Everyday sadism: psychometric properties of three Spanish versions for assessing the construct

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Abstract

Everyday sadism refers to the non-clinical personality trait of sadism, someone who obtains pleasure from inflicting pain or from the suffer of other people. This construct, in the recent years, has attracted more attention to researches, conducting to the development of different measures to assess it. With a sample of $N = 2160$ we studied the psychometric properties of three everyday sadism scales, the Short Sadistic Impulse Scale (SISS), the Comprehensive Assessment of Sadistic Tendencies (CAST), and the Assessment of Sadistic Personality (ASP). For the three scales we found (1) good reliability coefficients, (2) adequate fit for the factor structure theorized for each of the measures, (3) significant gender differences in the trait, where males obtain higher scores than females in all the instruments, and (4) negative correlations with the HEXACO super traits excluding openness and positive with the Dark Triad traits. We concluded that the psychometric properties of the Spanish versions of the SISS, CAST and ASP present good psychometric values in line with the original measures and previous translations.

Keywords Sadism · Personality assessment · Dark tetrad · Scale validation · Psychometrics

Introduction

Sadism, or more precisely everyday sadism, as a personality trait would define a person "who humiliates others, shows a longstanding pattern of cruel or demeaning behavior to others, or intentionally inflicts physical, sexual, or psychological pain or suffering on others in order to assert power and dominance or for pleasure and enjoyment" (O'Meara, Davies, & Hammond, 2011, p.523). Everyday sadism, differentiated from the pathological definition of sadism personality disorder from the *DSM-5* (American Psychiatric Association, 2013; Buckels, Jones, & Paulhus, 2013), is related with a large variety of antisocial tendencies, online and offline (Greitemeyer, 2015; Sest & March, 2017; Tortoriello, Hart, & Richardson, 2019).

Everyday sadism, currently forms part of the Dark Tetrad (Chabrol, Van Leeuwen, Rodgers, & Séjourné, 2009). Previously described as the Dark Triad, it was composed by subclinical psychopathy, subclinical narcissism, and Machiavellianism (Paulhus & Williams, 2002). Machiavellianism is described as a deceitful and manipulating way of acting towards others with the only purpose to achieve personal goals (Fehr, Samsom, & Paulhus, 1992). Subclinical psychopathy refers to a callous and not empathic person who seeks for exciting activities without considering moral values, thus usually performing antisocial behaviors (Hare, 1999; Kajonius & Björkman, 2019). And narcissism describes a pattern of personality with exaggerated view of themselves that usually looks for confirmation and attention (Raskin & Hall, 1981). Everyday sadism was added to this Triad, hence composing a tetrad due to its similarities and overlaps with the rest of the traits (e.g., aggressive behavior, low Honesty-Humility and emotionality, and low empathy between others) while being a different construct (Book et al., 2016; Pajevic, Vukosavljevic-Gvozden, Stevanovic, & Neumann, 2018; Plouffe, Smith, & Saklofske, 2019; Tortoriello et al., 2019).

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With the aim to develop an instrument to asses this trait, multiple self-reported measures have been constructed, such as the Short Sadistic Impulse Scale (SISS; O'Meara et al., 2011), the Comprehensive Assessment of Sadistic Tendencies (CAST; Buckels & Paulhus, 2013), and the Assessment of Sadistic Personality (ASP; Plouffe, Saklofske, & Smith, 2017).

The first one to be developed was the SISS (O'Meara et al., 2011), a scale derived from the Sadistic Attitudes and Behaviors Scale (SABS; Davies & Hand, 2003; O'Meara, Davies, & Barnes-Holmes, 2004). This scale, using an unidimensional measure of sadistic inclination has reported negative correlations with other measures of empathy, parental bonds, as well as positive correlations to maladaptive relating with others (O'Meara et al., 2011). The CAST, a refinement of its predecessor the Varieties of Sadistic Tendencies (VAST; Paulhus & Jones, 2015), measures sadism as enjoying the pain of others in various ways, actively hurting them, physically and verbally, or passively just observing (Buckels & Paulhus, 2013); this instrument has reported consistent connections with different type of antisocial behaviors (e.g., Buckels, Trapnell, Andjelovic, & Paulhus, 2019; Chester, DeWall, & Enjaian, 2019). And finally, the ASP was developed to address some problems in the limited construct description of the previous measures, and with the objective to add a complementary measure to the Dark Triad to create a way to easily measure the Dark Tetrad (Plouffe et al., 2017, 2019); this scale has also described links between sadism and several negative outcomes, as well as low trait emotional intelligence, agreeableness, and honesty-humility (Min, Pavisic, Howald, Highhouse, & Zickar, 2019; Plouffe et al, 2017).

Recently, the subclinical construct of sadism has gain interest due to, as stated before, its connections with different everyday antisocial behaviors and the Dark Triad of personality, now composing the Dark Tetrad (Book et al., 2016; Tetreault, Bates, & Bolam, 2018). Thus, making it important to facilitate researchers the asses of this trait in Spanish language, since until the date there are not translations of this scales into this language losing considerable research potential.

The main objective of the present study is to explore the following psychometrics of the Spanish versions of the three sadism scales mentioned before: (1) the internal consistency; (2) the theorized factor structure of sadism as an unifactorial or multifactorial construct in the different scales; and (3) the validity as expressed by (a) the gender differences, where Plouffe et al. (2017) found that males display higher score than females in the ASP, while O'Meara et al. (2011) reported that there were not gender differences in the SISS, (b) the links with general personality traits (based on the HEXACO model) and antisocial personality traits (the Dark Triad). In this last aspect of validity, we hypothesize that, according to the previous literature, high punctuations in sadism will be linked

with high punctuations in the Dark Triad traits (Bardeen & Michel, 2019; O'Meara et al., 2011; Plouffe et al., 2017). And also, high punctuations in sadism, will be linked with at least low scores on honesty-humility and agreeableness HEXACO subscales due to their known overlaps with the Dark Triad traits that also as stated before tend to overlap with sadism measures (Hodson et al., 2018; Lee & Ashton, 2014; Plouffe et al., 2019).

Until the date there are few studies that allow the comparison of these scales (Dinić, Bulut Allred, Petrović, & Wertag, 2020; Kowalski, Di Pierro, Plouffe, Rogoza, & Saklofske, 2019; Min et al., 2019), but moreover, none of them use Spanish speaking populations. A further objective of this study is to allow cross-cultural comparisons of the sadism construct and the three sadism scales with Spanish speaking populations. And additionally, compare the results offered in previous investigations to check if the measures given by the different instruments remains stable across different societies.

Method

Participants and Procedure

The participants recruited for this study were 3187, although from this sample, just 2160 met the inclusion criteria (being over 18 years old), that were having answered to the measures described in the next point. From this sample, 78.6% were women and 21.4% men, with an average age of 29.31 ($SD = 10.11$). Most of them Spanish but all of them Spanish speakers (Spanish = 89.9%, South American 8.2%, other = 1.9%) and with university studies (university studies = 62.4%, vocational studies = 18.2%, high school = 8.8%, secondary school = 6%, and primary school = 4.6%) The participants were recruited using convenience sample method via Internet.

Measures

Sadism Scales

The ASP (Plouffe et al., 2017) Is a scale that consists in 9 items, based on the original of 20, that measures everyday sadism. Participants answer in a in a Likert scale, from 0 = strongly disagree, to 4 = strongly agree. The reliability value reported by Plouffe et al., (2017) was $\alpha = .83$.

The SISS (O'Meara et al., 2011) is a 10 items scale for sadistic impulse inclination Participants answered in a Likert scale, from 0 = strongly disagree, to 4 = strongly agree. The reliability value reported in the original measure by O'Meara et al., (2011) was $\alpha = .86$.

The CAST (Buckels & Paulhus, 2013) consists in three subscales: Direct Verbal Sadism, with 6 items, Direct Physical Sadism composed by 5 items, and Vicarious Sadism with 7 items. The answering format was also Likert scale from 0 = strongly disagree to 4 = strongly agree. The α coefficients for the three subscales were between .81 and .83 (Buckels & Paulhus, 2013).

Permissions for translating the three scales into Spanish were asked to the authors. When the authors of the three scales gave us their permission, the three scales were translated into Spanish using a translation−back-translation procedure. The first and the second authors translated all the items from the original versions of the SISS, CAST and ASP into Spanish, after and independent native conducted the back translation. In order to make all the three questionnaires more comparable between them, SISS was adapted to a 5-point Likert scale from 0 = strongly disagree, to 4 = strongly agree.

Personality scales

Dark Triad Dirty Dozen (DTDD; Jonason & Webster, 2010)
Subclinical psychopathy, subclinical narcissism and Machiavellianism were assessed using the Dark Dirty Dozen scale. It is composed by 12 items, 4 measuring each trait, where participants have to answer in a Likert scale from 0 = strongly disagree to 4 = strongly agree. The reliability measures reported in the original study of the Spanish translation of the measure were between .60 and .80, except for the omega value of psychopathy that was .47 (Pineda, Sandín, & Muris, 2018). The values reported in our sample are shown in Table 1.

HEXACO Personality Inventory-Revised (HEXACO-60; Ashton & Lee, 2009)
The Hexaco-60 is a short personality inventory that assess 6 general personality dimensions based on the HEXACO model of personality structure. It is composed by 10 items per each subscale in Likert scale from 1 = strongly disagree to 5 = strongly Agree. The subscales measured by the HEXACO are Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness and Openness to the experience. The reliability measures reported for this subscales were between .73 to .80 in a community sample (Ashton & Lee, 2009). The Spanish version of HEXACO was applied (Roncero, Fornés, & Belloch, 2013). The values reported in our sample are shown in Table 1.

Data Analyses

We used SPSS 25th version in order to calculate the descriptive statistics, gender differences (t-tests) and bivariate correlations. For gender differences the multiple t-tests were corrected using the Bonferroni correction to account for amplified alpha, thus a significant effect was $p < .0033$ (as result of dividing the $\alpha = .05$ by the number of analyses performed = 15).

Reliability coefficients and confirmatory factor analyses were conducted with the statistical program R (R Core Team, 2016), using the Lavaan package (Rosseel, 2012). Diagonally weighted least squares (DWLS) was the estimation method used with individual items of the three scales loaded in their predetermined factors. We would conclude a good fit of the models if the fit indices proposed; chi-square (χ^2), normed-fit index (NFI), goodness-of fit statistic (GFI), comparative fix index (CFI), the standardized root mean square residual (SRMR), and the root mean square error approximation (RMSEA); meet their threshold values. Nonsignificant χ^2 due to the sample size, NFI bigger than .90, GFI bigger than or equal to .90, CFI bigger than or equal to .95, SRMR was equal or smaller than .05 (acceptable until .08), and RMSEA equal or smaller than .08 (Hu & Bentler, 1999; Kline, 2010).

Results

Descriptive Statistics and Bivariate Correlations

Table 1 shows means, standard deviations, gender differences and reliability coefficients of all the measures applied in the study. The Cronbach's alphas ranged between .76 and .80 and the McDonald's omegas between .75 and .77 show an acceptable internal consistency of all the scales. As expected, men score significantly higher in all the Dark Tetrad traits, with subclinical sadism displaying higher punctuations for males in the three measures.

Table 2 shows the bivariate correlations for all the measures used. As expected, the three sadism measures present important and significant correlations between them, from $r = .629$, $p < .001$, to $r = .723$, $p < .001$. Also, the three measures present positive, similar and significant correlations with the three Dark traits and negative with the HEXACO dimensions except for openness, with small, positive and nonsignificant correlations.

Confirmatory Factor Analyses of the Three Sadism Scales

The fit indices for the three scales confirmed that the predeterminate models adjust well. For the ASP, with one factor measurement model, the fit indices were $\chi2 = 40.216$, DF = 27, $p = .049$, NFI = .986, GFI = .994, CFI = .995, SRMR = .036, RMSEA = .015. For the CAST, with a measurement model of three factors, $\chi2 = 199.726$, DF = 132, $p < .001$, NFI = .975, GFI = .988, CFI = .991, SRMR = .039, RMSEA = .015. And finally, for the SISS, also with one

Table 1 Means (standard deviations), gender differences, and reliability coefficients (Cronbach's alphas and McDonald's omegas)

	Total (N=2160)	Women (n=1697)	Men (n=463)	t	d	α	ω
(1) CAST Verbal	0.66 (0.68)	0.57 (0.62)	1.01 (0.80)	-10.92*	0.60	.69	.69
(2) CAST Physical	0.16 (0.35)	0.13 (0.31)	0.26 (0.45)	-5.75*	0.34	.64	.64
(3) CAST Vicarious	0.56 (0.53)	0.43 (0.39)	1.01 (0.71)	-16.8*	1.01	.71	.71
(4) CAST Total	0.48 (0.42)	0.40 (0.34)	0.80 (0.52)	-15.88*	0.91	.80	.76
(5) ASP	0.42 (0.50)	0.36 (0.44)	0.64 (0.64)	-8.94*	0.51	.75	.75
(6) SSIS	0.36 (0.44)	0.32 (0.43)	0.53 (0.59)	-6.59*	0.41	.78	.76
DD							
(7) Machiavellianism	3.71 (3.15)	3.54 (3.08)	4.37 (3.34)	−3.80*	0.26	.77	.78
(8) Narcissism	5.58 (3.79)	5.33 (3.73)	6.56 (3.87)	−4.70*	0.32	.83	.84
(9) Psychopathy	2.53 (2.52)	2.31 (2.37)	3.37 (2.87)	-5.46*	0.40	.61	.54
HEXACO-60							
(10) Honesty	2.52 (.57)	2.56 (.55)	2.36 (.60)	5.34*	0.35	.68	.66
(11) Emotionality	2.85 (.58)	2.95 (.54)	2.46 (.54)	13.85*	0.91	.71	.68
(12) Extraversion	2.54 (.63)	2.52 (.64)	2.58 (.58)	−1.48	0.10	.77	.75
(13) Agreeableness	2.50 (.55)	2.49 (.55)	2.56 (.55)	−1.93	0.13	.65	.63
(14) Conscientiousness	2.62 (.56)	2.65 (.56)	2.50 (.53)	3.82*	0.28	.72	.67
(15) Openness	2.65 (.60)	2.65 (.59)	2.65 (.62)	0.124	0.00	.72	.69

Note: t = Student's t; d = Cohen's d; CAST physical, CAST verbal, and CAST vicarious = Comprehensive Assessment of Sadistic Tendencies subscales; ASP = Assessment of Sadistic Personality. DD = Dirty Dozen Dark Triad; HEXACO-60 = HEXACO Personality Inventory-Revised

*$p < .0033$ (Bonferroni fit)

factor, $\chi 2 = 78.399$, DF = 35, $p < .001$, NFI = .970, GFI = .987, CFI = .983, SRMR = .061, RMSEA = .024.

The standardized factor loadings for the items from the three measures are displayed in Fig. 1 for the ASP, Fig. 2

Table 2 Bivariate correlations between the study variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) CAST Verbal	1														
(2) CAST Physical	.45**	1													
(3) CAST Vicarious	.39**	.39**	1												
(4) CAST Total	.84**	.67**	.79**	1											
(5) ASP	.63**	.60**	.45**	.71**	1										
(6) SSIS	.53**	.60**	.40**	.62**	.72**	1									
DD															
(7) Machiavellianism	.43**	.40**	.27**	.46**	.46**	.41**	1								
(8) Narcissism	.30**	.25**	.13**	.29**	.33**	.24**	.49**	1							
(9) Psychopathy	.30**	.32**	.26**	.37**	.37**	.32**	.40**	.30**	1						
HEXACO-60															
(10) Honesty	−.28**	−.21**	−.19**	−.30**	−.32**	−.25**	−.45**	−.40**	−.20**	1					
(11) Emotionality	−.16**	−.09**	−.24**	−.23**	−.15**	−.11**	−.10**	.02	−.25**	.12**	1				
(12) Extraversion	−.05	−.09**	−.10**	−.10**	−.12**	−.11**	−.07**	.04	−.07*	.14**	−.05*	1			
(13) Agreeableness	−.20**	−.16**	−.08**	−.19**	−.24**	−.20**	−.21**	−.16**	−.19**	.28**	.07**	.26**	1		
(14) Conscientiousness	−.18**	−.14**	−.16**	−.21**	−.19**	−.14**	−.21**	−.06*	−.15**	.30**	.18**	.20**	.16**	1	
(15) Openness	−.04	.019	.04	.00	.01	.01	−.01	.09**	−.01	.19**	.09**	.16**	.18**	,19**	1

Note: CAST physical, CAST verbal, and CAST vicarious = Comprehensive Assessment of Sadistic Tendencies subscales; ASP = Assessment of Sadistic Personality. DD = Dirty Dozen Dark Triad; HEXACO-60 = HEXACO Personality Inventory-Revised

*$p < .05$, **$p < .01$

Fig. 1 Factor structure of the Spanish version of the ASP as obtained with confirmatory factor analysis
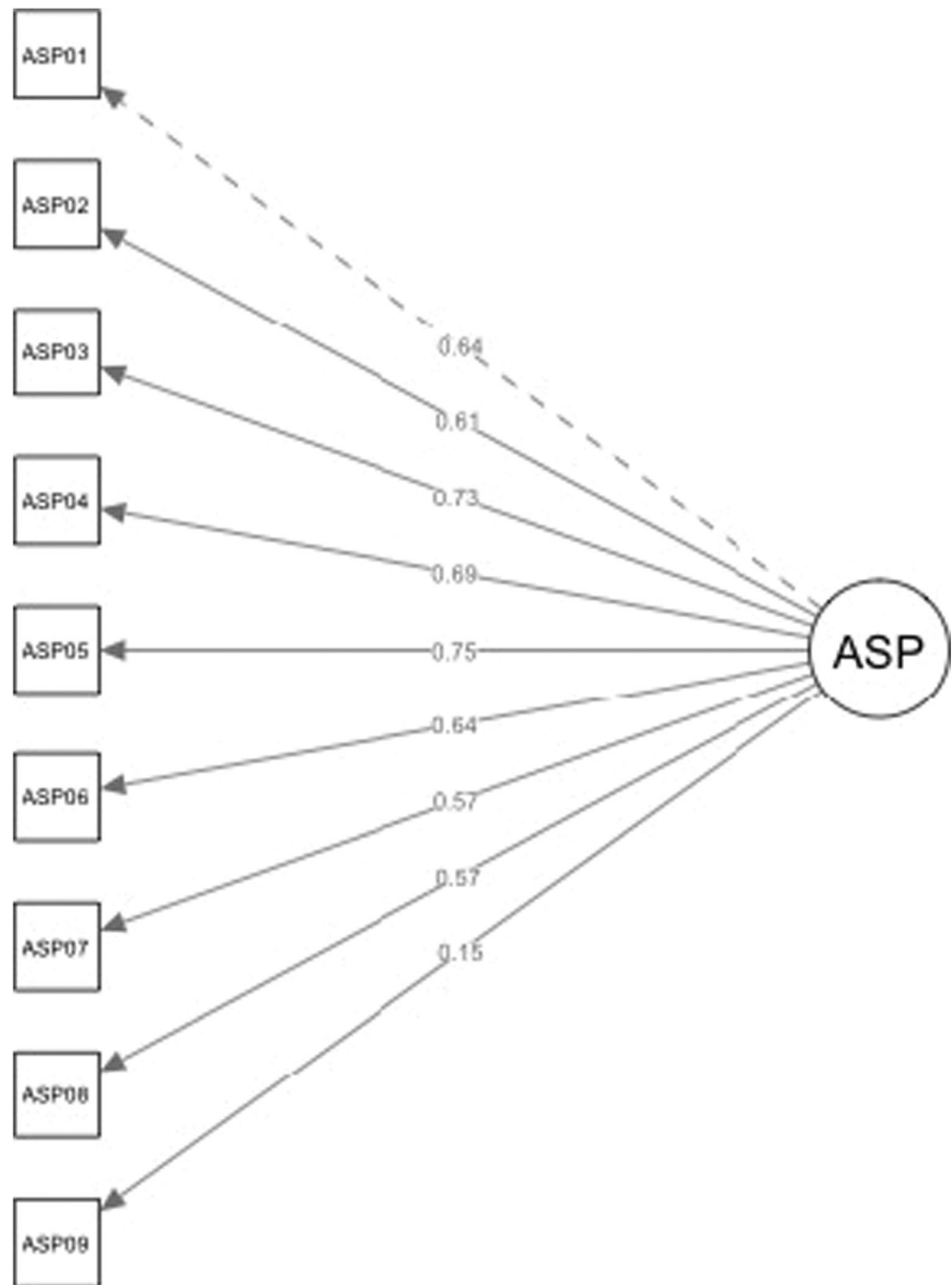

for the CAST and Fig. 3 for the SISS. Note that except the reversed items, the rest of them loaded adequately to their predetermined factors of each measure. The reversed item for the ASP is the number 9 ("I would not purposely hurt anybody, even if I didn't like them"), the items 6 and 16 for the CAST ("I would never purposely humiliate someone" and "There's way too much violence in sports") and the item number 3 for the SISS ("I wouldn't intentionally hurt anyone.").

Discussion

The main objective of this study was to assess the psychometric properties of the Spanish versions of the three main everyday sadism measures (i.e. the SISS, the CAST, and the ASP). The confirmatory factor analyses found a good fit for the three proposed models, meaning that the theorized factor structure of the Spanish measures are equal to the original ones (Buckels & Paulhus, 2013; O'Meara et al., 2011; Plouffe et al., 2017), as well as equivalent to other studies conducted

Fig. 2 Factor structure of the Spanish version of the CAST as obtained with confirmatory factor analysis
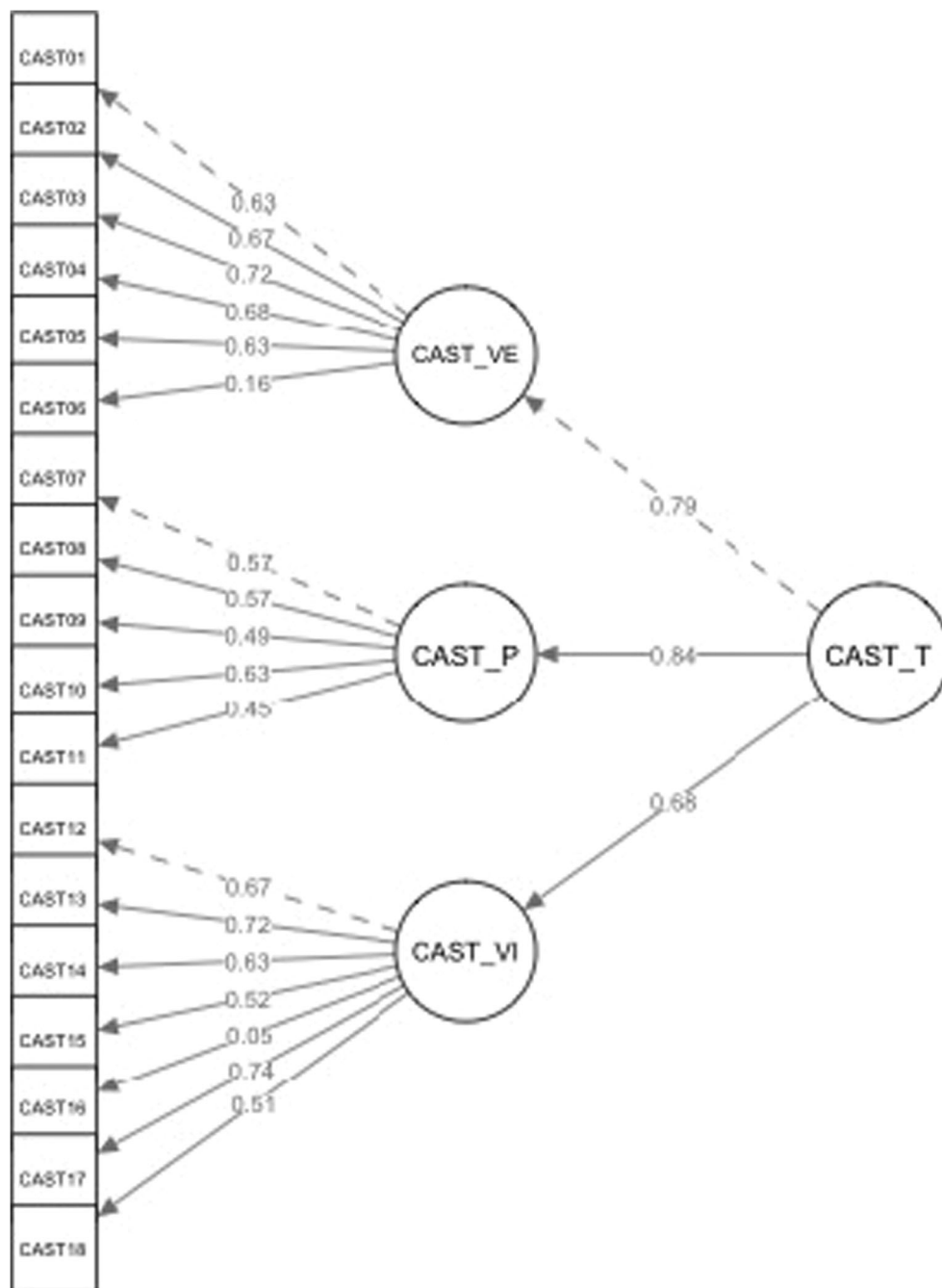

with different populations (Dinić et al., 2020; Kowalski et al., 2019; Min et al., 2019).

It is also necessary to remark that the factor loadings for all the reversed items; one item in the ASP, two items in the CAST and one item in the SISS; were considerably low (< .30). These factor loadings concerning the same reversed items has also been found in previous investigations (Dinić et al., 2020; Plouffe et al., 2017). Notwithstanding these small loadings, we do not encourage to remove them in order to allow cross-cultural comparisons.

Internal consistencies for the three Spanish versions of the instruments are from acceptable to good range, results in line with previous studies reporting alpha values of the scales (e.g., Buckels et al., 2019; Kowalski et al., 2019; O'Meara et al., 2011). Regarding the CAST subscales, similar to its predecessor the VAST, it reports lower subscales reliabilities, being the lowest the one measuring physical sadism (Buckels et al., 2013; Dinić et al., 2020).

Following Foulkes (2019) advise, we conducted gender analyses to observe differences between males and females in the different sadism scales. Our results show that males score

Fig. 3 Factor structure of the Spanish version of the SISS as obtained with confirmatory factor analysis
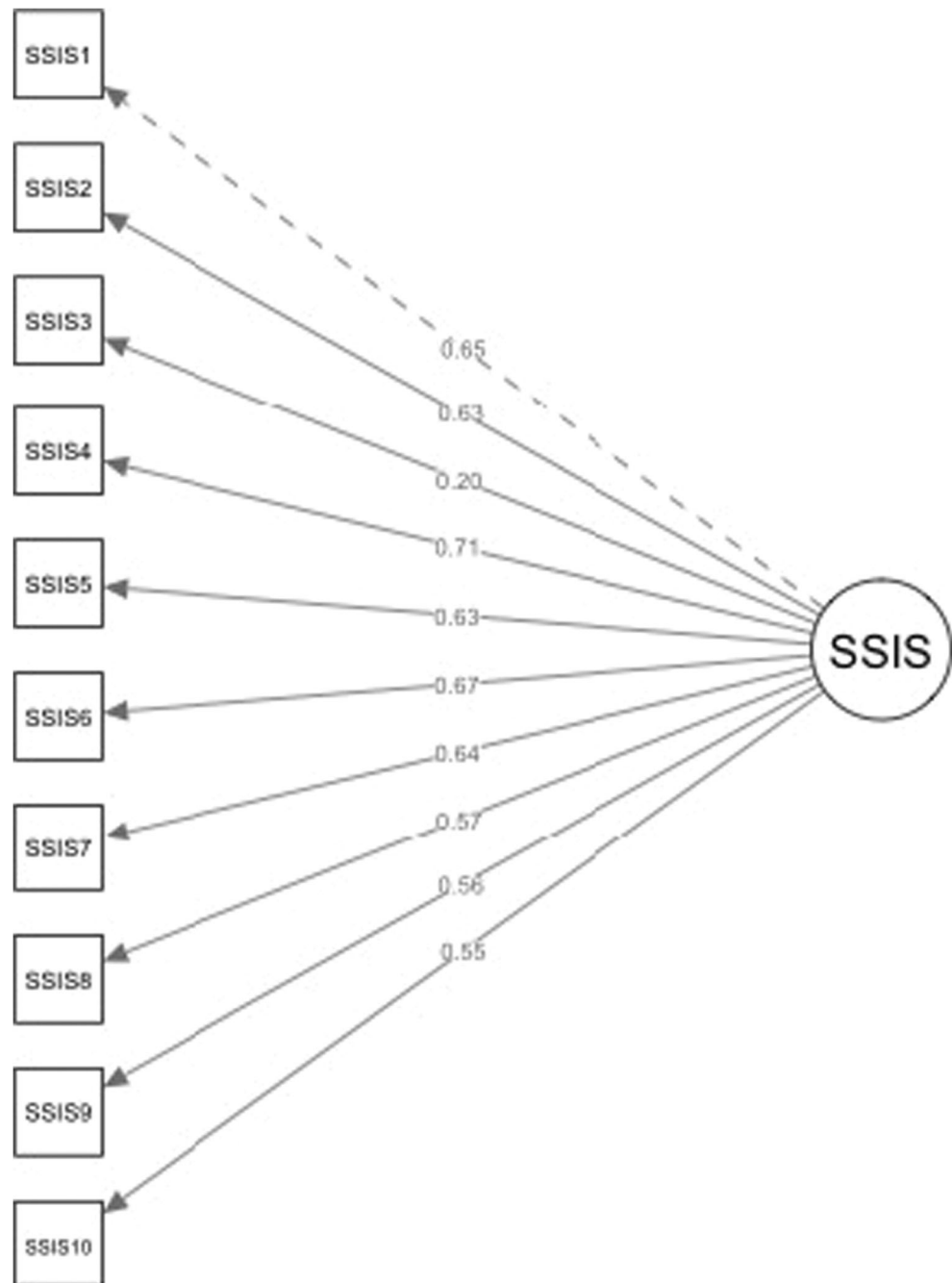
significantly higher in the three scales than females. This conception of sadism as a trait more featured by men, goes in line with Kowalski et al. (2019) and Plouffe et al. (2017) investigations, but not with O'Meara et al. (2011) when assessing the psychometric properties of the SISS. These gender differences are convergent with the ones found in the Dark Triad traits in this study and in previous ones (e.g., Pineda et al., 2018).

Regarding the links with the Dark Triad of personality and the three measures of everyday sadism, positive connections with the three traits were reported. This result was totally expected since now everyday sadism is part of the Dark Tetrad (Chabrol et al.,

2009) due to the way this construct is related with the other three Dark traits (Book et al., 2016; Buckels et al., 2013; Tortoriello et al., 2019). Although all the correlations between the Dark Triad traits and sadism were significant and positive, narcissism was the least related trait to the three sadism scales, being this difference bigger for vicarious sadism from the CAST, this same result has also been found in previous studies (e.g., Book et al., 2016; Dinić et al., 2020; Min et al., 2019). This low correlation might be due to narcissist necessity to be the center of attention and the ones getting the credits of their acts, thus preferring to be the ones inflicting the pain and not enjoying so much seeing it

(Raskin & Hall, 1981). In the same way, our results concerning the negative associations between the HEXACO traits and everyday sadism were similar to previous investigations (Book et al., 2016; Dinić et al., 2020; Plouffe et al., 2019). It is also relevant to give some attention to the negative correlations between honesty-humility and agreeableness HEXACO traits with those composing the Dark Triad, because these results are convergent with previous literature involving the Dark core of personality that is deeply related with antisocial behaviors (Hodson et al., 2018; Lee et al., 2013; Lee & Ashton, 2014; Moshagen, Hilbig, & Zettler, 2018; Muris, Otgaar, Meesters, Papasileka, & Pineda, 2020).

Concerning the measurement of the everyday sadism construct in different cultures, it remains stable along various societies (Dinić et al., 2020; Kowalski et al., 2019; Min et al., 2019). In this sense, and according to our results, and as stated before, gender differences show similarities across cultures and across measures, being males the ones displaying higher punctuations in the everyday sadism construct (Kowalski et al., 2019; Plouffe et al., 2017). Furthermore, our results present similarities in the construct scoring tendencies through the different societies, being the CAST the one obtaining the higher punctuations followed by the ASP and finally the SISS (Min et al., 2019; Plouffe et al., 2017). This recurrent difference might be due the way the different definitions assess the construct. Where for example the CAST (the one with higher punctuation tendencies) gives more weight to the vicarious and verbal components of the sadism construct, being these two more socially acceptable than the physical one and hence obtaining higher scores (Buckels & Paulhus, 2013; Plouffe et al., 2017, 2019).

To our knowledge, until the date, this is the first study to translate and after, to explore the psychometric properties of the Spanish versions of the three everyday sadism scales. Although the three of them present similar good psychometric properties, each of them captures the trait of everyday sadism in a different way. While the ASP and the SISS with a reduced number of items allow to cover Sadism in an unidimensional way, the CAST with 18 items gives a bit more detailed description of the construct. Furthermore, the ASP with one dimension contemplates a complex definition of everyday sadism, and also allows this measure to be added easily to the Short Dark Triad (SD3; Jones & Paulhus, 2014), assessing the Dark Tetrad of personality (Chabrol et al., 2009; Plouffe et al., 2019).

Limitations and Conclusion

Our research does not come without limitations. First, our sample was mainly formed by Spanish women, which might be a problem for the generalization to other Spanish speakers. Second, all of the measures were self-reported which may lead to biased responses due to social desirability, something highly connected with Dark personalities (Pineda et al., 2018). Moreover, it is also remarkable, that participants online answered to 5 different instruments, including the HEXACO-60. This might lead into fatigue, distorting some answers.

In conclusion, the results displayed by the three Spanish versions of the sadism scales in this study indicate that the psychometric properties evaluated are in line with the original instruments and other translations. This makes possible to conduct investigations using a sadism measures with Spanish speaking samples, allowing researchers to choose the scale they prefer the most to measure sadism attending to objective differences.

Declarations

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