (b) the Comparative Fit Index (CFI; [42]); (c) the Tucker-Lewis index (TLI; [42]); and (d) the root mean square error of approximation (RMSEA; [43]). The following criteria were used as cutoffs for good fit: a non-significant Chi-Square (χ^2) statistic, CFI and TLI > 0.90 (with >0.95 being ideal), and RMSEA < 0.08 (with <0.05 being ideal; [44]). MIs were examined to determine necessary changes to the factor structure.

Third, convergent validity was assessed at individual item and construct level based on two criteria: (a) the factor loadings should be statistically significant ($p < 0.05$) and (b) average variance extracted (AVE) of the construct should be above the recommended cutoff of 0.50 [45]. AVE was manually computed following the guidelines by Fornell and Larcker [46]. Afterwards, Pearson's correlations were performed to test the association between the SABS, rape myths, and psychopathic traits. Additionally, discriminant validity was assessed through the association between the SABS score and the perception of intimacy in relationships. In these statistical procedures, a significance level of 0.05 was set.

Fourth, a Multigroup Confirmatory Factor Analysis (MG-CFA) was performed to test its measurement invariance across gender on a set of nested models, which is a mandatory condition when one aims to make valid and meaningful comparisons among groups [47]. For this purpose, a baseline model for each group was determined considering the robust statistics (WLSMV) including a probit link and the THETA parameterization was used to estimate all models. We followed Vandenberg and Lance's [48] recommendations for testing measurement invariance with progressively restrictive stages. Nested model comparisons were conducted using the DIFFTEST procedure [49]. Invariance was tested for configural, metric and scalar. According to Cheung and Rensvold [50] recommendations, two models were considered to provide equivalent fit when the following criteria are comparing two nested models is recommended using cutoff values of ΔCFI < 0.01 and ΔRMSEA < 0.015 for metric and scalar invariances. Modification indices (MIs) were examined to detect the source of non-invariance when full metric and/or scalar invariance was not established [51].

Fifth, we tested for latent mean differences between genders. Specifically, a partial scalar invariance model was used as the baseline. To compare differences in latent means between groups, we constrained the 'men' latent mean to 0 and the latent mean of women was free to be estimated [52]. The z test statistic was used to evaluate the statistical significance of the latent mean difference estimate between men and women. If the z test statistic was statistically significant, then it was inferred that there is a significant difference between the two groups' latent variable means. In addition, we compared the observed mean differences across gender using an independent sample *t*-test.

Sixth, we assessed SABS-PT reliability using Kuder-Richardson 20 (KR-20) and McDonald's omega (ωt) as indices of internal consistency for gender and total sample. A minimum value of 0.60 was considered acceptable for both KR-20 and ωt [53–57]. The mean inter-item correlation (MIIC) was used to assess the homogeneity of items [58]. Pearson r values of 0.10, 0.30 and 0.50 were considered small, medium, and large as recommended by Cohen [59].

Descriptive and reliability statistics were computed with JASP software version 0.15 [60]. CFA and invariance testing were performed using structural equation modeling with the MPlus 8.3 software [61].

3. Results

3.1. Descriptive Statistics

Descriptive data were analyzed for gender (1232 males and 1308 females) and for the total sample (n = 1540). Table 1 displays the participant's responses (absolute frequencies and percentages) to the single factor version of the SABS with 10 items that was previously established [33]. Findings on the male and female samples reveal that most participants have never engaged in the portraited aggressive strategies to attempt sexual interactions. For the male sample, the two items that stand out due to higher percentages of participants who report having engaged in a certain sexually aggressive strategy, at least once (23.7% and 20.62%) are items 2 and 3, respectively. As for women, item 2 also stands out being the only item where more than 10% of the participants reported to have engaged in such behavior.

Table 1. Descriptive Statistics for Responses to Items of the SABS.

Items	Men (*n* = 1232)		Women (*n* = 1308)		Total (*n* = 2540)	
	Never	At Least Once	Never	At Least Once	Never	At Least Once
	n (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)
1. How many times have you attempted to have sexual contact with a woman by threatening to end your relationship?	1171 (95.05)	61 (4.95)	1269 (97.02)	39 (2.98)	2440 (96.06)	100 (3.94)
2. How many times have you attempted to have sexual contact with a woman by saying things that you didn't mean?	940 (76.3)	292 (23.7)	1115 (85.25)	193 (14.76)	2055 (80.91)	485 (19.09)
3. How many times have you attempted to have sexual contact with a woman by pressuring her with verbal arguments?	978 (79.38)	254 (20.62)	1188 (90.83)	120 (9.17)	2166 (85.28)	374 (14.72)
4. How many times have you attempted to have sexual contact with a woman by questioning her sexuality (suggesting that he may be frigid)?	1162 (94.32)	70 (5.68)	1245 (95.18)	63 (4.82)	2407 (94.76)	133 (5.24)
5. How many times have you attempted to have sexual contact with a woman by threatening to harm yourself?	1203 (97.65)	29 (2.35)	1291 (98.7)	17 (1.3)	2494 (98.19)	46 (1.81)
6. How many times have you attempted to have sexual contact with a woman by using your position of power or authority (boss, teacher, babysitter, counselor, or supervisor)?	1180 (95.78)	52 (4.22)	1281 (97.94)	27 (2.06)	2461 (96.89)	79 (3.11)
7. How many times have you attempted to have sexual contact with a girl between 12 and 18 years of age who was 5 or more years younger than yourself?	1097 (89.04)	135 (10.96)	1238 (96.65)	70 (5.35)	2335 (91.93)	205 (8.07)
8. How many times have you attempted to have sexual contact with a woman by getting her drunk or high?	1176 (95.45)	56 (4.55)	1279 (97.78)	29 (2.22)	2455 (96.65)	85 (3.35)
9. How many times have you attempted to have sexual contact with a woman by taking advantage of a compromising position she was in (being where she did not belong or breaking some rule)?	1161 (94.24)	71 (5.76)	1190 (90.98)	118 (9.02)	2351 (92.56)	189 (7.44)
10. How many times have you attempted to have sexual contact with a woman by threatening to use some degree of physical force (holding her down, hitting her, etc.)?	1186 (96.27)	46 (3.73)	1260 (96.33)	49 (3.67)	2446 (96.3)	94 (3.7)

Note. Items of the female version of the SABS have noun and pronoun adjustments.

Regarding the total sample, the analysis translates the results of both genders. Therefore, most of the participants reported having never engaged in any type of sexually aggressive behavior, as shown in Table 1. Accordingly, the most frequent behavior (item 2—19.09%) refers to attempting to initiate sexual contact by saying things one doesn't mean. On the other hand, the least frequent behavior (item 5—1.81%) refers to one's attempt to have sexual contact by threatening to harm his/herself.

3.2. Confirmatory Factor Analysis (CFA)

The construct validity of the SABS-PT was examined through a Confirmatory Factor Analysis (CFA) for gender and the total sample. Table 2 displays the overall fit of the factor structure according to the chosen indices, using the WLSMV estimation method for the tetrachoric correlation matrix of the SABS items. For the male sample, the results reveal a χ^2 (35) = 101.84; $p < 0.001$, a TLI = 0.95 and CFI = 0.96, and a RMSEA of 0.04. As for women, the analysis revealed a χ^2 (35) = 78.71; $p < 0.001$, a TLI = 0.91 and CFI = 0.93, and a RMSEA of 0.03. Finally, regarding the total sample, the results indicate a χ^2 (35) = 150.01; $p < 0.001$, TLI = 0.93 and CFI = 0.95, and a RMSEA of 0.04, as seen in Table 2. Given that the chi-square fit statistic is affected by large samples and multivariate non-normality, CFI, TLI, and RMSEA indices are preferred. According to these, results, this model showed a good overall fit to data.

Table 2. Fit indices for confirmatory factor analyses.

	WLSMV χ^2 (df)	p	TLI	CFI	RMSEA [90% CI]
Men ($n = 1232$)	101.84 (35)	<0.001	0.95	0.96	0.04 [0.03; 0.05]
Women ($n = 1308$)	78.71 (35)	<0.001	0.91	0.93	0.03 [0.02; 0.04]
Total ($n = 2540$)	150.01 (35)	<0.001	0.93	0.95	0.04 [0.03; 0.04]

Note. χ^2 Chi-Square test based using the Weighted Least Square Mean and Variance (WLSMV) estimator; df: degrees of freedom; p: p-value; TLI: Tucker-Lewis Index; CFI: comparative fit index; RMSEA: root mean square error of approximation.

As presented in Figures 1–3, the standardized factor loadings for all three CFAs (male, female, and total sample) satisfied the requirement ($\lambda > 0.45$) and all were statistically significant ($p < 0.05$).
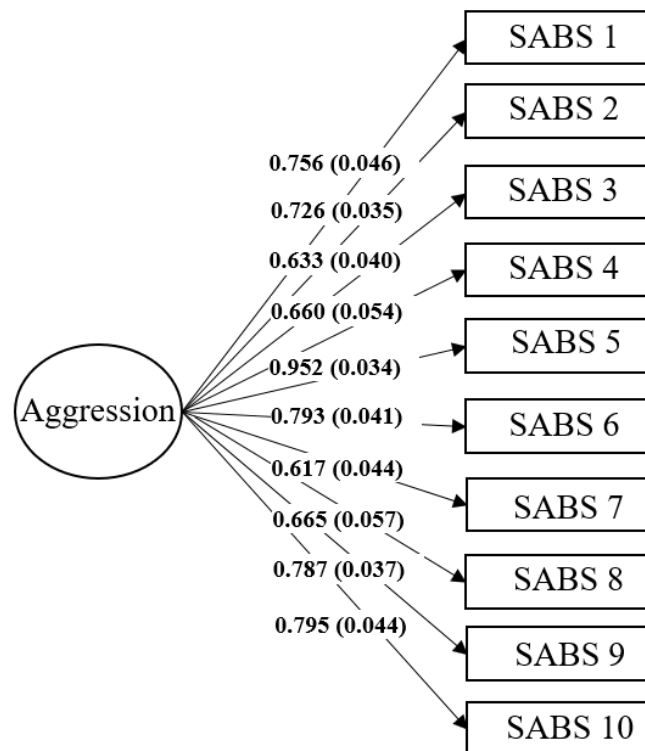

Figure 1. The single factorial structure of the Portuguese Version of SABS for CFA Male sample. Values represent standardized regression weights and standard error within brackets.
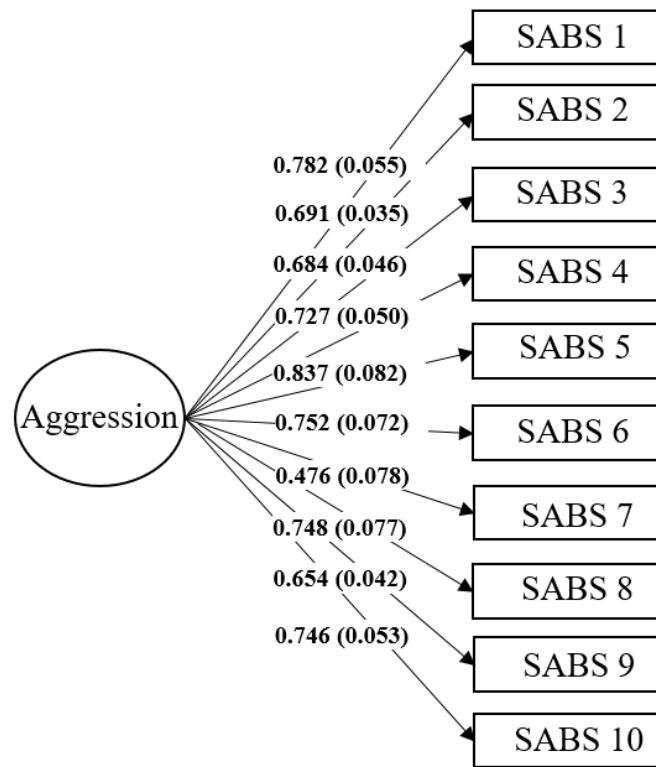
Figure 2. The single factorial structure of the Portuguese Version of SABS for CFA Female sample. Values represent standardized regression weights and standard error within brackets.
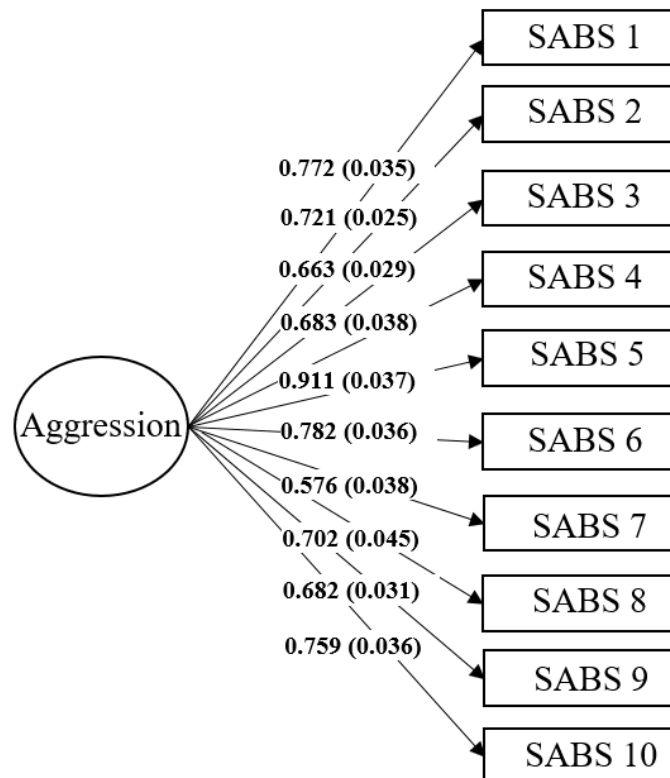

Figure 3. The single factorial structure of the Portuguese Version of SABS for CFA Total sample. Values represent standardized regression weights and standard error within brackets.

3.3. Convergent and Discriminant Validity

After assessing the quality of the CFA model, the convergent validity of the SABS-PT was examined according to Fornell and Larcker's [46] method. Firstly, all standardized factor loadings were statistically significant ($p < 0.05$). Secondly, the results also indicated an AVE > 0.50 (AVE = 0.53), both supporting the convergent validity of the construct.

Furthermore, the convergent and discriminant validity of the construct were both established in relation to external variables (see Table 3). Convergent validity was supported by the positive and significant associations between the SABS-PT, rape myths, and psychopathic traits, with small effect sizes [59]. Specifically, the SABS-PT score was positively and significantly correlated to the ECVS score. Similar correlations were found between the SABS-PT score and the different YPI dimensions.

Table 3. Correlation Values between the SABS, ECVS, YPI, and PAIR dimensions.

	Sexual Aggression
Convergent Validity	
ECVS—rape myths	0.21 *
YPI—Grandiosity-manipulative	0.23 *
YPI—Callous-unemotional	0.17 *
YPI—Impulsive-irresponsible	0.18 *
Discriminant validity	
PAIR—Personal validation	−0.05
PAIR—Communication	0.07
PAIR—Openness	0.05

Note. ECVS = Scale of Beliefs about Sexual Violence; YPI = Youth Psychopathic Traits Inventory; PAIR—Personal Assessment of Intimacy in Relationships Scale. * $p < 0.05$.

Discriminant validity was established through a correlation analysis between the SABS-PT and the perception of intimacy in relationships. As displayed in Table 3, the correlation coefficients are very small and statistically non-significant for all dimensions of the PAIR, meeting the criteria $|r| \leq 0.45$ [62] (DeVon et al., 2007) to support discriminant validity. Finally, sexual aggression was negatively associated with personal validation.

3.4. Measure of Invariance

Table 4 displays the results for measurement invariances of the SABS-PT across gender. The MG-CFA was performed by comparing the fit of the models in sequence, following the recommendations for testing the measurement invariance with progressively restrictive stages [48]. As so, several fit indices were used to compare each nested model to its previous.

Table 4. Fit indices for multi-group confirmatory factor analyses and difference testing.

	WLSMV χ^2 (df)	CFI	TLI	RMSEA	χ^2 Difftest	ΔCFI	ΔRMSEA
Configural	182.183 * (70)	0.945	0.929	0.036 (0.029; 0.042)	-	-	-
Metric	170.480 * (79)	0.955	0.949	0.030 (0.024; 0.036)	13.959 ns (9)	0.010	−0.006 (0.005; 0.006)
Scalar	259.40 (88)	0.916	0.914	0.039 (0.034; 0.045)	100.169 * (9)	−0.039	0.099 (0.010; 0.009)
Partial Scalar	182.307 * (82)	0.951	0.946	0.031 (0.005; 0.037)	6.999 ns (3)	0.003	0.001 (0.001; 0.001)

Note. * $p < 0.001$; ns = non-significant.

First, configural invariance was tested as a baseline model and results showed that it provided a good fit of the data (CFI = 0.945 and RMSEA = 0.036). The following procedure

was performed to test for metric invariance. A DIFFTEST revealed a non-significant chi-squared difference ($\Delta\chi^2 = 13.959$) suggesting an inter-group invariance. Additionally, a ΔCFI = 0.01 and a ΔRMSEA = -0.006, support that suggestion and corroborate the establishment of metric invariance. Afterwards, scalar invariance was examined, and the values indicated a significant $\Delta\chi^2 = 100.169$ on the chi-square test for difference testing. Consequently, full scalar invariance was not obtained. Modification indices were then examined to detect the source of non-invariance and revealed that the model could improve with the removal of the restrictions of the thresholds for items 3, 9, and 10. Therefore, we proceeded to test for partial scalar invariance removing the restrictions of the thresholds for those items. Results from the DIFFTEST (non-significant $\Delta\chi^2 = 6.999$; ΔCFI = 0.003; ΔRMSEA = 0.001) suggest a good fit of the data to the model and confirm partial scalar invariance of the SABS, as seen in Table 3. Partial scalar invariance can be established if at least two items with equal factor loadings and intercepts per factor are invariant [63].

3.5. Latent and Observed Mean Differences in Sexual Aggression

Given the establishment of partial scalar invariance, latent mean comparisons can be made between groups (male and female). The standardized estimated latent mean difference was -0.746, and statistically different from zero ($Z = -2.89$, $p = 0.004$)., suggesting that women presented a significantly lower latent mean of sexual aggression than men. Similarly, when comparing the observed means on SABS scores, the t test results showed that men ($M = 0.87$) present a higher mean for sexual aggression than women ($M = 0.53$), $t(2538) = 6.38$, $p < 0.001$, although with a small ($d = 0.24$) effect size according to Cohen's [59] criteria.

3.6. Reliability

The reliability was tested both for gender and the total sample (see Table 5). The KR-20 values for both male (0.71 [0.69–0.74]) and female (0.66 [0.63–0.69]) were acceptable [55]. McDonald's omega as a measure of composite reliability was above the minimum threshold (0.60) recommend by Hair and colleagues [56]: male (0.69 [0.67–0.72]) and female (0.67 [0.64–0.69]). Similarly, results regarding the total sample indicated acceptable values for KR-20 = 0.69 [0.68–0.71] and McDonald's omega = 0.69 [0.67–0.71] considering the small number of items in the scale [64,65]. Following Clark and Watson [58] criteria, all AIIC (=0.21) were within the adequate range ([0.15–0.50]). These results suggest that the items of the SABS are reasonably homogenous [66]. Therefore, the SABS-PT shows good reliability for both genders and the total sample.

Table 5. Reliability and Homogeneity Measures.

	ωt	KR-20	AIIC
Men ($n = 1232$)	0.69	0.71	0.23
Women ($n = 1308$)	0.67	0.66	0.18
Total ($N = 2540$)	0.69	0.69	0.21

Note. ωt = McDonald's omega; KR-20 = Kuder-Richardson 20; AIIC = Average Inter-Item Correlation.

4. Discussion

The present study was aimed at contributing to the refinement of a measurement tool targeting SV in the context of community samples, thus broadening the research scope of sexual offending behavior.

Results regarding the construct validity of the SABS-PT indicate a good overall fit of the data to the model. Convergent validity was internally established for the SABS-PT and further supported by the positive correlations found between the SABS-PT, rape myths, and psychopathic traits. These findings align with previous ones regarding the association between psychopathic personality traits and sexually aggressive behaviors (e.g., [11,18–21]). and between RMA and different forms of sexual aggression (e.g., [18,24,25,28]). Regardless,

according to conventional criteria, the small magnitude of these associations does not allow the establishment of a substantial level of convergence [67].

Concerning RMA, one possible explanation for the small magnitude of correlation is that RMA is more strongly associated with severe forms of sexual violence rather than the use of sexually aggressive strategies. In fact, Mouilso and Calhoun [21]. found that perpetrators of less severe forms of sexual aggression (i.e., sexual assault) did not differ from non-perpetrators on most of the subscales of the Illinois Rape Myth Acceptance Scale (IRMA), one of the first measures designed to assess RMA. Indeed, literature places significant evidence on the association between RMA and sexual violence behaviors measured by the Sexual Experiences Survey (SES; [24]), a measure that addresses various forms of actual perpetration of sexual aggression. Altogether, these results seem to suggest that RMA itself is insufficient to explain the perpetration of SV among community samples. Even though rape myths may play an important role by normalizing and minimizing SV, other variables (such as emotional or interpersonal factors) could help explain SV more expressively. Nonetheless, further research is necessary to clarify this issue.

Regarding the correlation between sexual aggression and psychopathic traits, the small magnitude effects can be explained by the community nature of the sample, considering that such association is well-established among incarcerated/criminal populations (e.g., [68,69]). In the light of the present findings, psychopathic traits may have a secondary role in the context of community samples engaging in sexually aggressive strategies. Researching the specific risk factors for SV among community samples is thus of paramount relevance.

Discriminant validity was established between the SABS-PT and PAIR scores. Sexual aggression was negatively associated with personal validation. Such findings suggest that individuals who do not perceive validation or acceptance from their partner may resort to sexual aggression, adding to literature about interpersonal deficits characterizing sexual offenders (e.g., [11,14]). Discriminant validity was corroborated by the positive, but very small associations found between sexual aggression and communication and openness. Overall, these findings align with existent literature regarding intimacy deficits as predictors of sexual violence [15] and further suggest that intimacy dynamics may constitute a path toward SV.

The SABS-PT has further confirmed good reliability. In addition, gender invariance was established, and the results revealed that women report significantly less sexual aggression than men. However, that difference was followed by a small effect size. Such findings corroborate literature suggesting that men outnumber women as perpetrators of sexual aggression, including among community samples (e.g., [4]). Nonetheless, the small effect size of that difference must be acknowledged; the present results reveal that the differences between male and female sexual perpetration is not substantial. Such findings are in line with literature supporting that both male and female college students engage in similar patterns of SV [11,12] suggesting that SV committed in the context of young and educated samples may not align perfectly with the gender-based violence perspective on SV. Further research is warranted to clarify gender differences and similarities so preventive strategies can be refined.

Currently, the lack of valid and reliable outcome measures in the field of SV as committed by non-forensic/community samples constitutes a great limitation, particularly when assessing the efficacy of the SV prevention programs. The present study places a relevant contribution in that matter, supporting the reliability of the SABS-PT to assess sexually aggressive behaviors as committed both by male and female community members. Therefore, it could have great implications for future research on SV with Portuguese speaking participants.

Despite the relevance of this study, some limitations must be acknowledged. First, it is important to stress that the SABS items assess attempted rather than consummated sexual aggression. As so, the present findings do not inform on the prevalence of such behaviors nor reflect the perpetration of rape. Instead, findings relate to the use of sexually aggressive strategies to initiate sexual contact. Secondly, collected data can be exposed to bias as self-

report measures are always prone to the participant's subjectiveness and their inhibition to answer, especially when regarding topics as sensitive as sexual aggression. Finally, the present study only included a very specific group of individuals (college students who identified as male or female and as heterosexual). Therefore, the present results cannot be generalized to other populations, including non-heterosexual or non-binary populations. Furthermore, with Portuguese being the official language in Brazil and PALOP (African countries having Portuguese as the official language), the SABS-PT may have a wide dissemination spectrum. Nonetheless, we recommend the cultural adaptation of the SABS items prior to its administration in those countries.

5. Conclusions

This study contributed to validating the SABS-PT for use with male participants. Given the evidence of sexually aggressive strategies used among Portuguese college populations [11,12], there's a highlighted need to develop reliable instruments to assess these behaviors as committed both by men and women. In this sense, the present research supports the validity and accuracy of the SABS-PT as a measure to assess sexually aggressive behaviors not only as committed by female college students towards men, but also as committed by male college students against women. The present study is expected to have great implications in this field of research by allowing the assessment of these sexually aggressive behaviors in community samples.

References

1. Basile, K.C.; Smith, S.G.; Breiding, M.; Black, M.C.; Mahendra, R.R. *Sexual Violence Surveillance: Uniform Definitions and Recommended Data Elements, Version 2.0*; National Center for Injury Prevention and Control, Centers for Disease Control and Prevention: Atlanta, Georgia, 2014.
2. O'Neil, M.; Morgan, P. *American Perceptions of Sexual Violence*; FrameWorks Institute: Washington, DC, USA, 2010.
3. Iglesias, P.S.; Sierra, J.C. Sexual victimization among spanish college women and risk factors for sexual revictimization. *J. Interpers. Violence* **2012**, *27*, 3468–3485. [CrossRef] [PubMed]
4. Krahé, B.; Berger, A.; Vanwesenbeeck, I.; Bianchi, G.; Chliaoutakis, J.; Fernández-Fuertes, A.A.; Fuertes, A.; de Matos, M.G.; Hadjigeorgiou, E.; Haller, B.; et al. Prevalence and correlates of young people's sexual aggression perpetration and victimization in 10 European countries: A multi-level analysis. *Cult. Health Sex.* **2015**, *17*, 682–699. [CrossRef] [PubMed]
5. Öberg, M.; Skalkidou, A.; Heimer, G.; Lucas, S. Sexual violence against women in Sweden: Associations with combined childhood violence and sociodemographic factors. *Scand. J. Public Health* **2021**, *49*, 292–300. [CrossRef] [PubMed]
6. Kassa, G.M.; Abajobir, A.A. Prevalence of violence against women in Ethiopia: A meta-analysis. *Trauma Violence Abus.* **2020**, *21*, 624–637. [CrossRef]
7. Winzer, L.; Krahé, B.; Guest, P. The scale of sexual aggression in southeast Asia: A review. *Trauma Violence Abus.* **2019**, *20*, 595–612. [CrossRef]
8. Schuster, I.; Krahé, B. Prevalence of sexual aggression victimization and perpetration in Chile: A systematic review. *Trauma Violence Abus.* **2019**, *20*, 229–244. [CrossRef]

9. World Health Organization. Violence against Women Prevalence Estimates, 2018: Global, Regional and National Prevalence Estimates for Intimate Partner Violence against Women and Global and Regional Prevalence Estimates for Non-Partner Sexual Violence against Women. 2021. Available online: https://www.who.int/publications/i/item/9789240022256 (accessed on 5 January 2022).
10. Casey, E.A.; Masters, N.T.; Beadnell, B.; Hoppe, M.J.; Morrison, D.M.; Wells, E.A. Predicting sexual assault perpetration among heterosexually active young men. *Violence Against Women* **2017**, *23*, 3–27. [CrossRef]
11. Carvalho, J.; Sá, A. Male college studewnts using sexually aggressive strategies: Findings on the interpersonal relationship profile. *J. Interpers. Violence* **2017**, *35*, 646–661. [CrossRef]
12. Carvalho, J.; Rosa, P.J.; Pereira, B. Dynamic Risk Factors Characterizing Aggressive Sexual Initiation by Female College Students. *J. Interpers. Violence* **2021**, *36*, 2455–2477. [CrossRef]
13. Marshall, W.L. Intimacy, loneliness and sexual offenders. *Behav. Res. Ther.* **1989**, *27*, 491–504. [CrossRef]
14. Martin, G.M.; Tardif, M. Examining sex offenders' intimacy deficits: Their nature and their influence on sexually abusive behaviours. *J. Sex. Aggress.* **2015**, *21*, 158–178. [CrossRef]
15. Hanson, R.K.; Morton-Bourgon, K.E. The characteristics of persistent sexual offenders: A meta-analysis of recidivism studies. *J. Consult. Clin. Psychol.* **2005**, *73*, 1154–1163. [CrossRef] [PubMed]
16. O'Connell, D.; Marcus, D.K. Psychopathic personality traits predict positive attitudes toward sexually predatory behaviors in college men and women. *Personal. Individ. Differ.* **2016**, *94*, 372–376. [CrossRef]
17. Mann, R.E.; Hanson, R.K.; Thornton, D. Assessing risk for sexual recidivism: Some proposals on the nature of psychologically meaningful risk factors. *Sex. Abus. A J. Res. Treat.* **2010**, *22*, 191–217. [CrossRef]
18. Bouffard, J.A.; Bouffard, L.A.; Miller, H.A. Examining the correlates of women's use of sexual coercion: Proposing an explanatory model. *J. Interpers. Violence* **2016**, *31*, 2360–2382. [CrossRef]
19. Gannon, T.A.; Cortoni, F. *Female Sexual Offenders: Theory, Assessment and Treatment*; Wiley-Blackwell: West Sussex, UK, 2010.
20. Hersh, K.; Gray-Little, B. Psychopathic traits and attitudes associated with self-reported sexual aggression in college men. *J. Interpers. Violence* **1998**, *13*, 456–471. [CrossRef]
21. Mouilso, E.R.; Calhoun, K.S. The role of rape myth acceptance and psychopathy in sexual assault perpetration. *J. Aggress. Maltreatment Trauma* **2013**, *22*, 159–174. [CrossRef]
22. Burt, M.R. Cultural myths and supports for rape. *J. Personal. Soc. Psychol.* **1980**, *38*, 217–230. [CrossRef]
23. Lonsway, K.A.; Fitzgerald, L.F. Rape myths. *Psychol. Women Q.* **1994**, *18*, 133. [CrossRef]
24. Yapp, E.J.; Quayle, E. A systematic review of the association between rape myth acceptance and male-on-female sexual violence. *Aggress. Violent Behav.* **2018**, *41*, 1–19. [CrossRef]
25. DeGue, S.; DiLillo, D.; Scalora, M. Are all perpetrators alike? Comparing risk factors for sexual coercion and aggression. *Sex. Abus.* **2010**, *22*, 402–426. [CrossRef] [PubMed]
26. Beech, A.; Parrett, N.; Ward, T.; Fisher, D. Assessing female sexual offenders' motivations and cognitions: An exploratory study. *Psychol. Crime Law* **2009**, *16*, 201–216. [CrossRef]
27. Carvalho, J.; Benzinho, E.; Robalho, R. Psychosexual characterization of college men and women reporting attempted sexual intercourse by coercive means. Presented at the 14th Congress of the European Federation of Sexology, Albufeira, Portugal, 9–12 May 2018.
28. Trottier, D.; Benbouriche, M.; Bonneville, V. A meta-analysis on the association between rape myth acceptance and sexual coercion perpetration. *J. Sex Res.* **2021**, *58*, 375–382. [CrossRef] [PubMed]
29. Mumford, E.A.; Potter, S.; Taylor, B.G.; Stapleton, J. Sexual Harassment and Sexual Assault in Early Adulthood: National Estimates for College and Non-College Students. *Public Health Rep.* **2020**, *135*, 555–559. [CrossRef]
30. Koss, M.P.; Oros, C.J. Sexual Experiences Survey: A research instrument investigating sexual aggression and victimization. *J. Cons. Cli. Psy.* **1982**, *50*, 455–457. [CrossRef]
31. Anderson, P.B. Correlates with college women's self-reports of initiating heterosexual contact. *Sex. Abus. A J. Res. Treat.* **1996**, *8*, 121–131. [CrossRef]
32. Moreira, B.; Carvalho, J.; Nobre, P. The Role of Dysfunctional Sexual Beliefs and Sexual Self-Esteem in Sexual Aggression: A Study with Male College Students. *Int. J. Sex. Health* **2021**, *34*, 308–318. [CrossRef]
33. Rosa, P.J.; Brazão, N.; Carvalho, J. Psychometric properties of the Sexually Aggressive Behaviors Scale: Factor structure, reliability and construct validity in a sample of Portuguese female college students. *Int. J. Offender Ther. Comp. Criminol.* **2022**, in press. [CrossRef]
34. Martins, S.; Machado, C.; Abrunhosa, R.; Manita, C. Escala de Crenças sobre Violência Sexual [Rape Myths Scale]. *Análise Psicológica* **2012**, *30*, 177–191. [CrossRef]
35. Van Baardewijk, Y.; Andershed, H.; Stegge, H.; Nilsson, K.; Scholte, E.; Vermeiren, R. Development and tests of short versions of the Youth Psychopathic Traits Inventory and the Youth Psychopathic Traits Inventory-Child Version. *Eur. J. Psychol. Assess.* **2010**, *26*, 122–128. [CrossRef]
36. Pechorro, P.; Andershed, H.; Ray, J.V.; Maroco, J.; Gonçalves, R.A. Validation of the Youth Psychopathic Traits Inventory and Youth Psychopathic Traits Inventory—Short Version among incarcerated juvenile delinquents. *J. Psychopathol. Behav. Assess.* **2015**, *37*, 576–586. [CrossRef]

37. Pechorro, P.; Ribeiro da Silva, D.; Rijo, D.; Gonçalves, R.A.; Andershed, H. Psychometric properties and measurement invariance of the Youth Psychopathic Traits Inventory—Short Version among Portuguese youth. *J. Psychopathol. Behav. Assess.* **2017**, *39*, 486–497. [CrossRef]

38. Colins, O.; Andershed, H. The Youth Psychopathic Inventory Short Version in a general population sample of emerging adults. *Psychol. Assess.* **2016**, *28*, 449–457. [CrossRef] [PubMed]

39. Schaefer, M.T.; Olson, D.H. Assessing intimacy: The PAIR inventory. *J. Marital Fam. Ther.* **1981**, *7*, 47–60. [CrossRef]

40. Moreira, H.; Amaral, A.; Canavarro, M.C. Adaptação do Personal Assessment of Intimacy in Relationships Scale (PAIR) para a população Portuguesa: Estudo das suas características psicométricas [Adaptation of the Personal Assessment of Intimacy in Relationships Scale (PAIR) for the Portuguese population: Study of the psicometric characteristics]. *Psychologica* **2009**, *50*, 339–359.

41. Schumacker, R.E.; Lomax, R.G. *A Beginner's Guide to Structural Equation Modeling*, 4th ed.; Routledge: New York, NY, USA, 2016.

42. Bentler, P.M. Comparative fit indexes in structural models. *Psychol. Bull.* **1990**, *107*, 238–246. [CrossRef]

43. Steiger, J.H. Structural model evaluation and modification: An interval estimation approach. *Multivar. Behav. Res.* **1990**, *25*, 173–180. [CrossRef]

44. Brown, T.A. *Confirmatory Factor Analysis for Applied Research*; The Guilford Press: New York, NY, USA, 2006.

45. Tomás, C.; Rosa, P.J. Validation of a scale of religious and spiritual coping for the Portuguese population. *J. Relig. Health* **2021**, *60*, 3510–3529. [CrossRef]

46. Fornell, C.; Larcker, D.F. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]

47. Milfont, T.L.; Fischer, R. Testing measurement invariance across groups: Applications in cross-cultural research. *Int. J. Psychol. Res.* **2010**, *3*, 111–130. [CrossRef]

48. Vandenberg, R.J.; Lance, C.E. A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organ. Res. Methods* **2000**, *3*, 4–70. [CrossRef]

49. Muthén, L.K.; Muthén, B.O. *Mplus User's Guide*; Muthén & Muthén: Los Angeles, CA, USA, 2017.

50. Cheung, G.W.; Rensvold, R.B. Evaluating goodness-of-fit indexes for testing measurement invariance. *Struct. Equ. Modeling* **2002**, *9*, 233–255. [CrossRef]

51. Hu, L.T.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct. Equ. Model. A Multidiscip. J.* **1999**, *6*, 1–55. [CrossRef]

52. Dimitrov, D.M. Comparing groups on latent variables: A structural equation modeling approach. *Work* **2006**, *26*, 429–436.

53. Bagozzi, R.P.; Yi, Y. On the evaluation of structural equation models. *J. Acad. Mark. Sci.* **1988**, *16*, 74–94. [CrossRef]

54. Bagozzi, R.P.; Yi, Y. Specification, evaluation, and interpretation of structural equation models. *J. Acad. Mark. Sci.* **2011**, *40*, 8–34. [CrossRef]

55. DeVellis, R.F. *Scale Development Theory and Applications*, 4th ed.; Sage: Thousand Oaks, CA, USA, 2017.

56. Hair, J.F.; Anderson, R.E.; Black, W.C. *Multivariate Data Analysis*, 7th ed.; Pearson: Harlow, UK, 2014.

57. Pires, C.; Rosa, P.J.; Vigário, M.; Cavaco, A. Validation of a new tool for evaluating subjects' satisfaction with medicine package leaflets: A cross-sectional descriptive study. *Sao Paulo Med. J.* **2019**, *137*, 454–462. [CrossRef]

58. Clark, L.A.; Watson, D. Constructing validity: Basic issues in objective scale development. *Psychol. Assess.* **1995**, *7*, 309–319. [CrossRef]

59. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed.; Lawrence Erlbaum Associates Inc.: New York, NY, USA, 1988.

60. JASP Team. *JASP (Version 0.15.) [Computer Software]*; University of Amsterdam: Amsterdam, The Netherlands, 2021.

61. Muthén, L.K.; Muthén, B.O. *MPlus (Version 8.3) [Computer Software]*; Mplus: Los Angeles, CA, USA, 2019.

62. DeVon, H.A.; Block, M.E.; Moyle-Wright, P.; Ernst, D.M.; Hayden, S.J.; Lazzara, D.J.; Savoy, S.M.; Kostas-Polston, E. A psychometric toolbox for testing validity and reliability. *J. Nurs. Sch.* **2007**, *39*, 155–164. [CrossRef]

63. Byrne, B.M.; Shavelson, R.J.; Muthén, B. Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance. *Psychol. Bull.* **1989**, *105*, 456–466. [CrossRef]

64. Cardoso, D.; Pascoal, P.M.; Rosa, P.J. Facing polyamorous lives: Translation and validation of the attitudes towards polyamory scale in a Portuguese sample. *Sex. Relatsh. Ther.* **2018**, *35*, 115–130. [CrossRef]

65. Pallant, J. *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS*; Open University Press/McGraw-Hill: Maidenhead, UK, 2010.

66. Piedmont, R.L. Inter-Item Correlations. In *Encyclopedia of Quality of Life and Well-Being Research*; Michalos, A.C., Ed.; Springer: Berlin/Heidelberg, Germany, 2014; pp. 3303–3304.

67. Gregory, R.J. *Psychology Testing: History, Principles, and Applications*; Pearson Education: Essex, UK, 2014.

68. Brown, A.R.; Dargis, M.A.; Mattern, A.C.; Tsonis, M.A.; Newman, J.P. Elevated Psychopathy Scores Among Mixed Sexual Offenders: Replication and Extension. *Crim. Justice Behav.* **2015**, *42*, 1032–1044. [CrossRef]

69. Krstic, S.; Neumann, C.S.; Roy, S.; Robertson, C.A.; Knight, R.A.; Hare, R.D. Using latent variable- and person-centered approaches to examine the role of psychopathic traits in sex offenders. *Personal. Disord.* **2018**, *9*, 207–216. [CrossRef] [PubMed]