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Psychometric Properties and Factor Structure of the Ruminative Responses Scale-Short Form in Colombia

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Abstract

The Ruminative Response Scale (RRS) is the most used measure of rumination in response to depressive mood. The RRS consists of 22 items that are responded on a 4-point Likert-type scale. A 10-item version of the RRS (RRS-SF) has been developed by removing the items that overlap with items of depression measures. The RRS-SF contains two subscales (Brooding and Reflection) that showed acceptable psychometric properties in the original and Spanish version. However, the psychometric properties and factor structure of the RRS-SF have not been tested in Colombia. After warranting validity content of the Spanish version of the RRS-SF, it was administered to a total of 604 participants including a nonclinical and clinical sample. The internal consistency of both subscales was acceptable and similar to the original version. The two-factor model showed a good fit to the data and measurement invariance across samples. The clinical sample's mean scores on the RRS-SF subscales were significantly higher than scores of the nonclinical sample. Brooding and Reflection scores were significantly related to measures of pathological worry, emotional symptoms, psychological distress, experiential avoidance, and cognitive fusion. The Spanish version of the RRS-SF showed good psychometric properties in Colombia.

Key words: ruminative responses scale, rumination, repetitive negative thinking, depression.

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Novelty and Significance

What is already known about the topic?

- The Ruminative Response Scale-Short Form (RRS-SF) is the most used measure of rumination in response to depressive mood.
- The RRS-SF has acceptable psychometric properties and a two-factor model structure (Brooding and Reflection).

What this paper adds?

- The two-factor model obtained acceptable fit to the data in clinical and nonclinical participants.
- The RRS-SF showed measurement invariance between the clinical and nonclinical samples.
- The RRS-SF showed good psychometric properties in Colombia.

Response Style Theory (RST; Nolen-Hoeksema, 1991) has analyzed how people tend to respond differently to their mood by engaging in some coping strategies such as distracting themselves, engaging in problem-solving, ruminating, etc. According to

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research within RST, some ways of responding to one's mood are adaptive and others are counterproductive. One of the most investigated response styles is rumination, which is defined as a way of coping with sadness and depression characterized by repetitive and passive thinking concerning their causes, consequences, and meaning. Specifically, rumination consists of repeatedly asking oneself and answering questions such as "Why am I feeling so sad? What's wrong with me? Why can't I overcome this?"

The empirical evidence within RST has shown that rumination is a particularly pernicious way of responding to feelings of sadness and depression because ruminators usually get trapped in cycles of ruminative thinking that do not lead to engaging in effective problem-solving actions (Nolen-Hoeksema, 2004). Studies have found that the tendency to engage in rumination in response to distress is a stable individual difference (Nolen-Hoeksema & Davis, 1999). Numerous longitudinal studies have shown that the tendency to ruminate predicts the presence of depressive symptoms and the onset of depression (see reviews in Ehring & Watkins, 2008; Nolen-Hoeksema, 2004; Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). For instance, the tendency to ruminate predicted more severe depressive symptoms both 10 days and 7 weeks after an earthquake (Nolen-Hoeksema & Morrow, 1991), and 18 months after the death of the beloved person (Nolen-Hoeksema & Larson, 1999). Additionally, rumination is associated with other psychological disorders such as anxiety, binge eating, addictions, and self-harm (e.g., Baumeister, Heatherton, & Tice, 1994; Nolen-Hoeksema & Harrell, 2002; Nolen-Hoeksema *et alii*, 2008).

Most of the empirical evidence of the effect of rumination on emotional disorders has been conducted with the Ruminative Response Scale (RRS; Nolen-Hoeksema & Morrow, 1991). The RRS is a subscale derived from a previous questionnaire known as the Response Styles Questionnaire, which consisted of 71 items that assess what kind of activities people engage in when feeling depressed, such as rumination, distraction, problem-solving, or dangerous activities. Only the rumination and distraction subscales were maintained in the RSQ because of the low reliability and predictive ability of the Problem-solving and Dangerous activities subscales. Subsequently, the Rumination subscale of the RSQ was called RRS and became a widely used instrument on rumination research on its own (Luminet, 2004).

The RRS consists of 22 items that are responded on a 4-point Likert-type scale (4= almost always, 1= almost never). The items of the RRS assess the coping strategies that the individual uses when facing depressed mood: finding a meaning by ruminating, entangling with the feeling, repetitively paying attention to the symptoms, and trying to figure out the possible causes or consequences of the actual emotional state. Cronbach's alpha of the RRS is good, ranging from 0.88 to 0.92, and factor analyses have led to a three-factor structure including Self-Focus, Symptom-Focus, and Self-Blame (Luminet, 2004).

Subsequent research showed that some items of the RRS overlap with items on measures of depression. Accordingly, Treynor, González, and Nolen-Hoeksema (2003) developed a short version of the RRS by eliminating the items with overlapping content. This version was called the Ruminative Response Scale-Short Form (RRS-SF) and consists of 10 items that are grouped in two subscales called Brooding and Reflection. Cronbach's alphas for Brooding and Reflection were .77 and .72, respectively (Treynor et alii, 2003).

The RRS and RRS-SF have been translated into Spanish in Spanish and Chilean samples (Cova Solar, Rincón, & Melipillán, 2007; Hervás, 2008). The psychometric

properties of the RRS-SF were acceptable in Hervás (2008) in Spanish nonclinical samples (.80 for Brooding and .74 for Reflection), and the exploratory factor structure conducted revealed the presence of the two factors found by Treynor et alii (2003). The internal consistency of the Spanish version presented by Cova Solar et alii was poor (.57 for Brooding and .67 for Reflection) in Chilean nonclinical samples. However, the confirmatory factor analysis found acceptable goodness-of-fit indices. None of the studies has analyzed the psychometric properties of the RRS-SF in clinical samples in Spanish-speaking countries.

To our knowledge, the psychometric properties and factor structure of the RRS-SF have not been explored in Colombian samples, which hinders the performance of rumination-related studies. Additionally, testing measures in culturally diverse samples enhance both our confidence in the measure and the cross-cultural relevance of the underlying theory (Elosua, Mujika, Almeida, & Hermosilla, 2014). In view of the abovementioned results, we used the Spanish version by Hervás (2008) to investigate the psychometric properties of the RRS-SF both in nonclinical and clinical samples.

METHOD

Participants

The sample 1 consisted of 368 participants (62% female) with age ranging between 18 and 89 years (M= 26.65, SD= 9.81). The relative educational level of the participants was: 49.2% primary studies (i.e., compulsory education) or mid-level study graduates (i.e., high school or vocational training), 33.4% were undergraduates or college graduates, and 16.4% were currently studying or had a postgraduate degree. They responded to an anonymous internet survey distributed through social media. All of them were Colombian. Thirty-nine percent reported having received psychological or psychiatric treatment at some time, but only 7.3% were currently in treatment. Also, 4.3% of participants reported consumption of some psychotropic medication.

The sample 2 consisted of 236 patients (74% female), with an age range of 18 to 63 years (M= 27.02, SD= 10.23), suffering from emotional symptoms. All participants were being evaluated in some private psychological consultation center. Only 7.1% of the participants reported that they were consuming some psychotropic medication.

Instruments

Ruminative Responses Scale-Short Form (RRS-SF; Treynor et alii, 2003; Spanish version by Hervás, 2008). The RRS-SF is a 10-item, 4-point Likert scale (4= almost always; 1= almost never) self-report instrument that was designed to measure the tendency to ruminate in response to feelings of sadness and depression. It contains two subscales called Brooding and Reflection. According to Treynor et alii (2003) brooding is the most maladaptive form of rumination, whereas reflection could have both maladaptive and adaptive aspects.

Acceptance and Action Questionnaire-II (AAQ-II; Bond et alii, 2011; Spanish version by Ruiz, Langer, Luciano, Cangas, & Beltrán, 2013). The AAQ-II is a general measure of experiential avoidance. It consists of 7 items that are rated on a 7-point Likert-type scale (7= always true; 1= never true). The Spanish version of the AAQ-II has shown good psychometric properties (overall alpha of .90) and a one-factor structure in Colombia (Ruiz *et alii*, 2016).

Cognitive Fusion Questionnaire (CFQ, Gillanders *et alii*, 2014; Spanish version by Ruiz, Suárez Falcón, Riaño Hernández, & Gillanders, 2017). The CFQ is a 7-item, 7-point Likert-type scale (7= always; 1= never true) consisting of sentences describing instances of cognitive fusion. This scale has been validated in English for a wide variety of clinical and nonclinical populations. The Spanish version by Ruiz et alii (2017) has shown similar psychometric properties (overall alpha of .92) and factor structure to the original version in Colombia.

Depression, Anxiety, and Stress Scales-21 (DASS-21; Antony, Bieling, Cox, Enns, & Swinson, 1998; Spanish version by Daza, Novy, Stanley, & Averill, 2002). The DASS-21 is a 21-item, 4-point Likert-type scale (3= applied to me very much, or most of the time; 0= did not apply to me at all) consisting of sentences describing negative emotional states. It contains three subscales (Depression, Anxiety, and Stress) and has shown good internal consistency and convergent and discriminant validity. The study by Ruiz, García Martín, Suárez Falcón, and Odriozola González (2017) showed that the DASS-21 has good psychometric properties in Colombia and a hierarchical structure with three first-order factors and one second-order factor.

General Health Questionnaire-12 (GHQ-12, Goldberg & Williams, 1988; Spanish version by Rocha, Pérez, Rodríguez Sanz, Borrell, & Obiols, 2011). The GHQ-12 is a 12-item, 4-point Likert-type scale that is frequently used as screening for psychological disorders. Respondents are asked to indicate the degree to which they have recently experienced a range of common symptoms of distress, with higher scores reflecting greater levels of psychological distress. The Likert scoring method was used in this study, with scores ranging from 0 to 3 assigned to each of the four response options. Alpha values for the GHQ-12 in this study were good, .91 in both samples.

Procedure

Before administering the RRS-SF, we conducted two initial studies with the aim of exploring the comprehensibility of the RRS-SF items in Colombia and content validity. Firstly, we administered the RRS-SF and other questionnaires to 64 clinical psychology trainees in order to analyze the comprehensibility of its items. No understanding problem was mentioned in relation to RRS-SF items. Secondly, the RRS-SF items were given to 3 experts in rumination and they were asked to rate their representativeness, comprehensibility, interpretation, and clarity. Aiken's V was above the usual threshold of .50 for all RRS-SF items.

Participants in Sample 1 responded to an anonymous internet survey distributed through social media (i.e., Facebook profiles, institutional webpage, etc.). Participants in Sample 2 responded to the questionnaires during one of the clinical assessment interviews at the beginning of the treatment, in the presence of their therapist. In both samples, after individuals gave informed consent, they were provided with a questionnaire package that included the abovementioned self-report instruments.

Data analysis

Prior to conducting factor analyses, data from Samples 1 and 2 were examined, searching for missing values. No missing values were found. All confirmatory factor analyses (CFA) were conducted in LISREL© (version 8.71, Jöreskog & Sörbom, 1999) following the weighted least square estimation method. According to previous research, we compared the fit of a one-factor model versus a two-factor model. Additionally, as previous studies (e.g., Cova Solar *et alii*, 2007) have found significant correlations

between some of the error terms of the RRS-SF items, we explored the modification indices provided by the LISREL.

Goodness of fit was examined computing the following fit indexes: (a) root mean square error of approximation (RMSEA); (b) the comparative fit index (CFI); (c) the non-normed fit index (NNFI); and (d) the expected cross-validation index (ECVI). According to Kelloway (1998), RMSEA values of .10 represent a good fit, and values below .05 represent a very good fit to the data. With respect to the CFI and NNFI, values above .90 indicate well-fitting models, and above .95 represent a very good fit to the data. The ECVI was computed to compare the goodness of fit of the alternative factor models (lower values indicate better fit to the model). Lastly, the differences between the chi-square-values for the alternative models were calculated following a likelihood ratio test under the null hypothesis that models showed equivalent fits. This chi-square difference is also chi-square distributed with degrees of freedom equal to the difference between the degrees of freedom of the two compared models.

Additional CFAs were performed to test for measurement invariance across samples and gender. In other words, we analyzed whether the item factor loadings are invariant across the clinical and nonclinical samples and between men and women. In so doing, the relative fit of two models was compared. The first model (the multiple-group baseline model) allowed the ten unstandardized factor loadings to vary across the two samples (or across men and women), whereas the second model (constrained model) placed equality constraints (i.e., invariance) on those loadings and error covariance. Equality constraints were not placed on estimates of the factor variances because these are known to vary across groups even when the indicators are measuring the same construct in a similar manner (Kline, 2005). Given the hierarchy of these nested and increasingly restrictive models, they were compared to each other. The parsimonious model (constrained model) was selected if the following four criteria suggested by Chen (2007) were met: (a) the constrained model did not generate a significantly worse fit than the unconstrained model (the multiple-group baseline model) according to the chi-square test; (b) the difference in RMSEA (ΔRMSEA) was lower than .01; (c) the difference in CFI (ΔCFI) was greater than -.01; and (d) the difference in NNFI (ΔNNFI) was greater than -.01.

The remaining statistical analyses were performed on SPSS 19©. Cronbach's alphas were computed providing 95% confidence intervals (CI) to explore the internal consistency of both subscales of the RRS-SF in Samples 1 and 2, and the overall sample. Corrected item-total correlations were obtained for each subscale to identify items that should be removed because of low discrimination item index (i.e., values below .20). Descriptive data were also calculated, and gender differences in RRS-SF subscale scores were explored by computing Student's *t*. To examine discriminant construct validity, scores on the RRS-SF subscales were compared between clinical and nonclinical participants (i.e., Samples 1 and 2). Pearson correlations between the RRS-SF subscales and other scales were calculated to assess convergent construct validity.

Results

Table 1 presents the results of the CFA conducted on the overall sample comparing the one-factor and two-factor models. The latter model showed slightly better fit, but modification indices suggested allowing error terms of Items 4 and 10 to correlate. The goodness-of-fit of this model is also presented in Table 1 and showed an acceptable fit (RMSEA= .092, 90% CI [.080, .10]; CFI= .95; NNFI= .94).

Figure 1 depicts the results of the standardized solution of the two-factor model with error terms of Items 4 and 10 allowed to correlate.

Table 1. Goodness-of-Fit Indexes in the Overall Sample (*N*= 604) of the One-Factor Model, Two-Factor Model, and the Two-Factor Model with Error Terms Allowed to Correlate for Items 4 and 10.

Goodness-of-fit indicators	One-factor model	Two-factor model	Two-factor model with error terms allowed to correlate between items 4 and 10
RMSEA [90% CI]	.11 [.10, .13]	.11 [.099, .12]	.092 [.080, .10]
CFI	.93	.93	.95
NNFI	.91	.91	.94
ECVI [90% CI]	.58 [.49, .68]	.54 [.46, .64]	.41 [.34, .49]
χ^2 (*df*)	307.44 (35)	285.87 (34)	201.50 (33)

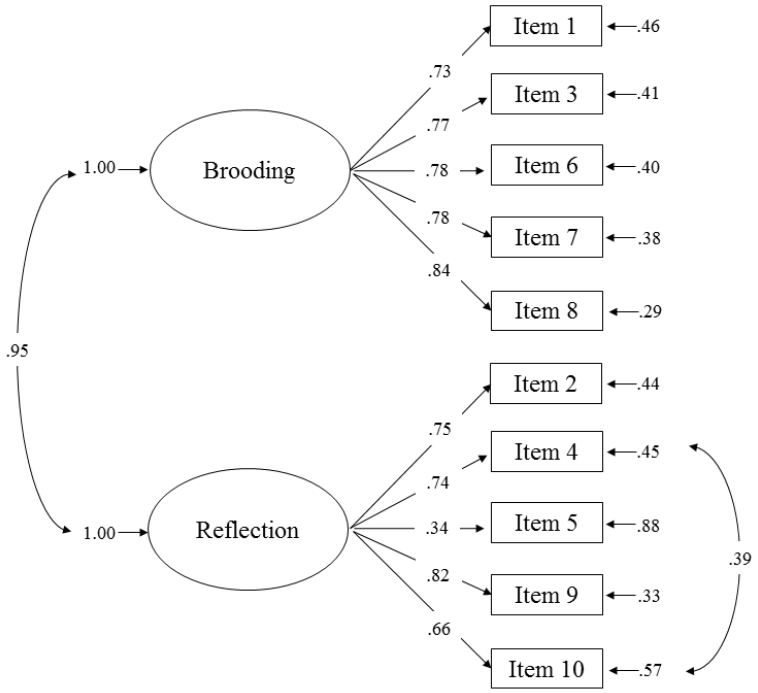


Figure 1. Standardized solution for the two-factor model with error terms of Items 4 and 10 allowed to correlate.

Table 2 shows that the multiple-group baseline models fit the data well, with all values of the goodness-of-fit indexes suggesting acceptable-fitting solutions. When equality constraints were placed on the factor loadings, there was no significant decrement in goodness of fit, suggesting that the measures were invariant across samples and gender. With respect to measurement invariance across clinical and nonclinical samples, all criteria recommended by Chen (2007) were met excepting the χ^2 diff test, which was statistically significant, $\chi^2_{(9)}= 28.46$, $p < .01$. Therefore, given the sensitivity of the χ^2 test to the sample size, we can assume that measurement invariance across sample was broadly met. All criteria were met in relation to measurement invariance across gender. Specifically, the χ^2 diff test was not statistically significant, $\chi^2_{(9)}= 18.74$, $p > .01$, the differences in RMSEA were lower than .01, and the differences in CFI and NNFI were higher than -.01.

Table 3 shows that Cronbach's alpha of Brooding in Sample 1 was .77, whereas in Sample 2, it was .71, with an overall alpha of .79. Corrected item-total correlations of Brooding in the overall sample ranged from .35 (Item 3) to .68 (Item 8). Cronbach's alphas of Reflection were .77 and .70 for Sample 1 and Sample 2, respectively. The overall alpha across samples was .75, and corrected item-total correlations ranged from .32 (Item 5) to .65 (Item 4). Overall, the results indicate that items of the RRS-SF present an acceptable level of discrimination index.

Mean scores of participants in the clinical sample were higher both in Brooding (t= -10.81, p <.001) and Reflection (t= -5.75, p <.001) than mean scores in the nonclinical sample. In the nonclinical sample, no statistically significant differences were found across gender either in Brooding (t= .37, p= .71) or Reflection (t= 1.85, p= .07). Likewise, no statistically significant differences were found in the clinical sample (Brooding: t= -.38, p= .70; Reflection: t= .91, p= .37).

The RRS-SF subscales showed correlations with all the other assessed constructs in theoretically coherent ways (see Table 4). Specifically, Brooding showed strong positive correlations with pathological worry, emotional symptoms, experiential avoidance, and cognitive fusion, whereas the correlations between Reflection and the latter constructs were lower and medium sized.

Table 2. Measurement Invariance across Samples and Gender.

Model	χ^2	*df*	$\Delta\chi^2$	Δdf	RMSEA	ΔRMSEA	CFI	ΔCFI	NNFI	ΔNNFI
Measurement invariance across samples										
MG Baseline model	298.03	66			.108		.947		.928	
Constrained model	326.49	75	28.46	9	.106	.002	.943	-.003	.931	.003
Measurement invariance across gender										
MG Baseline model	256.09	66			.101		.960		.945	
Constrained model	274.83	75	18.74	9	.097	.004	.958	-.002	.949	.004

Table 3. Cronbach's alphas and descriptive data across samples.

		Sample 1: Online (*N*= 368)	Sample 2: Clinical (*N*= 236)	Overall Sample (*N*= 604)
BROODING	Alpha	.77	.71	.79
	95% CI	[.74, .81]	[.65, .77]	[.76, .81]
	Mean score	10.84	13.90	12.03
	SD	3.46	3.48	3.71
REFLECTION	Alpha	.77	.70	.75
	95% CI	[.73, .81]	[.63, .75]	[.72, .78]
	Mean score	10.91	12.51	11.54
	SD	3.55	3.18	3.50

Table 4. Pearson correlations between the RRS-SF subscales and other relevant self-report measures (Sample 1, *N*= 368; Sample 2, *N*= 236)

Measure	Sample	*r* with Brooding	*r* with Reflection
PSWQ (pathological worry)	1	.65*	.33*
	2	.49*	.30*
AAQ-II (experiential avoidance)	1	.70*	.36*
	2	.63*	.33*
CFQ (cognitive fusion)	1	.72*	.40*
	2	.62*	.33*
DASS-21-Depression	1	.66*	.35*
	2	.48*	.33*
DASS-21-Anxiety	1	.62*	.32*
	2	.53*	41*
DASS-21- Stress	1	.67*	.33*
	2	.53*	.40*
GHQ-12 (psychological distress)	1	.60*	.30*
	2	.48*	.24*

Notes: AAQ-II= Acceptance and Action Questionnaire-II; CFQ= Cognitive Fusion Questionnaire; DASS= Depression, Anxiety, and Stress Scales-21; GHQ-12= General Health Questionnaire-12; PSWQ= Penn State Worry Questionnaire; *p <.001

Discussion

The RRS is the most used measure of rumination in response to depressive mood (Luminet, 2004). However, a good degree of the RRS items overlap with measures of depression, which could inflate correlations between both constructs. Accordingly, the RRS-SF was developed by removing the items of the RRS that overlap with measures of depression. Research has found that the RRS-SF has acceptable psychometric properties and a two-factor structure consisting of the subscales Brooding and Reflection (Treynor *et alii*, 2003). The RRS-SF has been translated into Spanish by Hervás (2008) and Cova Solar *et alii* (2007), but had not been tested in Colombian samples. To advance in this direction, we selected the version by Hervás, as it showed better psychometric properties than the Cova Solar *et alii* version.

We first confirmed the items' content validity, according to Colombian experts, and their comprehensibility, according to a sample of undergraduates. Afterward, the Spanish translation by Hervás (2008) was administered to nonclinical (*N*= 368) and clinical (*N*= 236) samples. The results showed that the RRS-SF had construct validity to the extent that the CFA showed that the two-factor model obtained an acceptable fit. Additionally, measurement invariance across samples (nonclinical and clinical samples) and gender was found.

The internal consistencies of the RRS-SF subscales were acceptable across samples. The RRS-SF subscales showed discriminant validity to the extent that their scores discriminated between clinical and nonclinical samples. Both Brooding and Reflection showed convergent validity in view of their positive correlations with pathological worry, experiential avoidance, cognitive fusion, emotional symptoms, and psychological distress. As expected, these correlations were higher for Brooding than for Reflection, which coincides with previous evidence that shows that Brooding seems to be the most counterproductive ruminative response (e.g., Hervás, 2008; Treynor *et alii*, 2003). Additionally, this version of the RRS-SF showed change sensitivity in the study by Ruiz, Riaño Hernández, Suárez-Falcón, and Luciano (2016) conducted with a Colombian sample.

In addition to showing that the RRS-SF has good psychometric properties and a two-factor structure in Colombia, the current study also contributes to the field by revealing that the RRS-SF subscales had measurement invariance across nonclinical and clinical samples. To our knowledge, only the study by Whitmer and Gotlib (2011) has analyzed the differences in factor structure of the RRS-SF in nonclinical and clinical samples. Specifically, the authors found that the two-factor structure reported by Treynor *et alii* (2003) was not adequate in a sample of currently depressed participants, but it was adequate in non-depressed and formerly depressed participants. Our study, however, has found measurement invariance across a nonclinical and a clinical sample. This difference with Whitmer and Gotlib's findings might be due to the composition of our clinical sample, which included not only depressed patients. Further studies might systematically analyze the issue of measurement invariance of the RRS-SF in different types of clinical samples.

Some limitations of this study are worth mentioning. Firstly, no systematic information was obtained concerning the diagnosis in clinical participants. Secondly, some validity aspects of the RRS-SF have not been analyzed in the current study (e.g., divergent validity, sensitivity to treatment effects, etc.). Lastly, the percentage of women

was significantly higher than the percentage of men in the composition of the samples, especially in the clinical one.

In conclusion, the Spanish version of the RRS-SF can be used to measure rumination in Colombia, according to the reliability and validity data provided in this study. Further studies might explore the psychometric properties of this version of the RRS-SF in other Spanish speaking countries.

References

Antony MM, Bieling PJ, Cox BJ, Enns MW, & Swinson RP (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales (DASS) in clinical groups and a community sample. *Psychological Assessment, 10*, 176-181. Doi:10.1037/1040-3590.10.2.176

Baumeister RF, Heatherton TF, & Tice DM (1994). *Losing control: How and why people fail at self-regulation*. San Diego: Academic Press.

Bond FW, Hayes SC, Baer RA, Carpenter KM, Guenole N, Orcutt HK, Waltz T, & Zettle RD (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire-II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy, 42*, 676-688. Doi: 10.1016/j.beth.2011.03.007

Chen FF (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal, 14*, 464-504. Doi: 10.1080/10705510701301834

Cova Solar F, Rincon P, & Melipillán A (2007). Rumiación y presencia de síntomatología ansiosa y depresiva en adolescentes [Rumination and presence of anxious and depressive symptomatology in adolescents]. *Revista Mexicana de Psicología, 24*, 175-183.

Daza P, Novy DM, Stanley M, & Averill P (2002). The Depression Anxiety Stress Scale-21: Spanish translation and validation with a Hispanic sample. *Journal of Psychopathology and Behavioral Assessment, 24*, 195-205. Doi: 10.1023/a:1016014818163

Ehring T & Watkins E (2008). Repetitive negative thinking as a transdiagnostic process. *International Journal of Cognitive Therapy, 3*, 192-205. Doi: 10.1521/ijct.2008.1.3.192

Elosua P, Mujika J, Almeida LS, & Hermosilla D (2014). Procedimientos analítico-racionales en la adaptación de tests. Adaptación al español de la batería de pruebas de razonamiento [Judgmental-analytical procedures for adapting tests: Adaptation to Spanish of the Reasoning Test Battery]. *Revista Latinoamericana de Psicología, 46*, 117-126. doi:10.1016/s0120-0534(14)70015-9

Gillanders DT, Bolderston H, Bond FW, Dempster M, Flaxman PE, Campbell L, Kerr S, Tansey L, Noel P, Ferenbach C, Masley S, Roach L, Lloyd J, May L, Clarke S, & Remington B (2014). The development and initial validation of the Cognitive Fusion Questionnaire. *Behavior Therapy, 45*, 83-101. Doi: 10.1016/j.beth.2013.09.001

Goldberg D & Williams P (1988). *A user's guide to the General Health Questionnaire*. Windsor, UK: NFER-Nelson.

Hervás G (2008). Adaptación al castellano de un instrumento para evaluar el estilo rumiativo: la Escala de Respuestas Rumiativas [Spanish adaptation of an instrument to assess ruminative style: Ruminative Response Scale]. *Revista de Psicopatología y Psicología Clínica, 13*, 111-121. Doi: 10.5944/rppc.vol.13.num.2.2008.4054

Jöreskog KG & Sörbom D (1999). *LISREL 8.30*. Chicago, IL: Scientific Software International.

Kelloway EK (1998). *Using LISREL for structural equation modeling: A researcher's guide*. Thousand Oaks, CA: Sage.

Kline RB (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.

Luminet O (2004). Measurement of depressive rumination and associated constructs. In C Papageorgiou, & A Wells (Eds.), *Depressive rumination: Nature, theory and treatment* (pp. 107-125). Sussex: Wiley.

Meyer TJ, Miller, ML, Metzger RL, & Borkovec TD (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research and Therapy, 28*, 487-495. Doi: 10.1016/0005-7967(90)90135-6

Nolen-Hoeksema S (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology, 100*, 569-582. Doi: 10.1037//0021-843x.100.4.569

Nolen-Hoeksema S (2004). The Response Styles Theory. In C Papageorgiou, & A Wells (Eds.), *Depressive rumination: Nature, theory and treatment* (pp.107-125). Sussex: Wiley.

Nolen-Hoeksema S & Davis CG (1999). "Thanks for sharing that": Ruminators and their social support networks. *Journal of Personality and Social Psychology, 77*, 801-814. Doi: 10.1037//0022-3514.77.4.801

Nolen-Hoeksema S & Harrell ZAT (2002). Rumination, depression and alcohol use: Tests of gender differences. *Journal*

of Cognitive Psychotherapy: An International Journal, 16, 391-404. Doi: 10.1891/088983902780935687

Nolen-Hoeksema S & Larson J (1999). *Coping with loss*. Mahwah, NJ: Erlbaum

Nolen-Hoeksema S & Morrow J (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: The 1989 Loma Prieta earthquake. *Journal of Personality and Social Psychology, 61*, 115-121. Doi: 10.1037/0022-3514.61.1.115

Nolen-Hoeksema S, Wisco, BE, & Lyubomirsky S (2008). Rethinking rumination. *Perspectives on Psychological Science, 3*, 400-424. Doi: 10.1111/j.1745-6924.2008.00088.x

Rocha K, Pérez K, Rodríguez Sanz M, Borrell C, & Obiols JE (2011). Propiedades psicométricas y valores normativos del General Health Questionnaire (GHQ-12) en población española [Psychometric properties and normative scores of the General Health Questionnaire (GHQ-12) in general Spanish population]. *International Journal of Clinical and Health Psychology, 11*, 125-139.

Ruiz FJ, Langer AI, Luciano C, Cangas AJ, & Beltrán I (2013). Measuring experiential avoidance and psychological inflexibility: The Spanish translation of the Acceptance and Action Questionnaire. *Psicothema*, *25,* 123-129. Doi: 10.7334/psicothema2011.239

Ruiz FJ, Riaño Hernández D, Suárez Falcón JC, & Luciano C (2016). Effect of a one-session ACT protocol in disrupting repetitive negative thinking: A randomized multiple-baseline design. *International Journal of Psychology and Psychological Therapy, 16*, 213-233.

Ruiz FJ, Suárez Falcón JC, Cárdenas Sierra S, Durán YA, Guerrero K, & Riaño Hernández D (2016). Psychometric properties of the Acceptance and Action Questionnaire-II in Colombia. *The Psychological Record, 66*, 429-437. Doi:10.1007/s40732-016-0183-2

Ruiz FJ, Suárez Falcón JC, Riaño Hernández D, & Gillanders D (2017). Psychometric properties of the Cognitive Fusion Questionnaire in Colombia. *Revista Latinoamericana de Psicología, 49*, 80-87. Doi: 10.1016/j.rlp.2016.09.006

Sandín B, Chorot P, Valiente RM, & Lostao L (2009). Validación española del cuestionario de preocupación PSWQ: estructura factorial y propiedades psicométricas [Spanish validation of the PSWQ: Factor structure and psychometric properties]. *Revista de Psicopatología y Psicología Clínica, 14*, 107-122. Doi: 10.5944/rppc.vol.14.num.2.2009.4070

Treynor W, Gonzalez R, & Nolen-Hoeksema S (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research, 27*, 247-259. Doi: 10.1023/A:1023910315561

Whitmer A & Gotlib IH (2011). Brooding and reflection reconsidered: A factor analytic examination of rumination in currently depressed, formerly depressed, and never depressed individuals. *Cognitive Therapy and Research, 35*, 99-107. Doi: 10.1007/s10608-011-9361-3.

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