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Spanish Adaptation of the Subjective Value Inventory

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Abstract

Background: Different studies have highlighted the importance of subjective outcomes in negotiations. The Subjective Value Inventory (SVI) is the only existing instrument for measuring this aspect. The aim of this research was to analyze the psychometric properties and gender factorial invariance of the SVI in a Spanish sample. **Method:** A double back-translation of the original tool was carried out and it was then applied to a diverse sample of 345 university students and professionals of both genders. Analysis of factorial validity, reliability, and factorial invariance of the model across gender were carried out. **Results:** A model of sixteen items grouped into four factors, equivalent to the original, was confirmed. All the factors of the model, except the Self, demonstrated adequate psychometric indices. The configural invariance across gender is acceptable. **Conclusions:** The Spanish version of the SVI matches the original scale. However, this study proposes using the scale without the Self factor. Lastly, the scale shows configural invariance across gender.

Keywords: Subjective Value Inventory (SVI), negotiation, subjective outcomes, psycho-sociological outcomes, gender factorial invariance.

Resumen

Adaptación española del Subjective Value Inventory. **Antecedentes:** diferentes estudios han destacado la importancia de los resultados subjetivos en las negociaciones. El Subjective Value Inventory (SVI) es el único instrumento para medir este aspecto. El objetivo de esta investigación fue analizar las propiedades psicométricas y la invarianza factorial de género del SVI en una muestra española. **Método:** se realizó la doble traducción de la herramienta original y luego se aplicó a una muestra de 345 universitarios y profesionales de ambos géneros. Se realizaron análisis de validez factorial, de fiabilidad y de invarianza factorial del modelo en relación al género. Todos los factores del modelo, excepto el Self, mostraron unos índices psicométricos adecuados. La invarianza configural en relación al género es aceptable. **Resultados:** se confirmó un modelo de dieciséis ítems agrupados en cuatro factores, equivalente al original. **Conclusiones:** la versión española del SVI se ajusta a la escala original. Sin embargo, en este estudio se propone utilizar la escala sin el factor Self. Finalmente, la escala muestra invarianza configural en relación al género.

Palabras clave: Subjetive Value Inventory (SVI), negociación, resultados subjetivos, resultados psicosociales, invarianza factorial de género.

Conflict—a complex, subjective, and discontinuous situation, which presents advances, setbacks and stagnation in its evolution (Morales, 1999, p. 20)—is characterized by the existence of interaction, clashing interests, and interdependence between the involved parties (Putnam & Poole, 1992). The emergence of conflict generates dysfunctional and beneficial effects (De Dreu, 1997). Therefore, when dealing with conflict, one must assess whether the benefits derived thereof are greater than the damage (Medina & Munduate, 2009) and, thus, one must choose either to prolong it—although this option is the exception in practice (Van de Vliert, 1997)—or to solve it, using for this purpose some of the resolution strategies, which range from avoidance to violence (Redorta, 2007).

One of these means of resolving conflict is *negotiation*, which, conceptually, is a plural (Lewicki et al., 2004) process (Alzate et al., 2009) of mutual communication (Fisher et al., 1991), in which opposing and common interests (Fisher et al., 1991) are mixed, and scarce resources are distributed (Pruitt, 1983) through conjointly decided fair and lasting actions (Lax & Sebenius, 1986).

In this sense, negotiation is the preferred dispute-resolution tool for several reasons: (a) it avoids resorting to force or external imposition; (b) it allows a dispute to be resolved when there are no pre-established settlement procedures; c) it is used in long-term relationship s for which reaching an agreement involves fewer costs than the breakdown of the existing link (Lewicki et al., 2004); (d) finally, its use reduces the possibility of further conflict because it implies "recognition of the other", an aspect whose absence is often observed in the origin of conflicts or in their rebirth (Honneth, 1997; Lindner, 2006).

Any negotiation involves an exchange of messages between the communicators, which includes the relationship between them and the content of the communications (Watzlawick et al., 1981). The connection between these two variables—content and relationship—is so intimate and intricate that it seems impossible to disconnect them (e.g. Medina et al., 2005). Therefore, effective negotiation should manage not only the content—also called the objective result—but also the human dimension, building and protecting

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the relationship established between the parties. This double dimension of negotiation—objective and subjective—was the basis used by Thompson (1990) to establish two types of results: economic and psychosocial. Objective results are established by normative analyses and rational principles (Nash, 1953) and they are based on the content of the negotiation. *Psychosocial results*—which constitute the subjective dimension of the negotiation—are based on social perception (Allport, 1955). The parties, as they do not have sufficient information to carry out an objective analysis of each negotiation situation, will conduct a subjective examination, which will clearly be different from that of the other party and, will depart from that offered by an exclusively economic analysis (Thompson & Hastie, 1990). According to the model of Thompson (1990), these psychosocial results are made up of three perceptions: the negotiation situation, the other party, and oneself. The first category comprises the feelings and judgments that the parties make about the process used and the agreement reached. Perceptions of the other party encompass the elements related to the process of forming one's impression and perception of the opponent. Finally, personal impressions refer to the negotiator's internal analysis of his/her feelings and of the process of perception. It is clear that these three perceptual aspects have an important influence on a process such as negotiation, which is a social activity that requires the cooperation of others (Thompson et al., 2010). The demand for people to participate in the negotiating process opens up the possibility to analyze how the negotiators' individual and sociodemographic characteristics may be influencing the creation of these perceptions. Among these factors, one of the most relevant is gender (e.g. Mazei et al., 2015).

The three-scale conceptual framework developed by Thompson (1990) served as the basis for Curhan et al. (2006), who added a fourth perception called Instrumental Outcome. This new factor, which assesses the negotiator's feelings about the terms of the agreement, serves as a connection between the objective result or objective value (OV) and the subjective result or subjective value (SV), which encompasses the feelings, perceptions, and emotions produced in the negotiators. According to these authors, the SV is significant for three reasons: first, it is important as a good in itself. Second, the SV can serve as a measure to quantify the degree of achievement of the OV in the face of the negotiators' lack of objectivity and overall vision (Thompson & Hastie, 1990). Finally, the development of the SV could help increase the OV of future negotiations (Drolet & Morris, 2000).

The above arguments show the significance of the subjective factors in negotiation. Despite this, little research on the psychosocial results of negotiation has been conducted compared to that carried out on economic results (Becker & Curhan, 2018). After reviewing the literature, it has been confirmed that there is just one measurement instrument for an aspect as relevant in negotiation as the subjective value: the Subjective Value Inventory (Curhan et al., 2006), a tool that is widely referenced in the bibliography on the subject (e.g. Malhotra & Bazerman, 2008; Thompson, 2005).

Although since its elaboration till the present date, the Subjective Value Inventory (SVI) has been used in a large number of investigations (e.g. Lewis et al., 2018; Sakhrani, 2016), to our knowledge, except for the original study, no other study has been conducted to corroborate its psychometric properties. And this is a necessary task, especially as one of the factors of the scale, the Self, had low factorial loads and seemed "to have the least internal cohesion among items—suggesting perhaps a more multifaceted nature—and the lowest level of association with other scale factors" (Curhan et. al., 2006, p. 502). On the other hand, although in their article, these authors state that two disparate groups, students and negotiators, categorize subjective value similarly, leading them to affirm the possibility of establishing group comparisons (Curhan et al., 2006), there is no mention of gender, an aspect that can ultimately be significant in the negotiation process.

For the above reasons, the objective of this study was twofold: a) to analyze the psychometric properties of the SVI in a sample of the Spanish population, and, b) to analyze its gender invariance.

Method

Participants

A heterogeneous sample composed of 345 Spanish university students and professionals (56.52% women and 43.48% men) was used. The average age of the female participants was 31.66 years (*SD* = 12.52) and of the males 32.43 (*SD* = 12.69). The sample size exceeded the recommended minimum limit of 200 people (MacCallum et al., 1999) and the ratio of (10:1) people per item (Velicer & Fava, 1998). A convenience sample was used, in accordance with that employed in the original study (Curhan et al., 2006): university students, Master's Degree students, and professionals from the business world. Thus, more than 80% of the participants had completed a university degree, and 48% of the total (n = 166) had an average work experience of more than 12 years. This diverse selection was an attempt to avoid the lack of representativeness and range-restriction attenuation of the correlations (Ferrando & Anguiano-Carrasco, 2010). Concerning the format, 52% responded to the questionnaire online, through Qualtrics, and the remaining 48% used the *Typeform* platform.

Instruments

The Subjective Value Inventory (SVI) questionnaire was used (Curhan et al., 2006), consisting of four factors: Instrumental outcome, Self, Process, and Relationship. The instrument presents 16 Likert-type items, which are rated between 1 (*Not at all*) and 7 (*Perfectly*), except for Items 3 and 5, which are reverse worded, so they must be recoded (Suárez-Alvarez et al., 2018).

Table 1
Sociodemographic characteristics of participants

Sample characteristics	Females		Males	
	n	%	n	%
Participants	195	57	150	43
Education level				
High School	41	21	15	10
Degree	124	64	116	77
Master	30	15	19	13
Working experience				
No	120	62	59	39
Yes	75	38	91	61

Note: Participants were on average 32.49 years old (*SD* = 12.59), and had on average 12.08 years of working experience (*SD* = 9.46)

Table 2
Subjective value inventory: Spanish and English version

Instrumental Outcome [Resultado operativo]

1. How satisfied are you with your own outcome—i.e., the extent to which the terms of your agreement (or lack of agreement) benefit you? [¿Cuál es tu nivel de satisfacción con tu propio resultado, es decir, hasta qué punto los términos del acuerdo (o la ausencia de este) te benefician?]
2. How satisfied are you with the balance between your own outcome and your counterpart(s)'s outcome(s)? [¿Cuál es tu nivel de satisfacción con el equilibrio entre tu propio resultado y el de la otra parte?]
3. Did you feel like you forfeited or "lost" in this negotiation? [¿Tuviste la sensación de haber renunciado o "perdido" en esta negociación?]
4. Do you think the terms of your agreement are consistent with principles of legitimacy or objective criteria (e.g., common standards of fairness, precedent, industry practice, legality, etc.)? [¿Consideras que los términos del acuerdo están en consonancia con principios de legitimidad o criterios objetivos (p.ej., normas habituales de equidad, precedentes, prácticas del sector, legalidad, etc.)?]

Self [Impresiones Personales]

5. Did you "lose face" (i.e., damage your sense of pride) in the negotiation? [¿Has quedado en evidencia (p.ej. se ha visto herido tu orgullo) en la negociación?]
6. Did this negotiation make you feel more or less competent as a negotiator? [¿Te ha hecho sentir esta negociación más o menos competente como negociador/a?]
7. Did you behave according to your own principles and values? [¿Has actuado con arreglo a tus propios principios y valores?]
8. Did this negotiation positively or negatively impact your self-image or your impression of yourself? [¿Ha repercutido positiva o negativamente esta negociación en tu opinión sobre ti mismo o en tu propia imagen?]

Process [Proceso]

9. Do you feel your counterpart(s) listened to your concerns? [¿Consideras que la otra parte tuvo en cuenta tus preocupaciones?]
10. Would you characterize the negotiation process as fair? [¿Calificarías el proceso de negociación como justo?]
11. How satisfied are you with the ease (or difficulty) of reaching an agreement? [¿Cuál es tu nivel de satisfacción con la facilidad (o dificultad) para alcanzar un acuerdo?]
12. Did your counterpart(s) consider your wishes, opinions, or needs? [¿Ha tenido en cuenta la otra parte tus deseos, opiniones o necesidades?]

Relationship [Relación]

13. What kind of "overall" impression did your counterpart(s) make on you? [¿Qué impresión general te ha provocado la otra parte?]
14. How satisfied are you with your relationship with your counterpart(s) as a result of this negotiation? [¿Cuál es tu nivel de satisfacción con la relación con la otra parte como resultado de esta negociación?]
15. Did the negotiation make you trust your counterpart(s)? [¿Ha conseguido esta negociación que confíes en la otra parte?]
16. Did the negotiation build a good foundation for a future relationship with your counterpart(s)? [¿Ha construido esta negociación una base sólida para una futura relación con la otra parte?]

Note: All items are rated between 1 (Not at all [En absoluto]) and 7 (Perfectly [Muchísimo]), except for Items 3 and 5, which are reverse worded, so they must be recoded

Procedure

For the adaptation, the Guidelines of the International Test Commission (ITC) (Muñiz et al., 2013) were followed in two phases. In the first phase, and after obtaining the permission of the authors of the SVI, a sworn translator and a qualified English teacher made two independent translations of the English questionnaire into Spanish. These translations were compared with the original instrument by a panel of three specialists, who combined linguistic and practical knowledge (Muñiz et al., 2013), and who, after making some adjustments, proposed a consensual translation. A British linguist then made a reverse translation into English. Finally, a committee of five judges (the three panel specialists and two psychologists) calculated Aiken's (1980) *V* to assess the degree of intelligibility of the items in Spanish. The final result reached the score of $V = .89$, which exceeded the recommended minimum value of $V = .70$ (Charter, 2003).

The pilot study, conducted by four students and six experienced professionals, confirmed that the questionnaire was completed in just under 3 minutes on average, no format or content errors were detected, the items were perfectly understood, and the online format was comfortable, simple, and attractive (Muñiz & Fonseca-Pedrero, 2019).

The second phase, from December 2017 to April 2019, consisted of contacting university students and experienced professionals, whose voluntary and honest collaboration was requested, and whose anonymity was guaranteed after signing an informed consent. The test, completed exclusively online, consisted of filling out a sociodemographic questionnaire, describing a real negotiation situation, as recent as possible, and responding to the sixteen questions of the SVI. The proposed case should be in accordance with the following negotiation description: "any situation in which two or more parties, trying to achieve a goal, have to communicate with their interlocutor to achieve it" (Curhan et al., 2006, p. 496).

Data analyses

The IBM SPSS Statistics programs, version 20.0 of 2011 and the LISREL (Jöreskog & Sörbom, 2001), version 9.2 of 2015, were used to analyze the data. The reliability of the SVI was analyzed from two approaches: first as internal consistency, the Cronbach alpha (α); second, as composite reliability, which is expressed through two indices: a) the composite reliability index (CRI), which is interpreted as Cronbach's alpha, also taking into account the interrelationships of the obtained dimensions; and (b) the average variance extracted (AVE), which is the relationship between the variance captured by a certain factor in relation to the total variance due to the measurement error of that factor (Dunn et al., 2014; Fornell & Larcker, 1981). Subsequently, different CFAs were performed. First, the fit of Curhan's model in the total sample was analyzed, and then gender factorial invariance was studied in that model (multigroup CFA). In both cases, the variance-covariance matrices obtained by PRELIS were used, with the maximum robust likelihood (MLR) as the estimation method.

The following indices were used to evaluate model fit: Satorra-Bentler's chi-squared, which corrects the effect of the normal data distribution violation, the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root mean square residual (SRMR). Following Hu and Bentler (1999), we consider that the fit is appropriate when $\chi^2/df < 3$, RMSEA ≤ .06, CFI ≥ .95, and SRMR ≤ .08.

Results

Initial Description of the Answers to Items

Table 3 shows the mean, standard deviation, and the corrected item-factor correlations, which refers to the correlation between each item and the total score of the subscale to which the item belongs.

Table 3
Descriptive statistics of the items

Factor	Items	M	SD	Corrected item to factor correlation
Instrumental outcome				
	1	5.26	1.32	0.693
	2	5.08	1.354	0.722
	3	5.01	1.735	0.472
	4	4.98	1.405	0.43
Self				
	5	5.78	1.52	0.291
	6	4.81	1.286	0.401
	7	5.74	1.168	0.322
	8	4.81	1.351	0.367
Process				
	9	4.8	1.305	0.611
	10	5.34	1.15	0.512
	11	5.17	1.146	0.486
	12	5.07	1.295	0.593
Relationship				
	13	5.37	1.237	0.745
	14	5.44	1.087	0.708
	15	5.27	1.267	0.773
	16	5.01	1.42	0.599

Note: M: mean; *SD*: standard deviation

The values of the means varied between 4.8 of Items 6, 8 (Self), and 9 (Process) and 5.8 of Items 5 (Self), which is one of the reverse items. The lowest response variability was 1.09 of Item 14 (Relationship) and the highest was 1.7 of Item 3 (Instrumental Outcome).

In the last column of the table, we can see that all the items have a correlation of .40, except for Items 5, 7, and 8 of the Self, which are the ones that have a lower correlation with their factor. In short, the Self is the factor with the least internal consistency and the worst defined by the items that conform it.

Reliability and Correlation Analysis between Factors

The reliability estimate was addressed from a dual perspective, internal consistency and composite reliability (Tables 4 and 5).

Table 4 shows the consistency values of the adapted instrument for each of the factors and the correlations between them. The reliability coefficients of the questionnaire and of the factors were both satisfactory, as they exceeded the minimum value set to α = .70 (Nunnally, 1978). Only the Self factor presented poor internal consistency, α = .570.

The correlation between the overall scale and the different factors was high, as it exceeded .70 and ranged between r = .730 and r = .858 (p < .001). The Instrumental Outcome factor had a moderate positive correlation with the different factors, r = .420 and r = .607 (p < .001), except for the Process factor, with which the correlation was low, r = .375 (p < .001). The Self factor had a moderate correlation with the Instrumental Outcome factor, r = .607 (p < .001) and, a low correlation with the rest of the factors, r = .358 and r = .385 (p < .001). Correlation analysis showed that the Process and Relationship factors were significantly correlated, r = .778 (p < .001), whereas the correlation between these factors and the Rapport factor was very high, r = .936 and r = .950 (p < .001).

As regards composite reliability, Table 5 provides the factor composite reliability indices (CRI) and average variance extracted (AVE) of the factors. To be considered acceptable, the CRI values must be ≥ .70 and AVE values must be ≥ .50 (Tomé-Lourido et al., 2018).

As shown, the CRIs practically match the coefficients shown in Table 3. Again, the lowest correlation corresponds to the Self factor, as its CRI is .57, and the highest correlation corresponds to the Relationship factor (.87).

The AVEs of the factors indicate the percentage of variance explained by each factor about itself. Hence, the factor that explains the lowest percentage of variance is the Self factor (25%) and the one that explains the largest percentage is the Relationship factor (.64).

Table 4
Scale reliability, factor reliability, and correlation between factors

Factor	Global GSV	Instrumental	Self	Rapport	Process	Relationship
Global SV	(.875)					
Instrumental	.784**	(.764)				
Self	.730**	.607**	(.570)			
Rapport	.858**	.423**	.385**	(.890)		
Process	.795**	.375**	.358**	.936**	(.753)	
Relationship	.821**	.420**	.366**	.950**	.778**	(.855)

Note: Reliabilities appear in parentheses on the diagonal.
** p ≤ .01 (all values two-tailed)

Table 5
Composite reliability indices and average value extracted

Factor	CRI	AVE
Instrumental	.80	.51
Self	.57	.25
Process	.75	.44
Relationship	.87	.64

Note: CRI: composite reliability indices; AVE: average value extracted

Confirmatory Factor Analysis

Following the procedure used by Curhan et al. (2006), the fit of three models was compared: (a) a one-factor model containing all 16 items, (b) a three-factor model (Instrumental, Self, and Rapport), and (c) the "three–two" model, with three factors (Instrumental, Self, and Rapport) and two subfactors (Relationship and Process) contained in the Rapport factor (Calderón et al., 2019).

The fit of the first two models was poor, whereas the fit indices of the third model were: $\chi^2 = 184.56$, $df = 99$; $\chi^2/df = 1.86$; RMSEA = .050; SRMR = .068; CFI = .98. According to the criteria indicated by Hu and Bentler (1999), Schermelleh-Engel et al. (2003) and Kaplan (2009), the fit is excellent. At the informational level, Table 6 shows the goodness-of-fit indices of the original model and the one obtained in our work. As can be seen, the fit was better in the Spanish sample.

The 16 items were grouped into four factors. The two first factors were Instrumental Outcome and Self, and the last two, Process and Relationship, which appear as part of a more inclusive factor, Rapport (Figure 1, Table 7).

The results confirmed that the factors obtained correspond to the original model. The relationship between the first two factors, Instrumental and Self (.83), was higher than the relationship each of them had with the Rapport factor (.48 and .51, respectively). In addition, the factors of Process and Relationship obtained loadings close to 1 on the Rapport factor (λ between .97 and .99, $p < .001$).

On the other hand, all items presented statistically significant values on the factors (between .46 and .85), exceeding the minimum value of .400 suggested by the literature (Gorsuch, 1983). Finally, we note that the Self factor is the one that has the lowest correlation with its own items (λ between .46 and .57, $p < .001$).

Model Measurement Invariance

After verifying that the Spanish adaptation of the SVI replicated the original model, we proceeded to analyze the gender invariance

Table 6
Original and Spanish model goodness of fit indices

Model	χ^2	df	χ^2/ df	RMSEA	SRMR	CFI
Three-two factor (Spanish model)	184.56	99	1.86	.050 [.039 .061]	0.068	0.98
Three-two factor (Original model)	283.046	99	2.859	0.083	0.057	0.914

Note: The three-two factor model groups items into three factors (Instrumental Outcome, Self, and Rapport) with two subfactors (Relationship and Process) contained within larger factor of Rapport. RMSEA: root-mean-square error of approximation; SRMR: standardized root-mean-square residual; CFI: comparative fit index

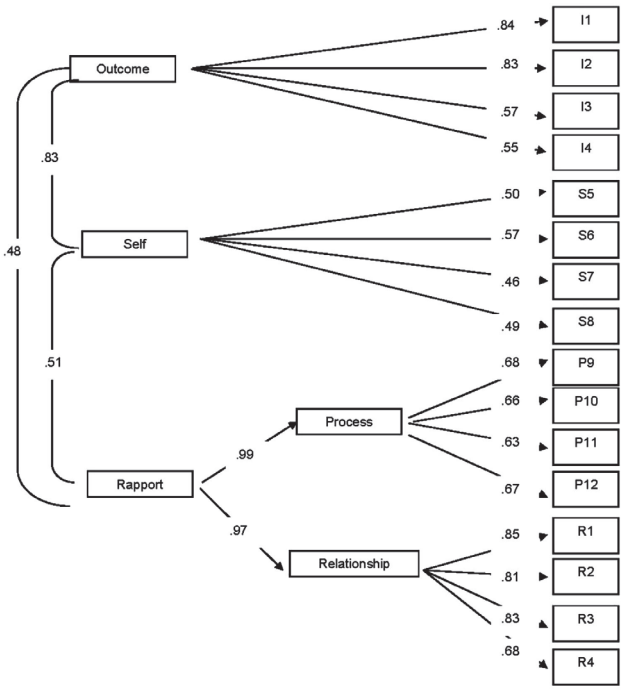

Figure 1. Hypothesized model

Table 7
Factorial loadings and error variances

Factor	Item	Standardized weights (λ)	λ^2	Error variances δ (1-λ^2)
Instrumental	I_1	.84	.79	.29
	I_2	.83	.69	.31
	I_3	.57	.32	.68
	I_4	.55	.30	.70
Self	S_5	.50	.25	.75
	S_6	.57	.32	.68
	S_7	.46	.21	.79
	S_8	.49	.24	.76
Rapport				
Process	P_9	.68	.46	.54
	P_10	.66	.44	.56
	P_11	.63	.40	.60
	P_12	.67	.45	.55
Relationship	R_13	.85	.72	.28
	R_14	.81	.66	.34
	R_15	.83	.69	.31
	R_16	.68	.46	.54

of the model. Progressive invariance analysis (Elosúa, 2005) was carried out, again using the CFA, in this case, multigroup CFA and the same estimation method (MLR). The goodness-of-fit indices for the configural invariance were the following: $\chi^2 = 719.49$, $df = 218$; $\chi^2/df = 3.3$; RMSA = .12; SRMR = .12; CFI = .88. These results lead to the rejection of the configural invariance hypothesis, which means that the latent factors are not specified by the same variables manifested in men and women (Elosúa, 2005, p. 360).

The modification indices to improve model fit indicate that three of the four items of the Self (5, 7, and 8) are related to items of the Instrumental Outcome factor. This result, along with others shown in previous sections, seems to suggest that the Self could be one of the reasons why the scale is not invariant across gender. Therefore, we decided to do a new analysis without that factor.

Table 8 shows the fit indices obtained in the analysis of the men's and the women's sample and the analysis of the comparison of the two factorial structures.

The results show that the fit of the new proposal was good in men and women and acceptable in terms of configural invariance, which implies that the latent factors or dimensions are specified by the same items or manifest variables.

Table 8
Goodness of fit indices for the invariance study

Fit indices	χ^2	Df	χ^2 / df	RMSEA	SRMR	CFI
Females	70.92	51	1.39	.051	.06	.99
Males	75.49	51	1.48	.057	.06	.98
Configural invariance	299.88	103	2.91	.09	.06	.94

Note: The new model for the invariance study contains 12 items grouped into two factors (Instrumental Outcome and Rapport) with two subfactors (Relationship and Process) contained within larger factor of Rapport. RMSEA: root-mean-square error of approximation; SRMR: standardized root-mean-square residual; CFI: comparative fit index

Discussion

In recent years, several investigations have questioned the predominance of the quantitative factors in negotiation, by causing the subjective value variable to emerge (Curhan et al., 2010; Thompson, 1990). In the absence of questionnaires in Spanish that measure this construct, we wished to analyze the psychometric properties of the only currently existing instrument to measure this important aspect of negotiation, the SVI (Curhan et al., 2006), addressing gender invariance, given the importance that this perspective is gaining in psychological research.

The CFA confirmed the original model's configuration in English (Curhan et al., 2006). The structure of the instrument in the Spanish sample has four factors: Instrumental Outcome, Self, Process, and Relationship, the last two included in the Rapport factor. The same thing occurred in the original model (Curhan et al., 2006, p. 502). Therefore, a decision has to be made: to consider these factors as independent factors or as part of a more inclusive one. The solution, already offered by the original authors of the instrument, is clear: "For theoretical reasons, we elected to retain the two Rapport factors as separate constructs rather than to combine them together into a single survey factor" (p. 502). The theoretical reason is that both the Process and Relationship factors are related to two important psychological processes, cold cognition and hot cognition, respectively.

With this result, and with the others obtained on reliability, it can be said that this work corroborates the psychometric properties of the original model. This similarity of results also includes the most questionable factor of the SVI: the Self.

Difficulties with this factor had already been detected in the work of Curhan et al. (2006) both because of its low level of association with the other factors of the scale and because of its internal consistency, which might suggest "perhaps a more multifaceted nature" (p. 502). In the original study, this restriction was noted, but not further deepened. Our study proves that the Self does not meet basic requirements. Three of its four items have a relationship of < .40 with the factor, the different reliability indices used (α, CRI, and AVE) are far from reaching the minimum established criterion, and the factor loadings on this factor are the lowest. It was also found that the Self negatively affected the fit of the model's factorial invariance across gender. The modification indices indicate that three of its items are linked to items of the Instrumental Outcome factor which is inappropriate. This conclusion is supported not only by our work, but also by the work of Curhan et al. (2006). The fact that two pieces of research were carried out in different cultures, with a temporal separation of almost fifteen years and using different samples, students (Studies 3 and 4) in the case of Curhan et al. (2006) and professionals and students in the Spanish adaptation, reinforces the questioning of that factor. Therefore, we propose the use of the instrument without the Self factor, as the conceptual entity of the other three factors and their appropriate psychometric properties are useful for measuring the subjective valuation of negotiation.

Finally, our study analyzed the factor invariance across gender of the SVI, an issue that, to our knowledge and despite its theoretical and applied interest, had not been addressed until now. The data showed that the model has a good fit both for men and women and also has configural gender invariance.

Concerning the limitations of the study, it could be noted that it does not provide evidence of external, convergent or discriminant validity. On the other hand, and considering that the process of validating an instrument is a long-term task involving the collection of evidence of validity of scores in different contexts, samples, and times, it is necessary for future work to use another type of sample and to compare the results of studies using different negotiating tasks.

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