



The Spanish adaptation of the relationship power inventory

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Accepted: 30 March 2022
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Abstract

Power dynamics are fundamental when negotiating conflicts. However, no instrument for measuring power in romantic relationships has been adequately adapted to Spanish culture. The goal of this research was to adapt the Relationship Power Inventory (RPI; Farrell et al., 2015) to Spanish culture and language, filling this gap by providing a rigorous instrument for evaluating this construct. Study 1 was conducted to obtain evidence based on Spanish adaptation of RPI content. Once the Spanish adaptation of the RPI was built and we obtained validity evidence based on the test content, in Study 2, the scale was administered to two different samples of the adult population following a cross-validation approach. Specifically, in Sample 1 ($N = 400$), the training sample, a statistical analysis and an exploration of the dimensional structure and reliability of the measure were carried out. In Sample 2 ($N = 755$), the validation sample, the internal structure of the scale was confirmed, and evidence of external validity and generalization was obtained. The exploratory and confirmatory factor analysis showed a good fit for the four-factor structure. These dimensions were invariant to gender and had adequate validity based on their relationship with other variables (dependence on the partner, conflict-resolution strategies, and psychological well-being). In sum, the Spanish version of the RPI (SARPI) is a reliable instrument with sufficient valid evidence to provide accurate measurement of power differences in the context of romantic relationships.

Keywords Power · Romantic relationships · Psychometric properties · Validity

Interpersonal *power* can be broadly defined as the ability to control or change another person's goals, feelings, and/or behaviors to align with one's own preferences, along with the ability to resist the other person's attempts to impose influence (Keltner et al., 2003; Simpson et al., 2015). Since Russell claimed in 1938 that power was one of the organizing principles of human behavior, the analysis of power differences, their correlates, and their consequences has been one of the main research topics in social psychology (e.g., Van Kleef & Lange, 2020).

One of the contexts in which power dynamics play a particularly important role is romantic relationships. In particular, although people's goals, desires, and happiness in these relationships inevitably depend on their partners' cooperation and investment, both members of a relationship often do not share the same goals or interests, resulting in conflict (Clark & Mills, 2012; Kelley & Thibaut, 1978). When this occurs, individuals may try to influence or control their romantic partners to achieve their interests, which is a risk factor when an imbalance of power exists between the two partners (Kim et al., 2019; Morales-Marente, 2005). Specifically, individuals may respond aggressively and violently toward their partners as a way of imposing their goals when they perceive they have power over their partners or, conversely, may increase submissive responses and tolerance of abuse when they perceive greater power in their partners (Cross et al., 2019; Overall et al., 2016; Pietromonaco et al., 2021). As a result, these power dynamics can severely affect the individuals' health and well-being (Kifer et al., 2013; Leone & Conroy, 2019; Martín-Lanas et al., 2019). Thus, it is vitally important to analyze power dynamics because they can have serious consequences for the members of romantic relationships.

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The Dyadic Power Social Influence Model (DPSIM; Simpson et al., 2015) proposed that power in romantic relationships is a dyadic property of the relationship and that to analyze its effects, it is necessary to study four relationship components depending on who is exercising power (the person/their partner) and when they exercise power (during the decision-making process /at the final outcome of the decision or discussion): (a) one's own control or influence during discussions or decision-making, for example, by proposing ideas (self-process power); (b) one's own control or influence over the final outcome of the discussion or decision-making (self-outcome power); (c) the partner's influence or control during discussions or decision-making (partner-process power); and (d) the partner's control or influence over the final outcome of such discussions (partner-outcome power; Farrell et al., 2015).

In recent years, there has been a growing interest in identifying variables closely related to the power components of romantic relationships described previously. This research focuses specifically on the relationship of power components to partner dependence, conflict resolution strategies, and well-being. On one hand, dependence on the partner is an antecedent or base of power. In fact, previous studies have shown that traditionally, people possess more power—process and outcome—to influence their partners and promote their goals when they are less dependent on their partners—either anxious, exclusive, or emotional—whereas when they are more dependent on their partners, they possess less power or are unable to resist their attempts to influence their partners (Kelley & Thibaut, 1978). In other words, while negative correlations have been found between personal power—process and outcome—and dependence, positive associations emerged for dependence and partner power (Farrell et al., 2015). On the other hand, these power dynamics are also associated with different resolution strategies for conflicts that appear in romantic relationships and with the levels of health and well-being of each member. Specifically, prior research has shown a positive association between personal power—process and outcome—and the use of destructive and even violent responses toward the partner during conflicts (exit or neglect; Cross et al., 2019; Overall et al., 2016), whereas a negative association has been found with constructive responses (expression or loyalty; Alonso-Ferres et al., 2021; DeMarree et al., 2014). Conversely, lacking power or perceiving greater power in the romantic partner—process and outcome—is positively associated with passive responses (loyalty or neglect) that tolerate partner abuse, and negatively associated with active responses (expression or exit) that confront conflict—either constructively or destructively (Pietromonaco et al., 2021). Finally, previous work has also confirmed that lacking power or perceiving greater power in a partner—process and outcome—negatively impacts the components of an

individual's psychological well-being (i.e., self-acceptance, personal growth, positive relations, autonomy, environmental mastery, and purpose in life), while possessing power has salutary effects (Kifer et al., 2013; Leone & Conroy, 2019; VanderDrift et al., 2019).

The relevance of power in different contexts, but especially in romantic relationships, has triggered the development of different measures to assess this construct. The most prominent tests are the Generalized Sense of Power Scale (ESPG; Willis et al., 2016), the Sexual Relationship Power Scale (SRPS; Pulerwitz et al., 2000), the Purchasing Decision-Making Table (Davis & Rigaux, 1974), and the Relationship Power Inventory (RPI; Farrell et al., 2015). On the one hand, the ESGP evaluates the sense of power in interpersonal relationships (e.g., work context); however, it does not assess power dynamics specific to romantic relationships. On the other hand, the SRPS assesses how often a person has the capacity to make decisions regarding sexual relations, and the Purchasing Decision-Making Table evaluates who is the economic decision-maker in the relationship. These measures, although developed in a romantic interpersonal context, studies power only in a specific domain: sexual decisions and economic decisions, respectively. Therefore, the RPI (Farrell et al., 2015) is the only measurement instrument that aims to assess dyadic power in a romantic interpersonal context.

Given the essential impact of power in relationships, it is crucial to have an instrument to assess this construct. The benefits of the RPI in measuring relationship power go beyond the other instruments for several reasons: (a) It is drawn from the dyadic power social influence model (Simpson et al., 2015), a robust theoretical framework widely supported by researchers in the area of power dynamics in romantic relationships (Kim et al., 2019); (b) it operationalizes the four theoretical power dimensions accepted (self-outcome power, partner-outcome power, self-process power, and partner-process power), and adequate reliability for all RPI dimensions was empirically confirmed in the original study ($\alpha \geq 0.85$); (c) the RPI dimensions were not associated with social desirability, removing potential measurement bias (Farrell et al., 2015); and (d) regarding external validity evidence, research has confirmed the associations between the RPI components and dependence, conflict resolution, and well-being that have been described previously. Despite these advantages, the available data on its internal structure are still limited. In particular, the psychometric properties of the RPI have been assessed only in the original study in which Farrell et al. (2015) proposed a dimensional model—that is, four-factors (self-outcome power, partner-outcome power, self-process power, and partner-process power) nested in two second-order factors (self-power and partner power)—without testing other competitive and more parsimonious models that are theoretically reasonable. In addition, although previous

literature has found that men tend to be the power-holders in relationships (Felmlee, 1994), no prior research has provided any evidence regarding the invariance across genders in the measurement of power.

In Spain, although an abundant bibliography is available on the relevant aspects and consequences of power following the aforementioned conceptualization of the construct (e.g., Alonso-Ferres et al., 2021; Martín-Lanas et al., 2019; Morales-Marente, 2005), psychometrically sound measures are clearly still needed to assess the construct of power in the context of romantic relationships. Of all the scales mentioned, the RPI is the only available instrument that measures this construct in romantic relationships (Kim et al., 2019). Therefore, this study aims to provide a comprehensive, adapted, reliable, and valid assessment of the RPI through two large Spanish samples.

Research Overview

Two studies were conducted to examine internal consistency and to obtain validity evidence to support the interpretation of RPI scores for the Spanish population. Specifically, in Study 1, we sought to translate the RPI (Farrell et al., 2015) into Spanish (called the Spanish Adaptation of the RPI; SARPI). Next, we aimed to obtain evidence based on Spanish adaptation of the RPI content. The main goal of Study 2 was to provide validity evidence based on the internal structure, measurement invariance, and relationships with the above-mentioned variables (i.e., dependence, conflict resolution, and psychological well-being) to support the interpretations of the RPI scores for proposed uses in the Spanish population. Such adaptation will give research on this construct in Spain an instrument with good psychometric properties and an opportunity to compare findings across different countries and cultural settings. In addition, the Spanish adaptation of the RPI would enrich the still insufficient data on the psychometric guarantees of the original version and, moreover, it would deepen the internal structure, examining competitive models of RPI through two independent samples collected at different times and in another cultural and linguistic context. The data and syntax are available on the Open Science Framework.

Study 1

Method

Participants A panel of 6 professionals was selected to serve as content validity experts for the Spanish adaptation of the RPI. An important criterion for the panel of experts selected

was that they were not familiar with the RPI and they were experts in the fields of social psychology (i.e., romantic relationship dynamics and power construct) and psychometrics. Each of the 6 experts was in academia. Five of them have doctoral degrees and one a master's degree in psychology. Two of the experts engaged in research on the dynamics of romantic relationships, one of them in power, and three were experts on test construction. Professional experience ranges from three to 15 years.

Procedure We adapted the RPI to the Spanish linguistic and cultural context following the guidelines proposed by Muñiz et al. (2013) and the recommendations of the Standards for Educational and Psychological Testing (American Educational Research Association et al., 2014; International Test Commission, 2017).

First, we obtained the necessary permission from the authors of the original RPI scale to carry out the Spanish adaptation.

Second, to ensure that culturally idiosyncratic expressions of the construct were included for the Spanish context, the 20 items were translated into Spanish using a committee approach (Harkness, 2003). Thus, a group of four professionals from different areas of expertise—linguistic, psychological target construct, and psychometrics—prepared, discussed, and revised the translation to fit the Spanish culture and language. Specifically, a bilingual specialist translated the original items of the RPI to Spanish, and then, two different specialists on the construct and psychometrics reviewed the translation introducing any changes considered necessary. After that, during a meeting, the research team in full, including a new expert in test construction, discussed the best translation to assure a balanced treatment of psychological, linguistic, and cultural considerations (Hambleton & de Jong, 2003).

Third, for the purpose of obtaining validity evidence based on content and avoiding construct biases for the Spanish RPI items, we utilized an expert-appraisal method. Specifically, we recruited a panel of six experts in the fields of social psychology and psychometrics. The role of the expert was to assess technical accuracy (i.e., comprehension, ambiguity, clarity) as well as the belonging and representativeness of the items for the intended dimensions (Sireci & Faulker-Bond, 2014). The above-mentioned aspects were evaluated through a “matching task” and Likert-type rating scales. Specifically, each expert had the semantic definition of relationship power and each dimension. Their evaluation of the domain definition and representation consisted of identifying the power dimension (i.e., self-outcome power, partner-outcome power, self-process power, and partner-process power) to which each item had been classified as belonging and indicating the degree of representativeness—from 1 = *nothing representative* to 4 = *very representative*—to which

the item reflected a behavior indicative of such dimension. Subsequently, the item's appropriateness was assessed on a four-point Likert scale considering comprehension (i.e., to what extent the item was correctly understood; 1 = *incomprehensible language*, 4 = *understandable language*), ambiguity (i.e., whether the item could be interpreted in another way; 1 = *varied interpretations*, 4 = *a single interpretation*), and clarity (i.e., to what extent the item was concise/accurate/direct; 1 = *nothing concise*, 4 = *very concise*). Finally, the experts were given the opportunity to make comments regarding the accuracy of each item.

Data Analyses Content validity indices (CVIs) and Cohen's kappa coefficient (κ) were calculated for the different items to obtain a quantitative indicator of agreement regarding each item's adequacy through the areas of content-based validity (i.e., representativeness, comprehension, ambiguity, clarity). A $CVI > 0.79$ indicated that the item would be appropriate, between 0.70 and 0.79 that it might need revision, and < 0.70 that it should be eliminated. Likewise, Kappa values above 0.74, between 0.60 and 0.74, and between 0.40 and 0.59 were considered excellent, good, and fair, respectively (Zamanzadeh et al., 2015).

Results

As Table 1 shows, all items were mostly correctly classified into their dimensions by all experts. Likewise, all items showed excellent content validity and interrater agreement indices ($CVIs > 0.78$, $\kappa > 0.74$; Zamanzadeh et al., 2015), except Items 6 and 10 regarding comprehension and representativeness, respectively ($CVIs = 0.67$, $\kappa = 0.67$). These items were reviewed and slightly edited based on experts' comments following DeVellis' (2012) recommendations. Specifically, according to the experts' suggestions, the expression "bring up issues" was translated as "exponer problemas" instead of "plantear problemas". Likewise, "tend to" was translated as "suelo" instead of "tiendo a" to facilitate the representativeness and comprehension of such items to Spanish idiosyncratic language and culture.

Study 2

Once we completed the development of the Spanish adaptation of the RPI in Study 1 and we obtained validity evidence based on the test content, the scale was administered to two samples of adult population in order to (a) carry out a psychometric study of their properties, and (b) obtain validity evidence based on the internal structure, measurement invariance, and relationships with other variables (i.e., dependence, conflict resolution, and psychological well-being).

Method

Participants To achieve the aims of this study, two samples were collected at different times. In both samples, participants had to meet the following inclusion criteria to participate in the study: (a) be aged 18 years or older; (b) be involved in an exclusive relationship for at least 3 months before the data collection date; and (c) be Spanish citizens. Sample 1 was composed of 400 adults (200 males & 200 females) between the ages of 18 and 79 years ($M = 33.32$, $SD = 14.59$), and they had been involved in their relationships for an average of 10.01 years ($SD = 12.67$). In this sample, 37.3% were married, 27.3% were cohabitating, and 35.5% were dating. Sample 2 consisted of 755 adults (304 males & 451 females) with ages ranging from 18 to 78 years ($M = 30.22$, $SD = 14.02$). They were involved in their relationships for an average of 10.26 years ($SD = 11.65$). Most participants were dating (58.8%), followed by married (22.9%), and cohabitating (18.3%).

Instruments The *Spanish Adaptation of the RPI* (SARPI; Farrell et al., 2015) was used in Samples 1 and 2. The SARPI is a 20-item measure that assesses self-outcome power, partner-outcome power, self-process power, and partner-process power. Respondents were asked to rate personal and partner power on a 7-point Likert-type scale ranging from 1 (*never*) to 7 (*always*). Higher scores indicated a greater power for the evaluated dimension. The internal consistency of this measure was adequate in the original version (Farrell et al., 2015): $\alpha_{\text{self-outcome power}} = 0.94$, $\alpha_{\text{self-process power}} = 0.85$, $\alpha_{\text{partner-outcome power}} = 0.95$, and $\alpha_{\text{partner-process power}} = 0.87$.

The *Spouse-Specific Dependency Scale* (SSDS; Valor-Segura et al., 2009) was administered in Sample 2. The SSDS consists of 17 items, scored with a 6-point Likert-type scale ranging from 1 (*totally disagree*) to 6 (*totally agree*). It measured three dimensions that showed adequate reliability in the version of the scale adapted to the Spanish population: anxious attachment ($\alpha = 0.90$), exclusive dependency ($\alpha = 0.89$), and emotional dependency ($\alpha = 0.89$). In this study, internal consistency was also adequate. The Cronbach's alphas were 0.82, 0.79, and 0.77, respectively.

The *Accommodation Among Romantic Couples Scale* (ERCP; Valor-Segura et al., 2020) was used in Sample 2. This instrument has 27 items that assess four types of conflict-facing strategies: voice, loyalty, exit, and neglect. Responses are rated on a 9-point Likert-type scale ranging from 1 (*never does that*) to 9 (*always shows that type of behavior*). The internal consistency of this measure in the adapted Spanish version was good: $\alpha_{\text{voice}} = 0.82$, $\alpha_{\text{loyalty}} = 0.68$, $\alpha_{\text{exit}} = 0.87$, and $\alpha_{\text{neglect}} = 0.75$. For this study, Cronbach's alphas were 0.74, 0.65, 0.86, and 0.79, respectively.

Table 1 Proportion of matches between classification of items into each SARP1 dimensions, CVI, and Kappa values for item characteristics

	Dimension				Representativeness		Comprehension		Ambiguity		Clarity	
	1	2	3	4	CVI' κ	κ	CVI' κ	κ	CVI' κ	κ	CVI' κ	κ
Self Outcome Power	100%				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2. I have more say than my partner does when we make decisions in our relationship. [Cuando tomamos decisiones en nuestra relación, finalmente mi opinión tiene más peso que la de mi pareja]												
5. I have more control over decision making than my partner does in our relationship. [Tengo más control que mi pareja sobre las decisiones en nuestra relación]	83%	16%			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
9. I have more influence than my partner does on decisions in our relationship. [Tengo más influencia que mi pareja sobre las decisiones en nuestra relación]	100%				0.89	0.88	1.00	1.00	1.00	0.89	1.00	1.00
11. I am more likely than my partner to get my way when we disagree about issues in our relationship. [Es más probable que sea yo quien me salga con la mía cuando mi pareja y yo estamos en desacuerdo sobre ciertos asuntos de nuestra relación]	100%				1.00	1.00	1.00	1.00	1.00	0.78	1.00	1.00
14. When we make decisions in our relationship, I get the final say. [Cuando tomamos decisiones en nuestra relación, yo suelo tener la última palabra]	100%				0.89	0.88	1.00	1.00	1.00	1.00	1.00	1.00
19. I have more power than my partner when deciding about issues in our relationship. [Cuando decidimos sobre ciertos asuntos de nuestra relación, finalmente tengo más poder que mi pareja]	83%	16%			0.89	0.88	1.00	1.00	1.00	0.89	1.00	1.00
Self Process Power												
1. I am more likely than my partner to start discussions about issues in our relationship. [Es más probable que sea yo quien inicie conversaciones sobre problemas que surgen en nuestra relación de pareja]				100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
7. When my partner and I make decisions in our relationship, I tend to structure and lead the discussion. [Cuando mi pareja y yo estamos tomando decisiones en nuestra relación, yo tiendo a estructurar y liderar la conversación]				100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10. I tend to bring up issues in our relationship more often than my partner does. [Suelo exponer los problemas de nuestra relación más a menudo que mi pareja]				100%	0.67	0.67	0.83	0.89	1.00	0.89	1.00	1.00
13. I lay out the options more than my partner does when we discuss decisions in our relationship. [Cuando estamos debatiendo decisiones en nuestra relación de pareja, suelo ser yo, más que mi pareja, quien exponga diferentes opciones]				100%	0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00

Table 1 (continued)

	Dimension				Representativeness		Comprehension		Ambiguity		Clarity	
	1	2	3	4	CVI'	κ	CVI'	κ	CVI'	κ	CVI'	κ
Partner Outcome Power												
3. My partner is more likely to get his/her way than me when we disagree about issues in our relationship. [Es más probable que se decida lo que mi pareja quiere cuando estamos en desacuerdo sobre algunos asuntos de nuestra relación]			100%		0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00
4. My partner has more power than me when deciding about issues in our relationship. [Mi pareja tiene más poder que yo cuando decidimos sobre ciertos asuntos de nuestra relación]			83%	16%	0.88	0.89	0.88	0.89	1.00	0.89	1.00	1.00
8. When we make decisions in our relationship, my partner gets the final say. [Cuando tomamos decisiones en nuestra relación, es mi pareja quien suele tener la última palabra]			100%		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
16. My partner has more say than I do when we make decisions in our relationship. [Cuando tomamos decisiones en nuestra relación, la opinión de mi pareja tiene más peso que la mía]			100%		0.88	0.89	1.00	1.00	1.00	1.00	1.00	1.00
17. My partner has more control over decision making than I do in our relationship. [Mi pareja tiene más control sobre las decisiones finales que tomamos en nuestra relación]			83%	16%	0.88	0.89	1.00	1.00	1.00	1.00	1.00	1.00
20. My partner has more influence than I do on decisions in our relationship. [Mi pareja tiene más influencia que yo en las decisiones que se toman en nuestra relación]			100%		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Partner Process Power												
6. My partner tends to bring up issues in our relationship more often than I do. [Mi pareja suele exponer los problemas de nuestra relación más a menudo que yo]				100%	0.88	0.89	0.67	0.67	0.83	1.00	1.00	1.00
12. My partner is more likely than me to start discussions about issues in our relationship. [Es más probable que sea mi pareja quien inicie conversaciones sobre ciertos problemas en nuestra relación]				100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
15. My partner lays out the options more than I do when we discuss decisions in our relationship. [Cuando estamos debatiendo decisiones en nuestra relación, suele ser mi pareja, más que yo, quien exponga posibles opciones]				100%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
18. When my partner and I make decisions in our relationship, my partner tends to structure and lead the discussion. [Cuando mi pareja y yo estamos tomando decisiones en nuestra relación, suele ser mi pareja quien estructure y lidere la conversación]				100%	1.00	1.00	1.00	1.00	1.00	0.89	1.00	1.00

1 = self-outcome power; 2 = self-process power; 3 = partner-outcome power; 4 = partner-process power

Ryff's Psychological Well-Being Scales (PWBS; Díaz et al., 2006) were administered in Sample 2. The PWBS consists of 29 items that measure six dimensions: self-acceptance, personal growth, positive relations, autonomy, environmental mastery, and purpose in life. Responses were given on a Likert-type scale ranging from 1 (*totally disagree*) to 6 (*totally agree*). The version of the PWBS adapted to the Spanish population showed adequate reliability: self-acceptance ($\alpha=0.84$), positive relations ($\alpha=0.78$), autonomy ($\alpha=0.70$), environmental mastery ($\alpha=0.82$), purpose in life ($\alpha=0.70$), and personal growth ($\alpha=0.71$). In this study, the internal consistency was adequate, with Cronbach's alphas of 0.79, 0.80, 0.76, 0.72, 0.82, and 0.70, respectively.

Procedure We selected two independent samples composed of Spanish adults in Study 2. We followed a cross-validation approach with Samples 1 and 2. Before its larger administration, we used Sample 1, the training sample, as a pilot study for a preliminary evaluation of the psychometric properties and factorial structure of the SARPI, including item analysis, reliability assessment, and an examination of the items' distribution patterns and underlying dimensions. Sample 2, the validation sample, was employed to support the score interpretations of the SARPI by (a) confirming its dimensionality with validity evidence based on internal structure; (b) checking that the measure was invariant across gender—gender being one of the bases of power imbalance (e.g., Alonso-Ferres et al., 2019; Pietromonaco et al., 2021); and (c) replicating the linkage between the relationship power and the above-mentioned target variables (i.e., validity evidence based on the relationship with other variables). We recruited both samples at different times using a convenience nonprobabilistic sampling method. For Sample 1, at several public places, trained members of the research team requested that participants collaborate by individually completing a survey in paper–pencil format. Data from Sample 2 were obtained using online administration. Specifically, we posted online advertisements on social media such as Facebook. Participants who met the inclusion criteria were given access to a subject-recruitment platform (i.e., Qualtrics) to complete the multimeasure survey. Previous studies have shown that online sampling methods are as valid as the paper–pencil method (e.g., Topolovec-Vranic & Natarajan, 2016). Following the Declaration of Helsinki, before completing the questionnaire, the participants in both studies read and signed an informed consent form in which they received information emphasizing the principles of voluntariness, confidentiality, and the anonymity of their answers, and advising them that they could interrupt the questionnaire at any time.

Data Analysis First, we explored the missing data in samples 1 and 2. While Sample 2 had no missing values, Sample 1 had a small number of missing data (ranging from 0.5 to

1.2). Given the small portion of missing values and the fact that data were missing completely at random (Little's MCAR test, $\chi^2(96)=383.05$, $p=0.309$), we used SPSS's expectation maximization algorithm (EM) to replace missing values in our sample. This technique provided unbiased parameter estimates and improved the statistical power of analyses (Scheffer, 2002). Then, we used Sample 1 to obtain descriptive statistics for the items and to observe whether they fit the normal distribution. We tested the multivariate normal distribution assumption using the Mardia test in the R software (version 3.6.3; R Core Team, 2017). Subsequently, after checking the matrix data with the Kaiser–Meyer–Olkin coefficient (KMO) and Bartlett's test—that is, whether there was an adequate intercorrelation between items—we also performed an exploratory factor analysis (EFA) in Sample 1, the training sample. This allowed examination of the items' distribution patterns and the underlying dimensions using principal axis estimation and direct oblique rotation (Clarkson & Jennrich, 1988; Osborne, 2014). Given the non-normal distribution of the data, we drew from a measurement and theoretical model that supports self and partner power as interconnected. We used the above-mentioned factor extraction and rotation methods (Lloret-Segura et al., 2014). We retained the dimension numbers based on a parallel analysis (Garrido et al., 2013) and the Goodness of model fit (Brown, 2015). Specifically, we used the chi-square (χ^2) test, the root mean square error of approximation (RMSEA) with a 90% confidence interval, the Tucker-Lewis index (TLI), and the standardized root mean square residual (SRMR). Values less than or equal to 0.08, and less than or equal to 0.06 for RMSEA indicated an excellent and a good fit, respectively (MacCallum et al., 1996). TLI values higher than 0.95 and between 0.90 and 0.95, indicated the excellent and acceptable fit of the model to the data, respectively (Hu & Bentler, 1999; Kaplan, 2000). Otherwise, values less than or equal to 0.08 for SRMR indicated an excellent fit (MacCallum et al., 1996). Once we established the dimensions, we calculated discrimination indices for each item and the internal consistency (i.e., McDonald's Omega total coefficients) for each dimension. In addition, we calculated loadings, communalities, and percentage of explained variance for each item by its related dimension, as well as eigenvalues for the factor solution that was suggested by Kaiser criterion and parallel analysis in EFA. We conducted the analysis with R software (R Core Team, 2017).

Sample 2, the validation sample, was collected once we verified that no further revision of the adapted test was necessary, and we established the factor solution of the scale in the training (pilot) sample. We first obtained descriptive statistics for the items to observe whether they fit the normal distribution. Subsequently, we used Sample 2 to establish the factorial validity of the scale. We compared several competitive

models—among others, the model of the original version of the RPI—using confirmatory factor analysis (CFA). To confirm the SARPI's dimensionality, we used R software (R Core Team, 2017) to perform the analysis. We conducted the CFA using the robust maximum likelihood estimation method. We assessed the model fit using the chi-square (χ^2) test, comparative fit index (CFI), the Tucker-Lewis index (TLI), the root mean square error of approximation (RMSEA) with a 90% confidence interval, and the standardized root mean square residual (SRMR). As the RMSEA and TLI, CFI and SRMR follow similar criteria. Thus, CFI values higher than 0.95 and between 0.90 and 0.95, indicated excellent and acceptable fit of the model to the data, respectively (Hu & Bentler, 1999; Kaplan, 2000). Next, we calculated the internal consistency for each dimension through McDonald's Omega total coefficients. Furthermore, we also tested different levels of measurement invariance in Sample 2 across gender using multigroup CFAs. The less restrictive, or configural, model determined whether men and women conceptualized relationship power in the same way, estimating the same model for both groups without constrained parameters (i.e., loadings, thresholds, and item variances). The metric invariance model introduced constraints—that is, factor loadings for both models were equal—confirming whether men and women understood the items on the SARPI equally. A scalar model incorporated constrained thresholds for both models to observe whether the latent factors showed the same

item scores for men and women. Subsequently, we assigned strict invariance model fixed loadings, thresholds, and item variances at the same value across groups so that the measurement error could be discerned as equal between men and women. The cutoff values proposed by Cheung and Rensvold (2002) to support a more restrictive invariance measurement model were the changes in CFI of less than or equal to 0.010 and in RMSEA of less than or equal to 0.015. Last, we computed validity evidence based on the relationship with other related variables in Sample 2 using Jamovi (Version 1.2.16.0; The jamovi project, 2021). Pearson correlation and attenuated correlation (to eliminate measurement error)—and their 95% confidence intervals—were calculated between SARPI dimensions and the SSDS, the ERCP, and PWBS (American Educational Research Association et al., 2014).

Results

Preliminary Analyses As Table 2 shows, skewness and kurtosis values for the observed variables (i.e., item) were acceptable in samples 1 and 2. However, the Kolmogorov–Smirnov test (univariate normality) was significant for all items in both Samples ($ps < 0.001$), as was the Mardia test (multivariate normality) in Sample 1 ($MS = 3856.84$, $p < 0.001$; $MK = 51.29$, $p < 0.001$) and Sample 2 ($MS = 4489.19$, $p < 0.001$; $MK = 64.03$, $p < 0.001$), indicating that the samples did not follow a strictly normal distribution.

Table 2 Descriptive Statistics, Discrimination Indices, Reliability of the 20 items of the SARPI in Sample 1 ($N_1 = 400$) and Sample 2 ($N_2 = 755$)

		<i>M</i> (<i>SD</i>)		Skewness		Kurtosis		<i>r</i> _{item-test}	
		Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
Self Outcome Power	Item 2	3.42 (1.39)	3.75 (1.69)	-.14	-.06	-.07	-.78	.77	.80
	Item 5	3.35 (1.41)	3.29 (1.82)	-.13	.24	-.59	-.84	.76	.79
	Item 9	3.20 (1.43)	3.46 (1.73)	.06	.03	-.46	-.64	.77	.80
	Item 11	3.29 (1.47)	3.72 (1.72)	.06	.05	-.36	-.21	.76	.80
	Item 14	3.28 (1.39)	3.49 (1.71)	-.07	.08	-.50	-.53	.77	.80
	Item 19	3.20 (1.32)	3.33 (1.74)	-.12	.32	-.59	-.37	.77	.80
Self Process Power	Item 1	3.73 (1.57)	4.62 (1.57)	-.04	.01	-.66	-.61	.76	.82
	Item 7	3.72 (1.49)	4.06 (1.67)	-.10	.01	-.44	-.44	.77	.81
	Item 10	4.01 (1.44)	4.03 (1.86)	-.19	.37	-.21	-.91	.76	.81
	Item 13	3.90 (1.55)	4.28 (1.52)	-.12	-.13	-.50	-.56	.78	.80
Partner Outcome Power	Item 3	4.63 (1.33)	3.43 (1.59)	.27	.22	-.57	-.64	.77	.80
	Item 4	4.72 (1.40)	2.85 (1.69)	.08	.52	-.51	-.74	.78	.80
	Item 8	4.62 (1.41)	3.23 (1.61)	.12	.38	-.33	-.59	.77	.81
	Item 16	4.72 (1.41)	3.02 (1.62)	.07	.42	-.62	-.23	.77	.80
	Item 17	4.67 (1.43)	3.03 (1.63)	.06	.30	-.63	-.59	.76	.80
Partner Process Power	Item 20	4.71 (1.38)	3.00 (1.59)	.02	.15	-.44	-1.04	.77	.80
	Item 6	4.70 (1.54)	3.16 (1.79)	-.17	.42	-.68	-1.11	.77	.82
	Item 12	4.74 (1.36)	3.36 (1.63)	-.03	.24	-.52	-1.14	.76	.82
	Item 15	4.55 (1.38)	3.40 (1.38)	-.19	.29	-.16	-.64	.77	.81
	Item 18	4.67 (1.44)	3.14 (1.51)	-.05	.56	-.45	-.57	.78	.81

Exploratory Analysis Bartlett’s test ($\chi^2=6578$, $df=190$, $p<0.001$) and the KMO coefficient (0.92) in Sample 1 pointed toward an adequate intercorrelation among these items, allowing the interpretation of the factorial solutions. As Fig. 1 shows, the cross between slopes pointed out that the eigenvalues from random data started to exceed the eigenvalues from research data after the fourth factor, suggesting the parallel analysis of a four-factor solution. Similarly,

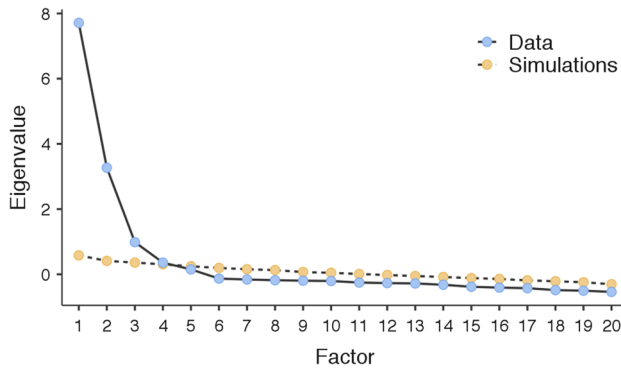


Fig. 1 Parallel analysis using eigenvalues from SARPI adaptation data (blue slope) and random data (yellow slope)

it is supported acceptably by the goodness-of-fit indices ($\chi^2[116]=458.66$, $p<0.001$, TLI=0.93, RMSEA=0.068, 90% CI [0.05, 0.07], SMRS=0.03). The EFA resulted in a four-factor solution (see Table 3)—these are consistent with the four dimensions of relationship power—that explained 67.9% of the total variance. Such factors showed eigenvalues of 4.86, 4.81, 2.22, and 1.66, respectively. Likewise, the items presented factor loadings higher than 0.40 in the dimensions proposed by the original version of the RPI and suitable discrimination indices (>0.50). Commonalities also showed that the common variance of items explained by each dimension was between 30% (for item 10 by self-process power) to 85% (for item 16 by partner-outcome power; see Table 3). Finally, the internal consistency of the different dimensions was higher than 0.70: self-outcome power ($\omega=0.95$), self-process power ($\omega=0.77$), partner-outcome power ($\omega=0.96$), and partner-process power ($\omega=0.83$).

Evidence Based on Internal Structure Through CFAs, overall goodness-of-fit indices for the different competitive models were calculated in Sample 2. Specifically, we checked (a) a model with four first-order factors (M1; self-outcome power, self-process power, partner-outcome power, and partner-process power) nested into two correlated second-order factors

Table 3 EFA loadings of the 20 items of the SARPI on the four rotated factors resulting of factor retention analyses

		F1	F2	F3	F4	h^2
Self Outcome Power	Item 2	-0.02	.82	-.06	-.01	.70
	Item 5	.02	.92	.02	-.01	.81
	Item 9	.09	.85	-.10	.03	.73
	Item 11	-.01	.91	.06	.01	.82
	Item 14	-.11	.82	.03	.03	.77
	Item 19	-.06	.82	-.01	.01	.72
Self Process Power	Item 1	.04	.08	-.03	.67	.48
	Item 7	.03	.39	-.02	.47	.53
	Item 10	-.09	.18	.09	.40	.30
	Item 13	.07	-.03	.03	.77	.41
Partner Outcome Power	Item 3	.90	-.04	-.04	.03	.78
	Item 4	.92	-.03	-.05	.00	.81
	Item 8	.76	.06	.12	-.11	.71
	Item 16	.92	.01	.00	-.02	.85
	Item 17	.89	-.02	.04	.03	.83
	Item 20	.82	.00	.07	.00	.75
Partner Process Power	Item 6	.14	-.02	.57	.09	.44
	Item 12	.21	.05	.71	-.08	.70
	Item 15	-.09	.04	.75	-.11	.48
	Item 18	.01	-.13	.78	.15	.78
Eigenvalues		4.86	4.81	2.22	1.66	
Percentage of explained variance by the factor		36%	36%	16%	12%	

$N_j=400$; h^2 = commonality

Higher item loading for each factor are shown in italics

(self-power and partner power); (b) a model with four first-order correlated factors (M2; i.e., self-outcome power, self-process power, partner-outcome power, and partner-process power); and (c) a model with two first-order correlated factors (M3; i.e., self-power and partner power). The first model was consistent with the original proposal, whereas the latter two models were based on empirical results obtained previously and on the original theory (see the Supplemental Material for each model factor structure and specification). As Table 4 shows, M1 and M2 fit better to the data in comparison with M3. However, there are small differences in the goodness-of-fit indices between M1 and M2. We performed a likelihood ratio test to compare the fit between M1 and M2. We found a significantly better fit of M2 in comparison to M1 ($\chi^2 = 14.90$, $df = 46$, $p = 0.001$). In addition, results suggested that M1 might be misspecified, and thus, it is not appropriate for the data (i.e., presents negative variances in the self-process power and partner-process power factors, as well as factor loadings greater than 1 in the standardized solution). Together, these results indicated that the correlated four-factor model (M2) fit better to the data in comparison with the other proposed models and provided a more parsimonious factorial solution (Flanagan et al., 2012). Based on that, the four first-order correlated factors model (M2) was endorsed as the latent structure of the scale for the Spanish population.

The CFA for M2 confirmed a nonsignificant correlation among partner-outcome power, self-outcome power ($r = -0.10$, $p = 0.18$), and self-process power ($r = -0.13$, $p = 0.06$). Moreover, modification indices were high for correlations between the error measurement for items 6 and 12 (MI = 61.43) as well as the correlation between both items ($r = 0.68$). After reviewing these items, redundant content—almost the same wording and terminology—was found and not shared with any other item of their respective power's dimension. Specifically, items 6 and 12 belong to the partner-process dimension and share the expression “issues in our relationship”. We understand that part of the uniqueness that is not a random error is shared by both items. This fact supported the re-specification of the model (Brown, 2015). Therefore, we recalculated the correlated model with four first-order factors (M2) by removing nonsignificant correlations between dimensions that were not related and

introducing correlations between the measurement error of item 6 and 12 as new parameters. The final fit was excellent: $\chi^2(165) = 586.34$, $p < 0.001$, CFI = 0.95, TLI = 0.94, RMSEA = 0.058, 90% CI [0.05, 0.06], SRMR = 0.06.

Figure 2 shows the factor structure of the SARPI. All factor loadings were higher than 0.80 and statistically significant. Likewise, all dimensions showed excellent internal consistency: self-process power ($\omega = 0.80$), self-outcome power ($\omega = 0.94$), partner-process power ($\omega = 0.82$), and partner-outcome power ($\omega = 0.93$).

Measurement Invariance As Table 5 shows, Sample 2 supported the configural and metric invariances. Thus, we can conclude that men and women conceptualized the construct of power in romantic relationships and interpreted the items in the same way. Sample 2 did not support the scalar invariance model. Therefore, following Byrne et al.'s (1989) recommendations, the intercept of item 11 was allowed to vary across groups based on the high value in the modification index (MI = 25.0, $p < 0.001$). After leaving the intercept free for this item between the groups, the CFI and RMSEA did not change above the cutoff points (Cheung & Rensvold, 2002). Thus, the partial scalar invariance model was finally supported. Finally, taking into consideration both the partial scalar invariance model and the strict factorial invariance model, we can conclude that both means and variances of the four SARPI dimensions could be compared between men and women.

Validity Evidence Based on Relationships with Other Variables We tested the validity evidence based on the relationships with other variables in Sample 2. As the values and 95% confidence intervals of the attenuated correlations in Table 6 indicate, self-process and outcome powers correlated negatively with partner dependence (except for anxious attachment). In addition, higher self-process and outcome powers were related to a greater use of destructive (exit and neglect) and less constructive–passive (loyalty) conflict-resolution strategies. Although the constructive–active strategy (voice) and self-outcome power were not associated, a significant and positive relationship was found between the constructive—active strategy (voice) and self-process power. Self-process power was also positively related to all

Table 4 CFA Fit Indices for Competitive Models of the SARPI

Models	χ^2	Df	CFI	TLI	RMSEA [90%IC]	SRMR
M1	647.509***	165	.93	.92	.062[.05, .07]	.06
M2	636.742***	164	.94	.93	.062[.05, .07]	.05
M3	1698.89***	169	.79	.77	.10 [.10, .11]	.13

$N_2 = 755$; M1 = original model of four factors (self-process power, self-outcome power, partner-process power, and partner-outcome power) nested into two second-order correlated factors (self-power and partner-power); M2 = four-factor correlated model (self-process power, self-outcome power, partner-process power, and partner-outcome power); M3 = two-factor correlated model (self-power and partner-power)

*** $p < .001$

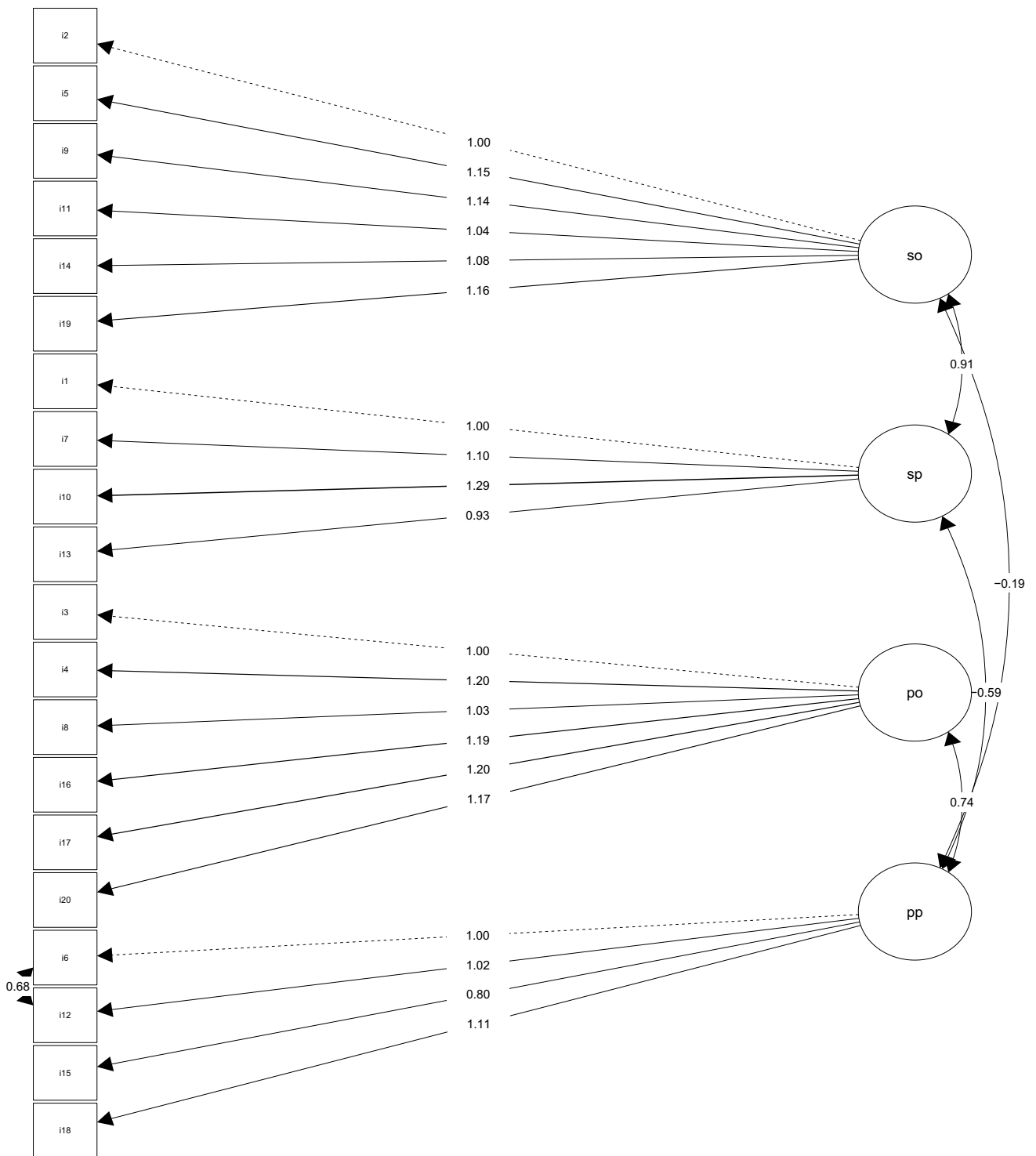


Fig. 2 Factor Structure of the Spanish Version of the Relationship Power Inventory (SARPI). *Note.* so = self-outcome power; sp = self-process power; po = partner-outcome power; pp = partner-process power

dimensions of psychological well-being (except positive relationships), whereas self-outcome power correlated positively with the dimensions of self-acceptance and autonomy.

The partner-process and outcome powers were related to greater dependence on the partner and greater use of passive (loyalty and neglect) and less constructive—active (voice)

Table 5 Fit Indices and Comparison of Invariance Models

Modelos	χ^2	Df	CFI	TLI	RMSEA [90% IC]	Δ CFI	Δ RMSEA
Configural Invariance	767.37***	330	.942	.933	.059 [.055, .064]		
Metric Invariance	805.91***	346	.939	.933	.059 [.055, .064]	.003	-
Scalar Invariance	918.05***	362	.926	.922	.064 [.059, .069]	.013	-.005
Partial-Scalar Invariance	897.52***	361	.929	.925	.063 [.058, .067]	.01	-.004
Strict Invariance	939.50***	381	.926	.926	.062 [.058, .067]	.003	.001

$N_2 = 755$; *** $p < .001$

conflict-resolution strategies. No relationship was found with the destructive–active strategy (exit). Finally, both types of partner power—process and outcome—correlated with lower subjective psychological well-being in all dimensions. These results are similar to those found in previous literature (e.g., Farrell et al., 2015).

General Discussion

Power dynamics are fundamental when negotiating interpersonal conflicts. In particular, during a romantic couple's conflict, the parties attempt to influence each other to find a solution that suits both (Kelley & Thibaut, 1978). However, one may have more or less power to influence the other and thus attempt to regain power through aggressive behaviors (Cross et al., 2019; Overall et al., 2016) or relinquish it by yielding to or adopting the needs of their partner (Pietromonaco et al., 2021). The consequences of such power dynamics can be quite varied, even seriously affecting the individuals' health and well-being (Kifer et al., 2013; Leone & Conroy, 2019; Martín-Lanas et al., 2019). Therefore, the assessment of power dynamics between partners should be a central theme in the study of and intervention in marital conflicts. Because Spain lacks a measurement instrument to assess this construct, the main objective of this research was to adapt the RPI, providing evidence of validity to support the interpretation of its measurements in the general Spanish population.

First, a panel of experts verified the validity of the SARPI based on its content, ensuring that the items adequately captured the content of the construct in the Spanish context. Subsequently, the psychometric properties and internal structure of the scale were evaluated in two different samples based on the model proposed by the authors of the original scale (Farrell et al., 2015). The internal structure of the SARPI—four dimensions nested into two second-order dimensions as proposed in the original study—was not supported after the exploratory study and the CFA. The proposed analyses indicated that, unlike the original model, the alternative four correlated factor model (self-process power, self-outcome power, partner-process power, and partner-outcome power) had a better fit in the Spanish context. It is relevant to highlight that the methodological approach conducted in the research has not

been fully reported for the original RPI. Indeed, the dimensional structure of the original scale was accepted even though it had some limitations in its fit and without its corroboration in other contexts different from the U.S. context. In line with the theoretical starting model (dyadic power social influence model; Simpson et al., 2015), the new proposed structure was endorsed as the latent structure of the scale for the Spanish population. This endorsement overcame the deficiencies of the original dimensional structure by eliminating the second-order factors composed of only two components, which consequently makes the model more parsimonious. Having performed a committee adaptation approach (instead of literal translation or assembly; Van de Vijver & Tanzer, 2004) during the translation process, together with findings from the expert appraisal, psychometrics results, and validity evidence based on internal structure, we are confident about the appropriateness of the SARPI four correlated factor structure.

Next, we obtained evidence of the measurement invariance of the RPI for the first time in any of its language versions. In our analysis, we compared the underlying construct of power between men and women to ensure the invariance of the SARPI across genders and to verify that the theoretical structure of both groups was similar (Felmlee, 1994). With these results, we conclude that men and women conceptualize the latent structure of the scale in the same way and interpret the items in a similar way, and that the means and variances of the four dimensions of the SARPI can be compared between both groups. Therefore, gender-differentiated studies on power dynamics in romantic relationships can be conducted using the adapted scale.

Finally, validity evidence based on the relation to other variables replicated previous correlations obtained between the SARPI, SSDS, ERCP, and PWBS (Farrell et al., 2015). Specifically, higher scores on self-power—process and outcome—are associated with lower dependence, destructive conflict resolution (both active and passive), and greater self-acceptance and autonomy. Conversely, higher scores on partner power—process and outcome—are associated with greater partner dependence, more passive conflict resolution, and lower levels of psychological well-being. Our work shows, according to the DPSIM (Simpson et al., 2015), that power is a unique construct that can be determined by different bases (e.g., dependence) and predicts key outcomes

Table 6 Correlation between SARPI Dimensions with SSDS, ERCP and PWBS

		SARPI							
		Self Process Power		Self Outcome Power		Partner Process Power		Partner Outcome Power	
		r_{xy}	r_{xy-a}	r_{xy}	r_{xy-a}	r_{xy}	r_{xy-a}	r_{xy}	r_{xy-a}
SSDS	Exclusive Depend- ency	-.13 [-.20, -.06]	-.17 [-.24, -.01]	-.11 [-.18, -.04]	-.13 [-.20, -.06]	.18 [.10, .25]	.23 [.16, .30]	.25 [.18, .33]	.30 [.23, .36]
	Anxious Attach- ment	.04 [-.05, .12]	.05 [-.02, .12]	-.02 [-.09, .06]	-.02 [-.09, .05]	.09 [.01, .18]	.11 [.04, .18]	.22 [.14, .30]	.26 [.19, .33]
	Emotional Dependency	-.08 [-.16, .00]	-.10 [-.17, -.03]	-.12 [-.20, -.03]	-.14 [-.21, -.07]	.11 [.04, .18]	.14 [.07, .21]	.12 [.05, .19]	.14 [.07, .21]
	Exit	.11 [.05, .18]	.13 [.06, .20]	.15 [.08, .22]	.17 [.10, .24]	-.03 [-.10, .05]	-.04 [-.11, .03]	.06 [-.01, .13]	.07 [-.01, .14]
ERCP	Voice	.20 [.11, .27]	.26 [.19, .33]	.01 [-.07, .09]	.01 [-.06, .08]	-.25 [-.33, -.17]	-.32 [-.38, -.25]	-.27 [-.34, -.20]	-.33 [-.39, -.26]
	Loyalty	-.14 [-.22, -.07]	-.20 [-.27, -.13]	-.10 [-.16, -.01]	-.13 [-.20, -.06]	.27 [.19, .35]	.38 [.32, .44]	.32 [.26, .39]	.42 [.36, .48]
PWBS	Neglect	.10 [.01, .18]	.13 [.06, .20]	.17 [.09, .24]	.20 [.13, .27]	.14 [.06, .22]	.17 [.10, .24]	.23 [.16, .31]	.27 [.20, .33]
	Self-acceptance	.07 [-.02, .14]	.09 [.02, .16]	.10 [.01, .16]	.12 [.05, .19]	-.10 [-.18, -.01]	-.12 [-.19, -.05]	-.13 [-.21, -.05]	-.15 [-.22, -.08]
	Positive Relation- ships	-.01 [-.08, .07]	-.01 [-.08, .06]	.01 [-.07, .10]	.01 [-.06, .08]	-.07 [-.15, .00]	-.09 [-.16, -.02]	-.13 [-.21, -.06]	-.16 [-.23, -.09]
	Autonomy	.06 [-.01, .14]	.08 [.01, .15]	.06 [-.01, .13]	.07 [.00, .14]	-.10 [-.18, -.01]	-.13 [-.20, -.06]	-.10 [-.18, -.01]	-.12 [-.19, -.05]
Environmental Mastery	Environmental	.07 [-.01, .14]	.09 [.02, .16]	.05 [-.01, .12]	.06 [-.01, .13]	-.10 [-.17, -.03]	-.12 [-.19, -.05]	-.19 [-.26, -.12]	-.22 [-.29, -.15]
	Personal Growth	.10 [.02, .17]	.14 [.07, .21]	.02 [-.06, .09]	.03 [-.04, .10]	-.11 [-.18, -.04]	-.15 [-.22, -.08]	-.18 [-.25, -.11]	-.23 [-.30, -.16]
Purpose in Life	.06 [-.02, .14]	.07 [.00, .14]	.04 [-.04, .11]	.05 [-.02, .12]	-.12 [-.20, -.03]	-.15 [-.22, -.08]	-.16 [-.23, -.09]	-.18 [-.25, -.11]	

$N_2 = 755$; r_{xy} = Pearson Correlation; r_{xy-a} = Attenuated Correlation; SSDS = Spouse-Specific Dependency Scale; ERCP = Spanish adaptation of the Accommodation among Romantic Couples Scale [Escala de Resolución de Conflictos de Pareja]; PWBS = Ryyff's Psychological Well-Being Scales; Confidence intervals that do not contain zero indicate that the correlations are significant ($p < .05$)

(e.g., conflict resolution and well-being). Specifically, in accordance with the principle of “least interest” (Kelley & Thibaut, 1978), these results support the idea that the person who is less involved in the relationship, and who thus may be less affected by the actions of their partner, possesses relatively greater levels of power to influence their partner and promote their own personal desires. Conversely, the person who is more engaged and whose goals and happiness are more dependent on the relationship is less able to exert influence (Kim et al., 2019; Simpson et al., 2015). This leads them to adopt passive responses toward their partner for fear of losing their relationship (Pietromonaco et al., 2021) and consequently affects their personal well-being (Kifer et al., 2013; Leone and Conroy, 2019). Results drawn from this research suggest the importance of having a specific measure of power in romantic relationships. The SARPI will make it possible to study these power dynamics in couple relationships in the Spanish context and thus stop this possible cycle of negativity. For the same purposes, the SARPI could be used in other Spanish-speaking contexts such as Latin America as long as two recommendations are followed (Van de Vijver, & Tanzer, 2004). First, items should be reviewed drawing from an adaptation method (i.e., changing idioms which are not suitable for a Spanish-speaking cultural or linguistic context, adding or removing items in order to avoid construct or item bias). Second, some validity evidence (e.g., validity evidence based on the internal structure or the relationship with other constructs) might be provided to support that the inferences from the SARPI scores are as suitable as the inferences made using the Spanish version for Spain.

The current findings may be important not only for the psychometric investigation of power in romantic relationships but also for clinical practice. From a theoretical perspective, our results provide a dyadic measure of power that will allow the researcher to evaluate, regardless of the individuals' gender: (a) the relative levels of power between partners, and how the (im)balance of relationship power predicts key outcomes (i.e., health and well-being) at both individual and couple level; and (b) whether power dynamics would have an important role in other challenges of a relationship such as emotions, decision making, or sacrifice during work-family conflicts. Marital therapists could use this information to develop intervention programs for couples seeking to improve relationship success. Additionally, given that power disparities represent one of the main reasons why couples seek therapy (Parker, 2009), therapists could use the SARPI to evaluate whether couples have healthy levels of relational power, and the effectiveness of their intervention programs, as well as to detect critical areas where interventions should be more precise (e.g., process or outcome power). Therefore, this assessment tool may be useful for a broad conceptualization and approach to power dynamics, as well as to show progress and intervention efficacy.

In future research, and with the aim of overcoming the limitations of this study, it would also be interesting to validate the SARPI in other age groups or fields of study, such as the adolescent population, using different sampling procedures to eliminate possible self-selection bias. Finally, given that with the Spanish population, we found a factorial model with certain differences from the one validated with the U.S. population, it would also be interesting to (a) be cautious and further confirm the proposed four correlated factor structure for the SARPI in future studies in Spain but also in other similar cultural contexts, and (b) explore possible cultural differences in the power dynamics that arise in romantic relationships. For example, future research could provide evidence about invariance measurement through the U.S. and Spanish samples to ensure the construct is similar, the understanding of the items is in the same way, and the means of SARPI dimensions can be compared across cultural groups. Having instruments with evidence of validity and reliability in different cultural contexts and languages is a valuable resource for intercultural studies.

In conclusion, this work shows the first evidence of reliability and validity of the adaptation of the RPI to the Spanish language and context, offering a useful instrument to evaluate the power dynamics that occur in such intimate contexts as romantic relationships.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s12144-022-03072-4>.

Acknowledgements We would like to thank Professor Luis M. Lozano for reviewing a first draft of this manuscript as well as for his emotional and methodological support during the development of this work.

Authors' contributions All authors contributed to the study conception and design. Material preparation, data collection and analyses were performed by María Alonso-Ferres, and Celia Serrano-Montilla. The first draft of the manuscript was written by María Alonso-Ferres and Celia Serrano-Montilla and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Funding Open Access funding provided thanks to the CRUE-CSIC agreement with Springer Nature and Universidad de Córdoba / CBUA. This paper was made possible thanks to the financing provided by the Spanish Ministry of Science and Next Generation funds from the European Union for the FPU16/03023, the Margarita Salas postdoctoral fellowship, and for the R&D project Ref. PID2020-114464RB-I00.

Data availability The datasets generated and analyzed during the current study are available at Open Science Framework [OSF].

Declarations

Ethics approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The study was approved by institutional research ethics committee of the University of Granada.

Consent to participate Informed consent was obtained from all individual participants included in the study.

Conflicts of interest/Competing interests The authors declare that there is no conflict of interest.

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References

- Alonso-Ferres, M., Righetti, F., Valor-Segura, I., & Expósito, F. (2021). How Power Affects Emotional Communication During Relationship Conflicts: The Role of Perceived Partner Responsiveness. *Social Psychological and Personality Science*. <https://doi.org/10.1177/1948550621996496>
- Alonso-Ferres, M., Valor-Segura, I., & Expósito, F. (2019). Couple conflict-facing responses from a gender perspective: Emotional intelligence as a differential pattern. *Psychosocial Intervention*, 28, 147–156. <https://doi.org/10.5093/pi2019a9>
- American Educational Research Association American Psychological Association National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. American Educational Research Association.
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research*. The Guilford Press.
- Byrne, B.M., Shavelson, R.J., & Muthén, B. (1989). *Testing for the Equivalence of Factor Covariance and Mean Structures: The Issue of Partial Measurement Invariance*.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(2), 233–255. <https://doi.org/10.1097/NNR.0b013e3182544750>
- Clarkson, D. B., & Jennrich, R. I. (1988). Quartic rotation criteria algorithms. *Psychometrika*, 53, 251–259.
- Clark, M. S., & Mills, J. R. (2012). A theory of communal (and exchange) relationships. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 232–250). Sage.
- Cross, E. J., Overall, N. C., Low, R. S. T., & McNulty, J. K. (2019). An interdependence account of sexism and power: Men's hostile sexism, biased perceptions of low power, and relationship aggression. *Journal of Personality and Social Psychology*, 117(2), 338–363. <https://doi.org/10.1037/pspi0000167>
- DeMarree, K. G., Brinol, P., & Petty, R. E. (2014). The effects of power on prosocial outcomes: A self-validation analysis. *Journal of Economic Psychology*, 41, 20–30. <https://doi.org/10.1016/j.joep.2012.07.005>
- DeVellis, R. F. (2012). *Scale development: Theory and applications* (3rd ed.). Sage.
- Díaz, D., Rodríguez-Carvajal, R., Blanco, A., Moreno-Jiménez, B., Gallardo, I., Valle, C., & van Dierendonck, D. (2006). Spanish adaptation of Ryff's psychological well-being scales. *Psicothema*, 18, 572–577.
- Farrell, A. K., Simpson, J. A., & Rothman, A. J. (2015). The relationship power inventory: Development and validation. *Personal Relationships*, 22, 387–413. <https://doi.org/10.1111/per.12072>
- Felmlee, D. H. (1994). Who's on top? Power in romantic relationships. *Sex Roles*, 31, 275–295. <https://doi.org/10.1007/BF01544589>
- Flanagan, D. P., & Harrison, P. L. (Eds.). (2012). *Contemporary intellectual assessment: Theories, tests, and issues* (3rd ed.). The Guilford Press.
- Garrido, L. E., Abad, F. J., & Ponsoda, V. (2013). A new look at Horn's parallel analysis with ordinal variables. *Psychological Methods*, 18, 454–474. <https://doi.org/10.1037/a0030005>
- Hambleton, R. K., & de Jong, J. H. A. L. (2003). Advances in translating and adapting educational and psychological tests. *Language Testing*, 20, 127–134.
- Harkness, J.A. (2003). Questionnaire translation. In: J.A. Harkness, F. van de Vijver, P.P.H. Mohler (Eds.), *Cross-cultural survey methods* (pp.35–56). John Wiley & Sons.
- International Test Commission. (2017). *The ITC Guidelines for Translating and Adapting Tests*. www.InTestCom.org
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. Wiley.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265–284. <https://doi.org/10.1037/0033-295X.110.2.265>
- Kifer, Y., Heller, D., Perunovic, W. Q. E., & Galinsky, A. D. (2013). The good life of the powerful: The experience of power and authenticity enhances subjective well-being. *Psychological Science*, 24, 280–288. <https://doi.org/10.1177/0956797612450891>
- Kim, J. J., Visserman, M. L., & Impett, E. A. (2019). Power in Close Intimate Relationships. In C. R. Agnew & J. J. Harman (Eds.), *Power in close relationships* (pp. 192–224). Cambridge University Press.
- Leone, J., & Conroy, N. (2019). Power and Interpersonal Violence. In C. R. Agnew & J. J. Harman (Eds.), *Power in Close Relationships* (pp. 225–240). Cambridge University Press.
- Lloret-Segura, S., Ferreres-Traver, A., Hernández-Baeza, A., & Tomás-Marco, I. (2014). Exploratory Item Factor Analysis: A practical guide revised and updated. *Anales De Psicología*, 30(3), 1151–1169. <https://doi.org/10.6018/analesps.30.3.199361>
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130–149. <https://doi.org/10.1037/1082-989X.1.2.130>
- Morales-Marente, E. (2005). Análisis psicosocial del poder en las relaciones de género [Doctoral Dissertation, University of Granada].
- Martín-Lanas, R., Osorio, A., Anaya-Hamue, E., Cano-Prous, A., & de Irala, J. (2019). Relationship power imbalance and known predictors of intimate partner violence in couples planning to get married: A baseline analysis of the AMAR Cohort Study. *Journal of Interpersonal Violence*. <https://doi.org/10.1177/0886260519884681>
- Muñiz, J., Elosua, P., & Hambleton, R. K. (2013). Directrices para la traducción y adaptación de los tests: Segunda edición. *Psicothema*, 25(2), 151–157.
- Osborne, J. W. (2014). *Best Practices in Exploratory Factor Analysis*. Create Space Independent Publishing.
- Overall, N. C., Hammond, M. D., McNulty, J. K., & Finkel, E. J. (2016). When power shapes interpersonal behavior: Low relationship power predicts men's aggressive responses to low situational power. *Journal of Personality and Social Psychology*, 111, 195–217. <https://doi.org/10.1037/pspi0000059>
- Parker, L. (2009). Disrupting power and privilege in couples therapy. *Clinical Social Work Journal*, 37, 248–255. <https://doi.org/10.1007/s10615-009-0211-7>

- Pietromonaco, P.R., Overall, N.C., Beck, L.A., & Powers, S.I. (2021). Is Low Power Associated With Submission During Marital Conflict? Moderating Roles of Gender and Traditional Gender Role Beliefs. *Social Psychological and Personality Science*. <https://doi.org/10.1177/1948550620904609>.
- Pulerwitz, J., Gortmaker, S. L., & DeJong, W. (2000). Measuring sexual relationship power in HIV/STD research. *Sex Roles*, 42, 637–660. <https://doi.org/10.1023/A:1007051506972>
- R Core Team (2017) R: A Language and Environment for Statistical Computing. <https://www.R-project.org/>.
- Scheffer, J. (2002). Dealing with missing data. *Research Letters in the Information and Mathe-Matical Sciences*, 3, 153–160.
- Simpson, J. A., Farrell, A. K., Oriña, M. M., & Rothman, A. J. (2015). Power and social influence in relationships. In M. Mikulincer, P. R. Shaver, J. A. Simpson, & J. F. Dovidio (Eds.), *APA handbook of personality and social psychology Interpersonal relations* (Vol. 3, pp. 393–420). American Psychological Association.
- Sireci, S., & Faulker-Bond, M. (2014). Validity evidence based on test content. *Psicothema*, 26, 100–107.
- The jamovi project (2021). *jamovi* (Version 1.6) [Computer Software]. Retrieved from <https://www.jamovi.org>
- Topolovec-Vranic, J., & Natarajan, K. (2016). The use of social media in recruitment for medical research studies: A scoping review. *Journal of Medical Internet Research*, 18, e286. <https://doi.org/10.2196/jmir.5698>
- Valor-Segura, I., Expósito, F., & Moya, M. (2009). Desarrollo y validación de la versión española de la Spouse-Specific Dependency Scale (SSDS). *International Journal of Clinical and Health Psychology*, 9(3), 479–500. <http://hdl.handle.net/10481/33037>.
- Valor-Segura, I., Garrido-Macías, M., & Lozano, L. M. (2020). Adaptation of the Accommodation in Romantic Couples Scale (ARCS) to the Spanish Population. *Psicothema*, 32, 1. <https://doi.org/10.7334/psicothema2019.123>
- VanderDrift, L., Ioerger, M., & Arriaga, X. (2019). Interdependence perspectives on power in relationships. In C. Agnew & J. Harman (Eds.), *Power in close relationships (Advances in Personal Relationships)* (pp. 55–71). Cambridge University Press.
- Van de Vijver, F., & Tanzer, N. K. (2004). Bias and equivalence in cross-cultural assessment: An overview. *Revue Européenne De Psychologie Appliquée*, 54(2), 119–135. <https://doi.org/10.1016/j.erap.2003.12.004>
- Van Kleef, G. A., & Lange, J. (2020). How hierarchy shapes our emotional lives: Effects of power and status on emotional experience, expression, and responsiveness. *Current Opinion in Psychology*, 33, 148–153. <https://doi.org/10.1016/j.copsyc.2019.07.009>
- Willis, G. B., Carretero-Dios, H., Rodríguez-Bailón, R., & Petkanopoulou, K. (2016). Versión española de la Escala de Sensación de Poder General. *Revista De Psicología Social*, 31(3), 570–587. <https://doi.org/10.1080/02134748.2016.1190131>
- Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A. (2015). Design and implementation content validity study: Development of an instrument for measuring patient-centered communication. *Journal of Caring Sciences*, 4(2), 165–178. <https://doi.org/10.15171/jcs.2015.01>

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