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Psychometric properties of the differentiated process scale of self-forgiveness in Spanish population

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ABSTRACT

Self-forgiveness is essential for repairing personal harm, yet its complexity has hindered the development of instruments that assess it as a process. Moreover, few measures have been translated into Spanish. Understanding self-forgiveness requires distinguishing genuine forgiveness, which involves emotional resolution, from maladaptive responses such as self-punishment or avoidance. This study aimed to adapt the Differentiated Process Scale of Self-Forgiveness for the Spanish population and examine its psychometric properties. A total of 474 participants (321 women, 63.5%; 153 men, 36.5%) aged 18 to 76 years (M = 38.52; SD = 13.55) completed the adapted scale. Exploratory factor analysis revealed a three-factor structure: Genuine Self-Forgiveness, Self-Punishment, and Pseudo-Forgiveness. Confirmatory factor analysis supported an 12-item version with good fit indices, reliability, and validity. Criterion validity analyses showed that Genuine Self-Forgiveness and Self-Punishment correlated positively with Desire for Reconciliation and Perceived Personal Responsibility, highlighting their relevance in forgiveness-related processes. In contrast, Pseudo-Forgiveness showed negative correlations, suggesting an avoidance function that hinders emotional resolution. These findings emphasize the multidimensional nature of self-forgiveness and the need to differentiate its adaptive and maladaptive components. The adapted scale demonstrated strong psychometric properties and offers a valuable tool for research on forgiveness, emotional regulation, and restorative justice in Spanish-speaking contexts.

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Introduction

Self-forgiveness is a dynamic and multidimensional process characterized by its great complexity, as it involves cognitive aspects, such as the recognition of responsibility; emotional aspects, where the regulation of guilt and shame are some of the processes involved; and attitudinal aspects, as changes in future actions are expected (Griffin, 2017; Pelucchi et al., 2017; Woodyatt et al., 2017). More than a goal, self-forgiveness is understood as a continuous process that goes through various stages. One of the most current definitions refers to a moral process that includes the recognition of responsibility for an action, the acceptance of its consequences, the maintenance of self-esteem, and the promotion of positive changes (Kim et al., 2022). From this perspective, self-forgiveness should originate from self-love as a virtue, avoiding vanity or self-centeredness, and implies a gradual shift towards greater concern for both personal well-being and that of others, thus differentiating itself from self-esteem and narcissism.

Wenzel et al. (2012) argue that self-forgiveness is better understood as the process by which a person breaks the negative link between taking responsibility and positive self-esteem. In 2017, Woodyatt, Wenzel, et al. presented two potential pathways or processes for individuals to achieve self-forgiveness. One is hedonic, focused on reducing self-punishment (self-condemnation) and increasing benevolence towards oneself (self-compassion, self-love). The second process is eudaimonic, where aggression is addressed through the identification and reaffirmation of violated values, resulting in a more complex process that considers underlying psychological needs, such as repairing harm and personal growth. From the eudaimonic perspective, the authors suggest that true self-forgiveness seems to be achieved through the affirmation of violated values, leading to a greater desire for reconciliation. They recognize that self-forgiveness involves taking responsibility for having acted wrongly, which is a psychologically uncomfortable and painful process, leading to the experience of negative emotions and requiring significant effort to work through each of them (Fisher & Exline, 2006; Thompson et al., 2005; Woodyatt & Wenzel, 2013a).

Another aspect that adds to the complexity of this phenomenon is the differentiation between two types of forgiveness. On the one hand, there is dispositional forgiveness, which is understood as a personality trait that demonstrates a general capacity to forgive oneself over time and in various situations (Hall & Fincham, 2005). On the other hand, there is specific forgiveness, which is described as behavior oriented towards specific transgressions where the person has harmed others or themselves (Hall & Fincham, 2005; Prieto-Ursúa & Echegoyen, 2015). Some authors have criticized this distinction (Kim & Enright, 2016). Roberts (1995) points out that dispositional forgiveness is different from the 'act or process of forgiveness' because it characterizes the person with the virtue of forgiving. In this sense, forgiveness as a moral virtue is a skill that grows over time as it is practiced in people and situations (where specific contexts are still taken into account), so that one can grow and mature in the capacity to forgive, rather than possessing or being born with this virtue (Kim & Enright, 2016).

One of the consequences of the complexity of this construct is the difficulty in developing precise measurement instruments that allow for rigorous and consistent evaluation of self-forgiveness. While its conceptual richness adds depth to the field of study, it also complicates its proper operationalization, creating challenges for its empirical evaluation. As a result, research on self-forgiveness may be limited by the lack of reliable and valid psychometric instruments that reflect this complexity (Prieto-Ursúa, 2017). Among the difficulties observed in measuring this construct, we mainly find a traditional tendency to evaluate self-forgiveness as an outcome, without analyzing the process that leads to such an outcome (Cornish & Wade, 2015; Woodyatt et al., 2017; Woodyatt & Wenzel, 2013a). When the measurement of self-forgiveness focuses on the reduction of negative affect or feelings and the presence of positive ones towards oneself, it does not allow us to know whether the outcome has been achieved through a complete, healthy, and adaptive process or through a defensive and denial process.

Another observed difficulty lies in the fact that some studies have attempted to measure this construct using both hypothetical and real situations. However, in the case of real situations, factors such as forgetting or distortion have not been considered, which could influence the results (Paleari et al., 2010; Prieto-Ursúa, 2017). Additionally, it has been noted that the construction and validation of instruments have mostly been carried out with samples composed of university students (Prieto-Ursúa, 2017), which could bias or restrict the generalization of the findings.

Currently, various instruments have been developed to obtain data on self-forgiveness in the population. Among the most widely used, we highlight the Heartland Forgiveness Scale (HFS) developed by Thompson et al. (2005), which has been used in non-clinical populations and allows for measures of dispositional forgiveness towards oneself, others, and situations; this scale has been translated and validated in different populations, including the Spanish one (Gallo-Giunzioni et al., 2020). The Two-Factor Self-Forgiveness Scale by Griffin (2017) is a measure that attempts to directly capture the distinction between accepting responsibility and increasing self-esteem as a dual-process model. The Enright Self-Forgiveness Inventory (ESFI), an instrument that understands self-forgiveness as a moral virtue, is a scale that evaluates affect, thoughts, and behaviors, whether negative or positive, towards oneself (Kim et al., 2022). This instrument has also been translated into multiple languages, including Spanish (Molinero et al., 2023). Finally, we highlight the Differentiated Process Scale of Self-Forgiveness by Woodyatt and Wenzel (2013a), which conceptually distinguishes between three possible responses to oneself after an interpersonal transgression: self-punishment, pseudo self-forgiveness, and genuine self-forgiveness. These authors emphasize the importance of measuring the process that drives self-forgiveness, rather than merely conceptualizing it as the presence of positive feelings towards oneself after an offense.

Although some scales have attempted to address this weakness by measuring self-forgiveness only as an outcome, we observe other limitations that interfere with the robustness of the construct's measurement. More specifically, we can mention that the ESFI by Kim et al. (2022), while measuring self-forgiveness as a process, primarily conceives forgiveness as moral growth without differentiating between authentic and evasive forgiveness. Meanwhile, the Griffin (2017) has been considered overly simplified, preventing it from capturing the nuances of the self-forgiveness process. In contrast, the Differentiated Process Scale of Self-Forgiveness (Woodyatt & Wenzel, 2013a) is more precise and comprehensive, as it distinguishes between genuine forgiveness and guilt evasion, thus avoiding misinterpretations.

Woodyatt and Wenzel (2013a) showed that self-forgiveness measures had largely focused on obtaining information about the repair of positive self-esteem. Therefore, they developed a measure of genuine self-forgiveness as a process, emphasizing the acceptance of responsibility and differentiating self-forgiveness from pseudo self-forgiveness.

The results obtained by Woodyatt and Wenzel (2013a) suggest that when instruments simply focus on the final state of benevolent attitudes towards oneself as indicators of self-forgiveness, they may not capture the different ways in which offenders regain their self-esteem; in this sense, they may show responses associated with pseudo self-forgiveness processes and be mistaken for genuine self-forgiveness. From this perspective, it is emphasized that the individual must recognize that their behavior was wrong and take responsibility or guilt for their actions to achieve genuine self-forgiveness (Woodyatt & Wenzel, 2013b). This assumption of responsibility is key, and its absence likely suggests false forgiveness.

Within the study of self-forgiveness as a process, as has been outlined, there are two variables that also play a key role and should be understood as such. The first is the perceived personal responsibility of the offender, where genuine self-forgiveness by definition requires the perception of personal responsibility for the offense. This variable is associated with the implementation of reparative strategies that mobilize the offender towards genuine forgiveness (Fisher & Exline, 2006; Suzuki & Jenkins, 2022; Woodyatt et al., 2017).

On the other hand, the desire for reconciliation is a variable closely related to the process of self-forgiveness, although both concepts are distinct. While interpersonal forgiveness can occur without the need to restore the relationship with the offender, genuine self-forgiveness requires an internal reconciliation with oneself, where the individual takes responsibility for their action and experiences a positive change in their self-concept (Hall & Fincham, 2005; Word et al., 2023). In this sense, the desire for reconciliation may arise as a consequence of the self-forgiveness process, as reducing guilt and self-condemnation can make the individual more open to re-establishing ties with those they have harmed (Griffin, 2017; Pandey et al., 2020; Word et al., 2023). However, this desire is not a requirement for self-compassion and the restoration of moral identity, as self-forgiveness focuses on personal reconstruction rather than repairing an external relationship (Woodyatt & Wenzel, 2013a). Thus, although self-forgiveness can facilitate reconciliation with others, its primary goal is the individual's internal healing.

Given the relevance of self-forgiveness in various psychological processes and its impact on human functioning, it is essential to have tools that allow for its precise evaluation. However, to date, the Differentiated

Process Scale of Self-Forgiveness (Woodyatt & Wenzel, 2013a), designed to distinguish between genuine forgiveness, pseudo forgiveness, and self-punishment, has not been validated in the Spanish population, limiting its application and development in Spanish-speaking contexts. Consequently, this study aims to fill this gap by validating this scale. Although there are other instruments to evaluate self-forgiveness, as mentioned earlier, none of them allow for such precise differentiation between true and false forgiveness.

Method

Participants

The main sample consisted of 474 participants, all Spanish, of whom 63.5% were women (n = 321) and 36.5% were men (n = 153), with ages ranging from 18 to 76 years (M = 38.52; SD = 13.55). Regarding their marital status, 42% were single (n = 199), 39% were married (n = 185), 8% were in a domestic partnership (n = 38), 6% were divorced/separated (n = 28), 4% indicated they had a partner (n = 19), and 1% were widowed (n = 5). In terms of educational level, 77% had undergraduate or master's degrees (n = 365), 22% had vocational training (n = 104), and 1% indicated another level of education (n = 5). Minors under 18 years old and participants who had incompletely answered the forms were excluded.

Instruments

Sociodemographic data

Variables such as sex, age, marital status, and educational level were analyzed to characterize the sample.

Differentiated process scale of self-forgiveness by Woodyatt and Wenzel (2013a)

The instrument consists of 20 items distributed across three subscales that measure Self-Forgiveness, Self-Punishment, and Pseudo Self-Forgiveness. A 7-point Likert scale is used (0 = 'completely disagree', 6 = 'completely agree'). High scores on the subscales indicate higher levels in each of the measured variables. The Genuine Self-Forgiveness subscale (items 1–7) evaluates reflection and learning after a mistake; the Self-Punishment subscale (items 8–14) measures self-condemnation and suffering; and the Pseudo Self-Forgiveness or Self-Exoneration subscale (items 15–20) captures attitudes of justification or externalization of guilt. Woodyatt and Wenzel (2013a) reported adequate reliability for the subscales: Genuine Self-Forgiveness (α = 0.85), Pseudo Self-Forgiveness (α = 0.81), and Self-Punishment (α = 0.85).

Perceived personal responsibility scale by Fisher and Exline (2006)

The instrument consists of five items, including direct statements ('I feel guilty for what I did') and indirect ones ('I really did nothing wrong'). A 10-point Likert scale is used (1 = 'completely disagree', 10 = 'completely agree'); high scores indicate greater perceived responsibility. Fisher and Exline (2006) reported acceptable reliability (α = 0.83). Similarly, in the present study, a Cronbach's alpha coefficient of 0.83 was obtained, indicating satisfactory internal consistency of the sample.

Desire for reconciliation scale by Woodyatt and Wenzel

The instrument evaluates the desire for reconciliation in those who have committed an offense through four items, such as 'I want to reconcile with this person' and 'I want the relationship between this person and me to improve'. A 7-point Likert scale is used (1 = 'strongly disagree', 7 = 'strongly agree'), where higher scores indicate a greater intention to repair the relationship. Woodyatt and Wenzel reported adequate reliability (α = 0.82). In the present study, a Cronbach's alpha coefficient of 0.89 was obtained for this scale, indicating a high level of internal consistency within the sample.

Procedure

The scale was subjected to the translation-back translation process following Brislin's (1970) procedure. Three bilingual psychologists independently translated the scale into Spanish, and after comparing their

versions, a single version was agreed upon. Then, two different bilinguals translated this version back into English to verify its correspondence with the original before establishing the final version.

A snowball sampling method was used, and an online protocol was administered via Google Forms. This included informed consent in accordance with Organic Law 5/2018, a sociodemographic questionnaire, and the Self-Forgiveness, Perceived Personal Responsibility, and Desire for Reconciliation scales. Participants were informed about the study's objectives, data confidentiality, and instructions for completion. Participation was voluntary. No missing values were recorded, as the online data collection protocol configured all questions as mandatory.

Data analysis

An item analysis was conducted, obtaining mean, standard deviation, and homogeneity indices, as well as skewness and kurtosis to assess normality. Pearson correlations were calculated between the items to assess the relationships among them. Subsequently, the total sample (n = 474) was randomly divided into two equivalent subsamples (n1 = 237 and n2 = 237). With the first sample, the underlying factor structure of the items was explored through Exploratory Factor Analysis (EFA), and with the second sample, this structure was confirmed through Confirmatory Factor Analysis (CFA) (Brown, 2006). Regarding sample adequacy, the criteria for considering a sample of 150–200 cases in the EFA were met, thus ensuring precise coefficient estimates (Lloret-Segura et al., 2014).

Factor extraction was based on Kaiser's rule and Cattell's criterion. The first step of the EFA was to evaluate the criteria ensuring the appropriateness of the EFA, the Kaiser-Meyer-Olkin (KMO) test indicating the adequacy of the data for factor analysis, and Bartlett's test of sphericity assessing whether there is sufficient correlation among the variables for the EFA to be appropriate. In addition, individual measures of sampling adequacy (MSA) were calculated. The EFA was conducted using the minimum squares extraction method, recommended when the normality assumption is not met (Lloret-Segura et al., 2014), and oblique rotations (direct oblimin) were performed. The communalities of the items from the extracted factor models were calculated.

To evaluate the CFA solution, the following goodness-of-fit indicators were used: the normal theory weighted least squares (NTWLS) method, chi-square test, non-normed fit index (NNFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR), which allow for the assessment of the confirmatory model fit (Ferrando et al., 2022). The cutoff criteria used are presented in Table 1.

To assess discriminant validity among the factors identified in the confirmatory model, the Fornell-Larcker criterion and the Heterotrait-Monotrait Ratio (HTMT) were applied.inally, criterion validity (convergent and discriminant) was analyzed using Pearson's correlation coefficient, following the interpretation guidelines established by Schober et al. (2018). The analyses were conducted with IBM SPSS Statistics 30.0 for descriptives, EFA, and reliability, and with IBM SPSS Amos 30.0 for CFA.

Results

Item analysis

The item analysis showed that most items met the skewness (<2) and kurtosis (<7) criteria of Finney and di Stefano (2006), except for items 9, 10, 11, and 12, which presented skewness between 2.15 and 3.23, and items 11 and 12, which had kurtosis between 8.88 and 11.54 (see Table 2).

The initial homogeneity index analysis showed that items 15 and 20 had negative and near-zero values, with Cronbach's alpha of .666. After recoding, the alpha increased to 0.721, but items 17 and 19

Table 1. Cutoff criteria for goodness-of-fit indices.

Fit index	Acceptable fit	Excellent fit
NNFI	≥ 0.90	≥ 0.95
CFI	≥ 0.90	≥ 0.95
RMSEA	≤ 0.08	≤ 0.05
SRMR	≤ 0.08	≤ 0.05

Table 2. Item analysis statistics.

Item	Mean	SD	Asymmetry	Kurtosis	Hc_j 1	Hc_j 2	Hc_j 3	Hc_j 4
1	4.88	1.54	−1.51	1.63	.409	.543	.570	.503
2	5.14	1.31	−1.95	3.95	.375	.512	.558	.542
3	3.89	1.81	−.64	−.53	.440	.506	.497	.449
4	4.26	1.71	−.97	.15	.469	.557	.530	.472
5	4.88	1.38	−1.49	2.00	.202	.273	.222	.157
6	4.61	1.50	−1.21	1.05	.342	.456	.515	.515
7	4.70	1.52	−1.34	1.37	.376	.480	.528	.501
8	1.08	1.44	1.36	1.13	.292	.317	.341	.361
9	.73	1.27	2.15	4.52	.309	.379	.310	.286
10	.54	1.12	2.56	6.61	.382	.407	.386	.376
11	.41	1.02	3.22	11.29	.384	.419	.378	.355
12	.37	.95	3.36	12.49	.355	.390	.397	.380
13	1.48	1.33	1.06	.27	.383	.417	.343	.305
14	1.86	1.80	.64	−.68	.275	.308	.338	.334
15	1.36	1.75	1.21	.44	−.002	.142	.303	.612
16	3.77	2.06	−.56	−.96	.139	.044	−.198	.348
17	2.17	1.91	.50	−.83	.070	−.155	.276	.299
18	3.02	1.87	−.11	−.96	.139	.363	.552	.417
19	3.04	2.21	−.06	−1.43	.056	−.058	.161	.249
20	1.79	1.63	.69	−.61	−.007	.084	.251	.198

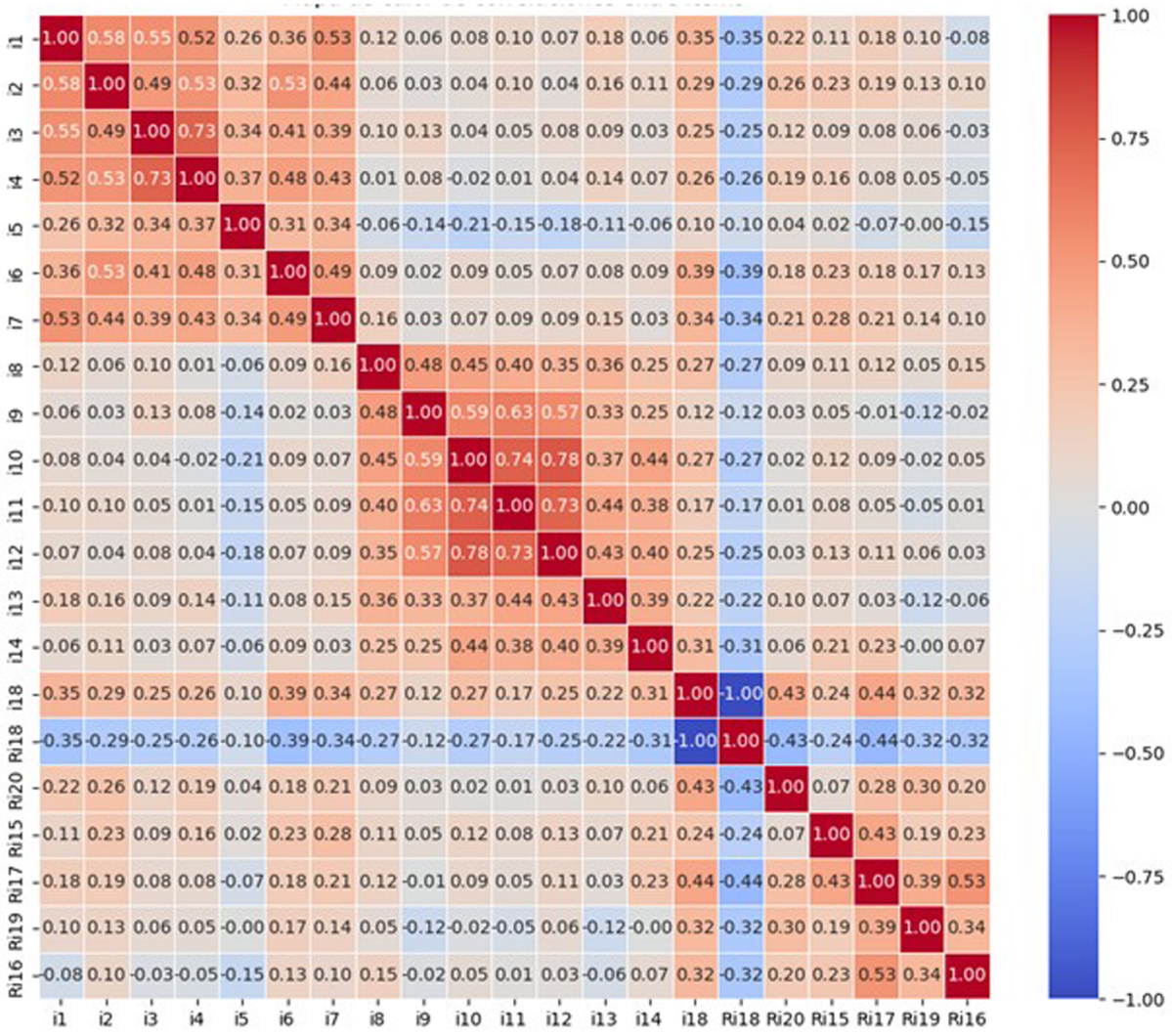

Figure 1. Heatmap of the correlation matrix between items.

presented negative values below .17. Both items were recoded, and the analysis was repeated, obtaining a Cronbach's alpha of 0.777, with item 16 being negative this time.

Item 16 was recoded again, and the analysis was repeated. The homogeneity indices obtained were positive and above 0.170, except for item 5 (Hj = 0.157), which was retained due to its minimal impact on reliability. The Cronbach's alpha was 0.806, and the Omega was 0.768.

Subsequently, Pearson correlations were calculated between the items of the scale to examine the relationships among them. The correlation matrix revealed moderate to high associations between several items, suggesting adequate homogeneity. A heatmap is included to visualize these relationships (see Figure 1).

Exploratory Factor analysis

Bartlett's test of sphericity was $\chi^2 = 2065.26$ (df = 190; $p < 0.001$) and the KMO test was 0.818, showing the adequacy of the data for factor analysis (Lloret-Segura et al., 2014). All included items showed MSA values above 0.70, except for item 16 (MSA = 0.665), supporting their suitability for exploratory factor analysis (Lorenzo-Seva & Ferrando, 2021) (see Table 3).

The factor analysis revealed a four-factor structure freely extracted without constraints, using Kaiser's criterion for factor extraction (eigenvalues greater than 1) and identifying the inflection point following Cattell's scree test (see Figure 2).

Table 3. Item adequacy for factor análisis.

Item	MSA	Initial h^2
1	.821	.554
2	.855	.530
3	.817	.599
4	.818	.624
5	.849	.316
6	.879	.447
7	.874	.458
8	.78	.383
9	.831	.526
10	.811	.729
11	.872	.672
12	.807	.703
13	.781	.383
14	.824	.340
15	.785	.276
16	.665	.294
17	.737	.489
18	.859	.404
19	.747	.282
20	.745	.487

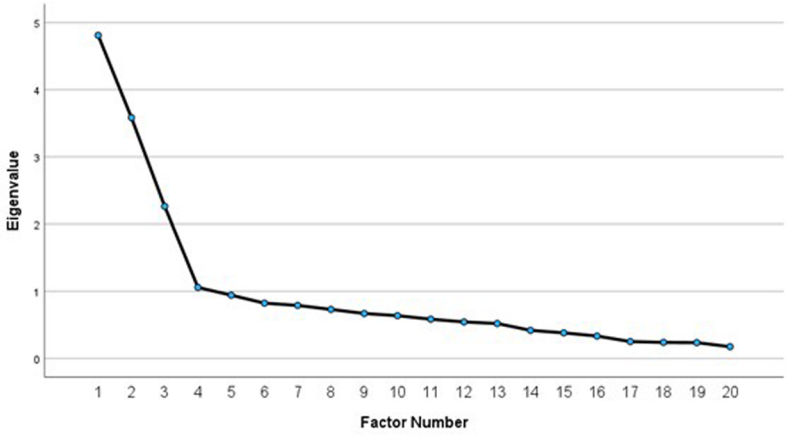

Figure 2. Scree plot of the exploratory factor analysis.

Table 4. Exploratory factor analysis structure.

	Structure 4 factors					Structure 3 factors			
Item	F 1	F 2	F 3	F 4	h^2	F 1	F 2	F 3	h^2
1	.725				.521	.725			.510
2	.722				.530	.723			.530
3	.748				.564	.747			.564
4	.802				.636	.802			.636
5	.535				.306	.532			.303
6	.648				.431	.647			.423
7	.633				.441	.632			.436
8		.532			.302		.529		.295
9		.697			.507		.691		.505
10		.853			.763		.855		.762
11		.817			.720		.818		.719
12		.818			.691		.820		.691
13		.537			.306		.536		.302
14		.486			.273		.489		.266
15				**−.**561	.393			.410	.198
16			.603		.303			.637	.293
17			.710	*−.523*	.635			.776	.611
18			.614		.415			.586	.430
19			.537		.395			.536	.202
20			.516		.560			.412	.496

Note: Inverse items are indicated in bold.

Table 5. Fit indices of the scales of the models tested using the CFA.

Version	$X^2(df)$	*p*	RMSEA	CFI	TLI	SRMR
Original Scale	459 (*167*)	<.001	.085	.822	.797	.086
Brief Scale	112 (*32*)	<.001	.10	.825	.753	.07
Portuguese Validation	276 (*116*)	<.001	.07	.873	.851	.07
Spanish Validation	87.7 (*51*)	<.001	.05	.95	.94	.04

Note: RMSEA = Root mean square error of approximation; CFI = Comparative fit index; TLI = Tucker-Lewis index; SRMR = Standardized root mean square residual.

These four factors explain 58.35% (Factor 1 = 24.06%; Factor 2 = 17.56%; Factor 3 = 11.60; Factor 4 = 5.12%). The structure is shown in Table 4. As can be seen, the last factor was made up of only three items, which also saturated factor 3. Regarding reliability, Factor 1 showed α = 0.86 Ω = 0.88; Factor 2 α = 0.82 Ω = 0.81; Factor 3 α = 0.72 Ω = 0.71 and Factor 4 α = 0.58 Ω = 0.62.

The items were assigned to the factors following the criterion of saturation greater than 0.40, especially relevant in samples of less than 300 participants (Lloret-Segura et al., 2014).

Due to the low variance explained by Factor 4, the small number of items loading on it—which also show cross-loadings on Factor 3—and the low Cronbach's alpha and Omega values, the factor analysis was repeated by forcing a three-factor structure to align with the original structure of the scale. These three factors explained 53.23% of the variance (Factor 1 = 21.58%; Factor 2 = 15.67%; Factor 3 = 8.59%). The resulting structure is presented in Table 4. Regarding reliability, Factor 1 showed α = 0.85, Ω = 0.85; Factor 2, α = 0.82, Ω = 0.82; and Factor 3, α = 0.73, Ω = 0.73.

Confirmatory factor analysis

After conducting the EFA, a CFA was performed to verify if the theoretical structure adequately fits the data from the Spanish population (n2 = 237). First, a CFA was conducted based on the structure of the original scale (Woodyatt & Wenzel, 2013a). As shown in Table 5, the results indicated that the solution did not fit the data adequately (χ^2 = 459, df = 167, *p* = 0.000, RMSEA = 0.085 [90% CI = 0.07, 0.09], CFI = 0.82, TLI = 0.79, SRMR = 0.086) (see Figure 3).

Second, a CFA was conducted to verify the structure of the brief scale designed by the same authors (Woodyatt & Wenzel, 2013a). The results showed that, although some fit indices improved (see Table 5), this solution did not fit the data adequately (χ^2 = 112, df = 116, *p* = 0.000, RMSEA = 0.10 [90% CI = 0.08, 0.112], CFI = 0.82, TLI = 0.75, SRMR = 0.07) (see Figure 4).

Third, a CFA was conducted to verify the brief structure of the Portuguese validation (Costa et al., 2021). The results showed that this solution, although improving some fit indices (see Table 5), also did

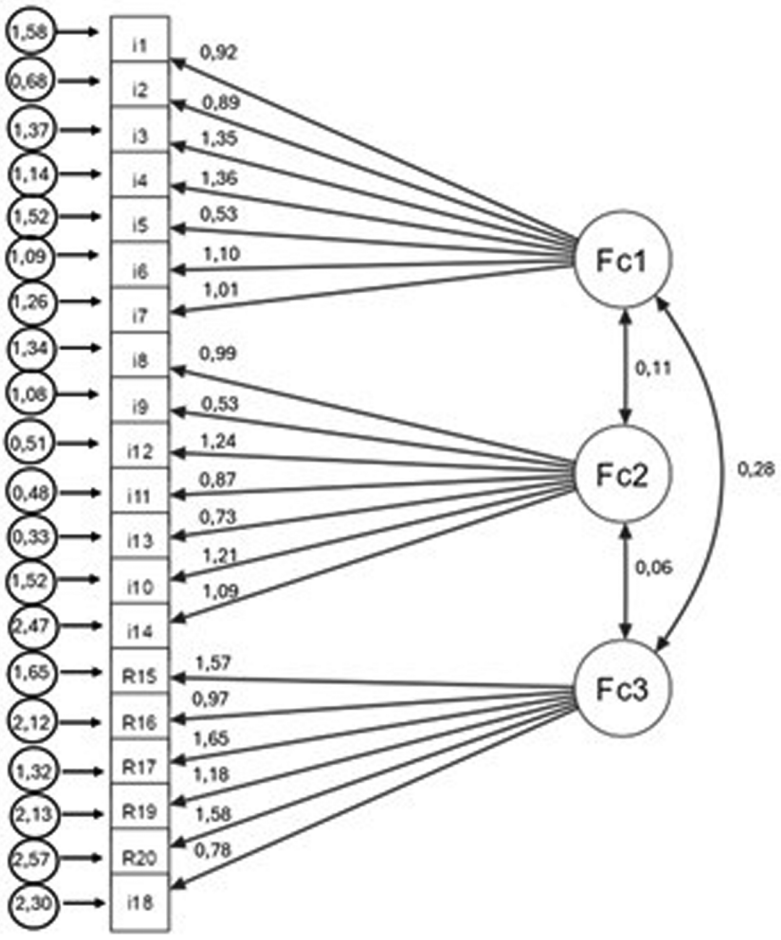

Figure 3. Resulting structure of the original scale.

not fit the data adequately ($\chi^2 = 296$, df = 116, $p = 0.000$, RMSEA = 0.08 [90% CI = 0.06, 0.09], CFI = 0.86, TLI = 0.83, SRMR = 0.07) (see Figure 5).

Following Worthington and Whittaker (2006), necessary changes in the factor structure were analyzed, and items with a modification index greater than 3 were removed, obtaining a factor structure with a good fit to the data (see Table 5) ($\chi^2 = 87.7$, df = 51, $p < 0.001$, RMSEA = 0.05 [90% CI = 0.01, 0.09], CFI = 0.95, TLI = 0.94, SRMR = 0.04).

In Figure 6 you can see the resulting structure after eliminating items 2, 4, 5, 6, 8, 13, 14, 16, according to the recommendations of Worthington and Whittaker (2006).

Once the resulting structure was defined, discriminant validity among the three identified factors was assessed (see Table 6). The square root of the AVE for each factor was greater than the inter-factor correlations, indicating adequate differentiation among the factors. Additionally, the HTMT values between the three factors were below 0.85. Both results indicate satisfactory discriminant validity.

Table 7 is presented below, which summarizes the items included in each of the versions that have been tested.

Table 8 presents the reliability indices of each factor identified in Figure 6, calculated through the Cronbach's alpha coefficient and the Omega coefficient.

Criterion validity analysis

Regarding the criterion validity of the instrument, as shown in Table 9, the Genuine Self-Forgiveness subscale correlated weakly, positively, and significantly with the Desire for Reconciliation, and moderately, positively, and significantly with the Perceived Personal Responsibility scale. The Pseudo Self-Forgiveness subscale showed a significant, negative, and weak correlation with the Desire for

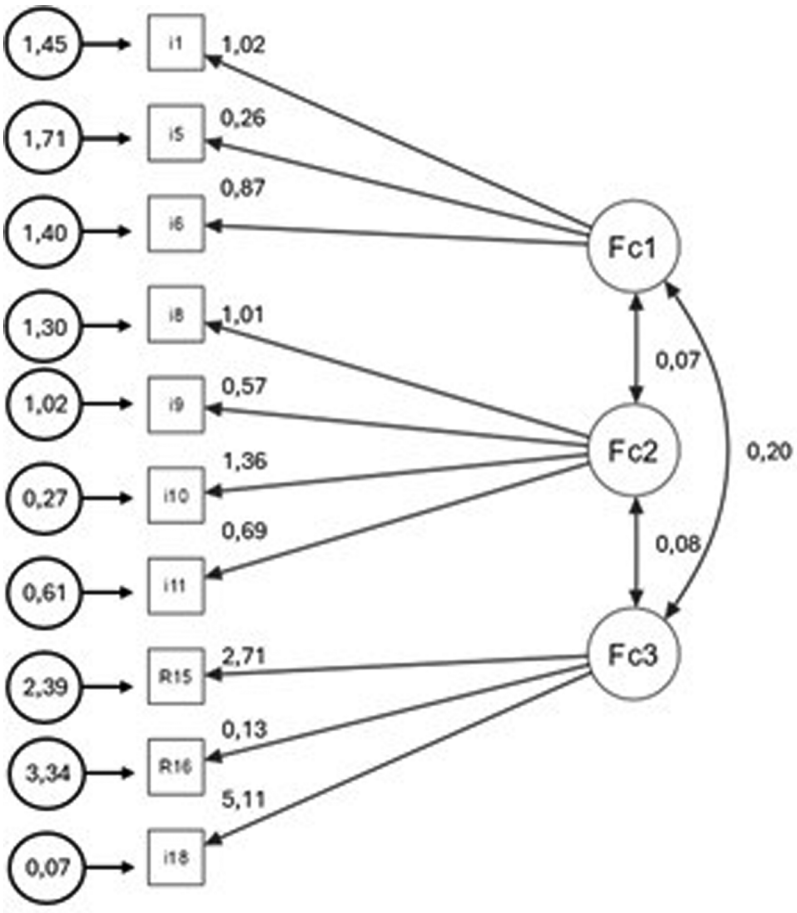

Figure 4. Resulting structure of the brief scale.

Reconciliation, and a moderate correlation with Perceived Personal Responsibility. Finally, the Self-Punishment subscale exhibited weak, positive, and significant correlations with both the Desire for Reconciliation and Perceived Personal Responsibility. These classifications follow the guidelines proposed by Schober et al. (2018), who define correlations between 0.10 and 0.39 as weak, and those between 0.40 and 0.69 as moderate.

Discussion

Self-forgiveness has become an increasingly explored topic in the scientific field, although its conceptualization remains a challenge, which has led to a paucity of measures that address this construct as a process, rather than considering it an end state or outcome (Griffin, 2017; Woodyatt et al., 2017; Woodyatt & Wenzel, 2013a). The Differentiated Self-Forgiveness Process Scale by Woodyatt and Wenzel (2013a) is one of the few instruments that measures self-forgiveness, understanding it as a process, and also differentiates it from possible responses that do not evidence true self-forgiveness. Consequently, the main objective of this study was to adapt and analyze the psychometric properties of the Differentiated Self-Forgiveness Process Scale by Woodyatt and Wenzel (2013a) in the Spanish population where, in addition, interest and research in this area of psychology are constantly growing, and there are still few validated instruments adapted to this population (Gallo-Giunzioni et al., 2020; Molinero et al., 2023).

The unconstrained EFA revealed a four-factor structure, in contrast to the original three-factor structure proposed by Woodyatt and Wenzel (2013a). However, given that the fourth factor presented a significant loading on the third factor and was only composed of three items, it was decided to force the structure to three factors. As a result, the scale was made up of the factors of Genuine Self-Forgiveness, Self-Punishment and Pseudo Self-Forgiveness.

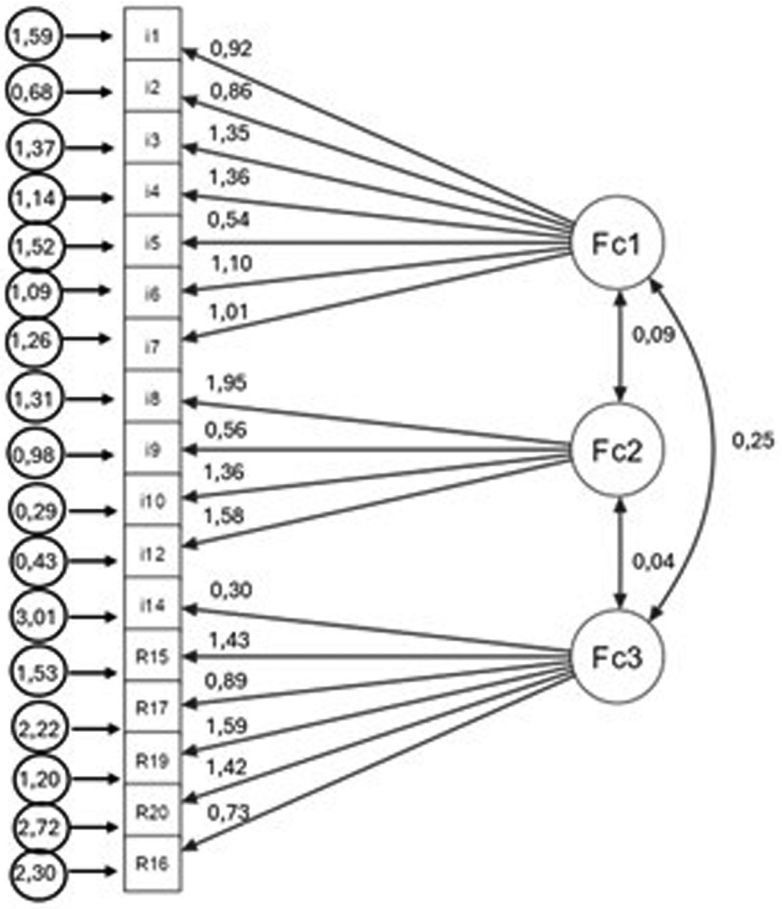

Figure 5. Resulting structure from the Portuguese validation.

Regarding the CFA, the general structure of the Spanish version was comparable to the English version (Woodyatt & Wenzel, 2013a). However, as often happens in translations between different cultures, some items were not adequately adapted to our sample (Beaton et al., 2000). As has been observed in studies of adaptation of this instrument to Latin cultures, it was convenient to discard eight items, ultimately resulting in a similar structure. (Costa et al., 2021). The items were eliminated for several reasons: possible redundancy problems, in which some items address the same concept more clearly and precisely than others, or comprehension difficulties in our population that generate erroneous or inconsistent responses. Of the eight items eliminated for the resulting version in the present study, three of them coincide with those also excluded in the adaptation to the Portuguese population (Costa et al., 2021) and that also did not allow an adequate adjustment of the scale.

Concerning the internal consistency of the scale, this study obtained Cronbach's alpha values between 0.72 and 0.79 for each of the Factors. Although the values reported by the original authors of the instrument (Woodyatt & Wenzel, 2013a) are slightly higher, the values obtained in this study are satisfactory considering that each Factor or subscale consists of four items, which is a smaller number compared to the original version, potentially affecting reliability indices (De Vellis, 2012; Nunnally & Bernstein, 1994). Through the Omega coefficient, values between 0.73 and 0.80 were obtained, which are similar to those obtained by Costa et al. (2021), who conducted a cultural adaptation of this instrument to the Portuguese population.

Regarding criterion validity, it was found that, as expected, the Genuine Self-Forgiveness and Self-Punishment subscales showed positive and significant correlations with the Desire for Reconciliation and Perceived Personal Responsibility scales. These findings are consistent with previous studies, which indicate that self-forgiveness is not just about ignoring the negative feelings that may arise after causing harm; rather, this process requires taking responsibility for one's actions and reflecting on the mistakes and feelings involved (validation article; Griffin et al., 2015; Suzuki & Jenkins, 2022; Woodyatt & Wenzel,

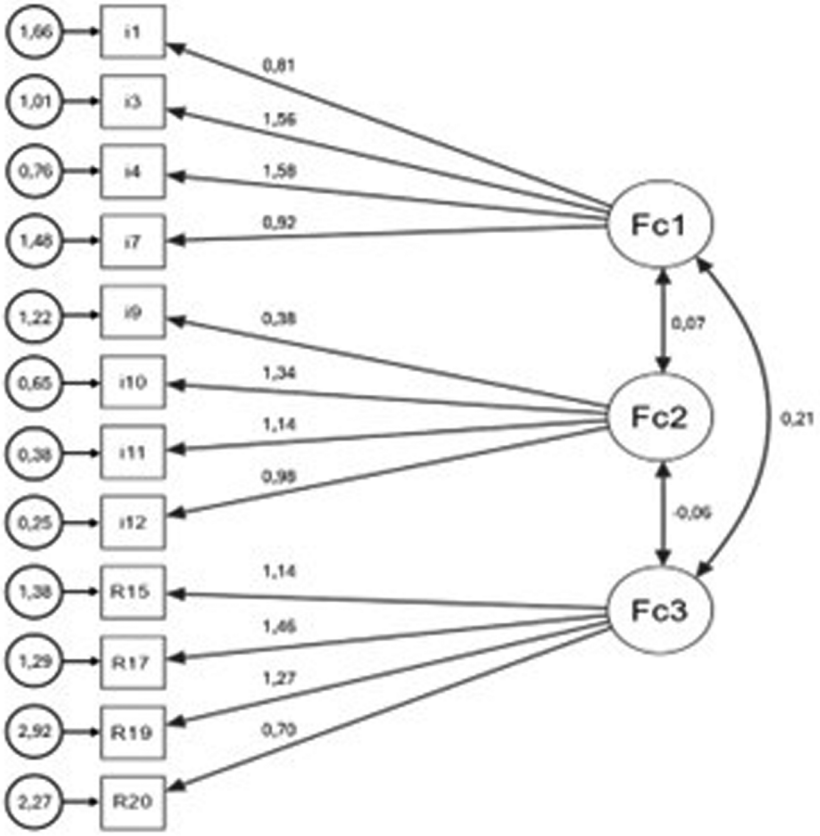

Figure 6. Resulting structure with adequate adjustment to the Spanish population.

Table 6. Fornell-Larcker and HTMT matrix.

		Correlations			HTMT		
	$\sqrt{AVE}$	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
Factor1	.71	1	–	–	–	–	–
Factor2	.69	.122	1	–	.122	–	–
Factor3	.64	.224	−.093	1	.258	−.08	–

2013a, 2013b). Additionally, it has been observed that, in certain cases, when a person avoids facing the negative emotions that emerge after accepting responsibility, self-punishing behaviors develop (Griffin et al., 2015), which function as a mechanism to evade a genuine self-forgiveness process (Cornish & Wade, 2015; Griffin et al., 2015; Woodyatt et al., 2017).

The Pseudo Self-Forgiveness subscale, on the other hand, correlated negatively and significantly with both the Desire for Reconciliation and Perceived Personal Responsibility. As various authors have pointed out (validation article; Hall & Fincham, 2005; Pandey et al., 2020; Woodyatt et al., 2017; Woodyatt & Wenzel, 2013b), false self-forgiveness involves other processes such as making excuses or deflecting the harm caused before taking responsibility for wrongful actions. This way, personal self-esteem is protected (Griffin, 2017; Word et al., 2023). The scale validated in this study has the potential to measure self-forgiveness as a differentiated process, considering both self-punishment and false self-forgiveness as possible responses or pathways individuals may choose to avoid facing genuine self-forgiveness and its implications (Wenzel et al., 2012; Woodyatt & Wenzel, 2013a). This measure diverges from traditional hedonistic approaches, where self-forgiveness is evaluated based on the presence of positive attitudes towards oneself as a result of having achieved true forgiveness (Tangney et al., 2005; Woodyatt & Wenzel, 2013a).

This study presents some limitations. First, the use of self-report instruments may introduce response biases, such as the social desirability effect. Second, given that this is a cross-sectional study, causal relationships cannot be established (Hernández & Velazco-Mondragón, 2000). Additionally, participants' responses may vary over time and under different circumstances, which could affect the temporal

Table 7. Comparison of items in the four existing versions of the differentiated self-forgiveness process scale by Woodyatt and Wenzel (2013a).

		Escala original	Escala breve	Validación Portuguesa	Validación española
1	I have tried to think through why I did what I did.	X	X	X	X
2	I am trying to learn from my wrongdoing.	X		X	
3	I have spent time working through my guilt.	X		X	X
4	I have put energy into processing my wrongdoing.	X		X	
5	I am trying to accept myself even with my failures.	X	X	X	
6	Since committing the offense, I have tried to change.	X	X	X	
7	I don't take what I have done lightly.	X		X	X
8	What I've done is unforgiveable.	X	X	X	
9	I can't seem to get over what I have done.	X	X	X	X
10	I deserve to suffer for what I have done.	X	X	X	X
11	I feel like I can't look myself in the eye.	X	X		X
12	I want to punish myself for what I have done.	X		X	X
13	I keep going over what I have done in my head.	X			
14	I don't understand why I behaved as I did.	X			
15	I feel the other person got what they deserved.	X	X	X	X
16	I wasn't the only one to blame for what happened.	X	X	X	
17	I think the other person was really to blame for what I did.	X		X	X
18	I feel what happened was my fault. (R)	X	X		X
19	I feel angry about the way I have been treated.	X		X	X
20	I'm not really sure whether what I did was wrong.	X		X	X

Note: (R)= reverse item.

Table 8. Reliability dimensions figure 6.

	Factor 1	Factor 2	Factor 3
Alfa	.79	.75	.72
Omega	.80	.78	.73

Table 9. Criterion validity: Pearson correlations.

	SFG	PSF	Self-punishment
DR	.221**	−.276**	.146**
RPP	.401**	−.697**	.268**

Note: DR = Desire for Reconciliation Scale; PPR = Perceived Personal Responsibility Scale; SFG = Genuine Self-Forgiveness Subscale; PSF = False Self-Forgiveness Subscale.
**The correlation is significant at the 0.01 level (bilateral).

stability of the scale. Third, the present study was conducted using standard estimators under the assumption of multivariate normality. However, high kurtosis values were observed in some items, which could affect the accuracy of the estimates. Therefore, future research is encouraged to replicate the analysis using robust estimators such as MLR (Maximum Likelihood Robust). Fourth, due to the imbalance in sample sizes between men and women, it was not possible to conduct a multi-group invariance analysis. This limitation prevents confirmation of the model's equivalence across genders.

However, the study also has several notable strengths. It provides the adaptation of a brief instrument to the Spanish population, with adequate psychometric properties to measure self-forgiveness as a process, which in turn allows for more detailed studies on this variable in Spanish-speaking populations. Furthermore, this study includes a diverse sample that is not exclusively limited to students, addressing one of the main criticisms in the field of self-forgiveness research (Prieto-Ursúa, 2017). Additionally, the results reflect a different factor structure in our population compared to that observed in Portugal (Costa et al., 2021), suggesting the possible influence of cultural differences in the self-forgiveness process. This finding highlights the need for further research on how specific cultural factors may impact the conceptualization and measurement of this variable.

In conclusion, the results of our study show that the psychometric properties of the resulting scale are good, meaning that the adaptation we made to the Spanish population allows the instrument to be used with adequate reliability and validity criteria in empirical research or clinical settings.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Ethics declarations

This research is part of a doctoral thesis, which was previously reviewed and approved by the Academic Committee of Doctoral Studies at the Universidad Pontificia Comillas. Subsequently, it did not require the approval of the ethics committee. The participants signed an online informed consent in accordance with current European regulations on personal data protection. The anonymous nature of the data was always protected, confidential handling of the data was carried out, and the possibility of the person stopping participating in the study was maintained whenever they wished.

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Data availability statement

The data that support the findings of this study are available from the corresponding author, [K.G.], upon reasonable request.

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