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The Behavioral Activation for Depression Scale-Short Form (BADS-SF-8): An analysis of its psychometric properties in Colombia

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Abstract | **Introduction/Aim:** The Behavioral Activation Scale for Depression-Short Form (BADS-SF-8) is an instrument that assesses *activation*, that is, participation in meaningful activities, and *avoidance*, or the tendency to avoid negative thoughts and emotions. This study aimed to analyse the internal structure of the BADS-SF and its relationship with other psychological variables. **Method:** In a sample of 530 participants, the structure, validity, invariance, and internal consistency of the BADS-SF were examined. Additionally, its correlation with measures of emotional symptomatology and other related constructs such as psychological inflexibility, environmental suppressors, probability of reinforcement, values, and automatic thoughts was explored. **Results:** The BADS-SF showed adequate internal consistency, both in the total scale and in its factors. Confirmatory factor analysis supported a clear two-factor structure, which was invariant across sex and levels of depressive symptoms. The scale also demonstrated validity by correlating significantly (p <.05) with measures of emotional symptomatology and other relevant theoretical constructs. **Conclusions:** The BADS-SF is a reliable and valid tool for assessing the processes of activation and avoidance. Our findings support the usefulness of the 8-item version of the BADS-SF for the Colombian population as a sensitive and brief resource for mental health research and behavioural activation therapy.

Keywords: BADS-SF, confirmatory factor analysis, emotional symptomatology, behavioral activation

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Propiedades psicométricas de la Forma Corta de la Escala de Activación Conductual para la Depresión en una muestra colombiana

Resumen | **Introducción/objetivo:** La Escala Breve de Activación Conductual para la Depresión (BADS-SF-8) es un instrumento que evalúa la *activación*, es decir, la participación en actividades significativas y la *evitación* o tendencia a evitar pensamientos y emociones negativas. El presente estudio tuvo como objetivo analizar la estructura interna de la BADS-SF y su relación con otras variables psicológicas. **Método:** En una muestra de 530 participantes, se examinó la estructura, validez, invarianza y consistencia interna de la BADS-SF. Así mismo, se exploró su correlación con medidas de sintomatología emocional y otros constructos relacionados como la inflexibilidad psicológica, los supresores ambientales, la probabilidad de reforzamiento, los valores y los pensamientos automáticos. **Resultados:** La BADS-SF mostró adecuada consistencia interna, tanto en la escala total como en sus factores. El análisis factorial confirmatorio validó una estructura de dos factores que resultó invariante en sexo y sintomatología depresiva. La escala también demostró validez al correlacionarse signifi-

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cativamente (p < .05) con medidas de sintomatología emocional y otros constructos teóricos relevantes. **Conclusiones:** La BADS-SF es una herramienta fiable y válida para evaluar los procesos de activación y evitación. Nuestros hallazgos respaldan la utilidad de la versión de ocho ítems de la BADS-SF para la población colombiana como un recurso sensible y breve para investigaciones en salud mental y terapia de activación conductual.

Palabras clave: BADS-SF, análisis factorial confirmatorio, sintomatología emocional, activación conductual

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Behavioral Activation (BA; Stein et al., 2021) stands out among interventions for emotional and affective disorders due to its simplicity, cost-effectiveness, and ease of implementation (Melicherova et al., 2024). Based on Ferster and Lewinsohn's theoretical contributions regarding the link between avoidance and depression (Dimidjian et al., 2011), BA promotes engagement in rewarding activities to enhance response-contingent positive reinforcement (RCPR) and improve mood (Jung & Han, 2024). BA is also characterised by its flexibility in community-based settings (Stein et al., 2021) and the ease with which clinicians can be trained (Cuijpers et al., 2023). Evidence supports its efficacy across diverse disorders and modalities, highlighting it as a trans-therapeutic approach (Wang & Feng, 2022). Moreover, activation has been proposed as a potential core mechanism in transdiagnostic models (Fernández-Rodríguez et al., 2023).

Aligned with BA principles, the Brief Behavioral Activation for Depression Scale–Short Form (BADS-SF) was developed to assess activation and avoidance patterns (Manos et al., 2011). The BADS-SF consists of nine items rated on a 0-6 Likert scale and comprises two factors: Avoidance (items 1, 6, 7, and 8) and Activation (items 2, 3, 4, 5, and 9). Activation reflects engagement in scheduled, goal-directed activities across life domains (Karimpourvazifehkhorani et al., 2025), whereas Avoidance represents efforts to suppress aversive thoughts and emotions typical of depressive states (García, 2019). This two-factor structure is theoretically consistent with BA and captures activation, escape, and avoidance behaviours (Sánchez et al., 2018). Psychometric studies in Latin America have generally reported acceptable reliability; for instance, Santos (2013) found α = .79 for the total scale.

In Colombia, García (2019) reported acceptable internal consistency for Activation (α_1 = .82; α_2 = .76) and Avoidance (α_1 = .71; α_2 = .70), and for the total scale (Sample 1: ω = .79, α = .77; Sample 2: α = .77, α = .77). Item 8 showed poor discrimination, and its removal improved internal consistency and model fit (χ^2/df = 2.5, CFI = .95, NFI = .92, IFI = .95), although RMSEA remained suboptimal. In Spain, González et al. (2018) found that item 8 loaded more strongly on Activation in smokers with depression, and their two-factor model (GFI = .99, CFI = .98, RMSEA = .07) explained 54.9% of variance, with good internal consistency (ω = .85 for Activation; ω = .70 for Avoidance).

Despite these generally supportive findings, several psychometric concerns remain regarding the Avoidance subscale. The original study (Manos et al., 2011) recommended using the total score without testing a higher-order factor and suggested employing additional measures to assess avoidance. Moreover, studies have reported low internal consistency for this dimension (α < .60; Almeida-López et al., 2021; Santos, 2013), and the removal of item 8 has repeatedly improved model fit and reliability (García, 2019; Koşan & Kaya, 2023). In Almeida-López et al.'s (2021) cross-cultural comparison, the Brazilian version showed lower reliability (α = .55) than the Peruvian version (α = .66), with both requiring item-level adjustments, highlighting the need for country-specific validation even within culturally related regions.

Although the BADS-SF has been examined in several cultural contexts, differences in emotion regulation, social reinforcers, and coping strategies can significantly influence the measurements of activation and avoidance. These contextual variations underscore the critical need for culturally sensitive adaptations in order to ensure conceptual and psychometric equivalence. This need is especially relevant in the Colombian context, where BA stands out as an intervention of high applicability for public mental health systems due to its cost-effectiveness (Cuijpers et al., 2023). Despite this potential, Colombian clinicians currently lack robust, validated instruments to accurately assess these core processes. This deficit limits their ability to formulate cases based on BA, monitor patient progress, or rigorously evaluate therapeutic efficacy. In response to this gap, the present study aimed to examine the internal structure of the Colombian adaptation of the BADS-SF (García, 2019) using a sequential exploratory-confirmatory approach. Parallel analysis, the Hull method, and indices of essential unidimensionality were applied to identify the most appropriate latent structure, which was then cross-validated through confirmatory factor analysis. Competing models, including the exclusion of item 8 (Koşan & Kaya, 2023) and a higher-order factor model, were also tested.

Additionally, the study evaluated measurement invariance across sex (men vs. women) and depressive symptomatology (low vs. elevated), and examined internal consistency, item discrimination, and validity evidence. Convergent and criterion-related validity were assessed through associations with transdiagnostic constructs (automatic thoughts, psychological inflexibility, personal values, and environmental reward probability) and differences between individuals with and without elevated depressive symptoms.

The BADS-SF, like any instrument, carries implicit assumptions based on its original development context

regarding how activation and avoidance are operationalised. Therefore, it is an empirical question whether these assumptions and the resulting factor structure remain invariant in a cultural context like Colombia. By rigorously testing the existing measure, this study provides the necessary evidence to establish a preliminary cross-cultural equivalence. This step is essential for facilitating the replicability of findings; it allows researchers—both in Colombia and globally—to be confident that they are measuring the same underlying constructs, enabling meaningful comparisons of behavioural processes across diverse populations.

Accordingly, this instrumental study provides comprehensive psychometric evidence supporting the structure, reliability, and validity of the BADS-SF-8 in a Colombian population, following AERA, APA, and NCME (2014) standards. These findings contribute to a more precise understanding of behavioural activation as a clinically relevant process in the assessment of emotional functioning and in research on mechanisms of change in affective disorders.

Method

Participants

A total of 530 Colombian individuals, 66.4% (n = 352) women, were selected through non-probability convenience sampling. Participants held at least a high school diploma and self-reported no diagnosed neuropsychological or psychological disorders. All participants provided informed consent. Ages ranged from 18 to 70 years for women (M = 26.8, SD = 11.2) and from 18 to 72 years for men (M = 27.1, SD = 11.1). The majority of participants were single (76.9%), followed by married (12.9%) and those in a common-law union (7.8%). Regarding education, the most common levels were high school (38.2%), undergraduate (25.2%), and technical (20.7%).

Forty-five point four percent of participants were students, 24.1% were employed, and 11.5% were both students and employed. Fifty-seven percent reported a middle socioeconomic level, followed by 35% reporting a low level. Additionally, 49.6% resided in the department of Cundinamarca, 45.2% in Bogotá, and the remainder in other regions of the country. Finally, 10% had received psychological or psychiatric care in the past year, 6.6% in the past 6 months, and 5% in the past month.

Instruments

The *Behavioral Activation for Depression Scale Short Form* (BADS-SF; Manos et al., 2011) assesses two components, avoidance and activation, through nine Likert-scale items (0: Not at all; 6: Completely). Higher scores indicate a higher degree of activation. The Colombian validation showed good internal consistency for activation (α = .82) and acceptable consistency for avoidance (α = .71); additionally, it showed good fit indices (CFI ≥ .95, NFI and IFI > .9) for the two-factorial model (García, 2019).

The *Depression Anxiety and Stress Scale – 21* (DASS-21; Antony et al., 1998) assesses emotional symptomatology in three dimensions: depression, anxiety, and stress, with 21 Likert-scale items (0: Did not occur at all; 3: Occurred very much, or most of the time). Higher total scores indicate a higher degree of symptomatology. The Colombian validation reported excellent internal consistency (α = [.92; .95]) and good fit indices (CFI = .99; RMSEA = .051; NNFI = .99) for the three-factor model with a second-order factor (Ruiz, García et al., 2017).

The *Acceptance and Action Questionnaire- II* (AAQ-II; Bond et al., 2011) assesses psychological inflexibility through 7 Likert-scale items (1: Never true; 7: Always true). The Colombian validation reports excellent internal consistency (α = .91) and adequate to good fit indices (RMSEA = .069; CFI = .98; NNFI = .97; Ruiz et al., 2016).

The *Reward Probability Index* (RPI; Carvalho et al., 2011) assesses the magnitude of environmental reward through 20 Likert-scale items (1: Strongly disagree; 4: Strongly agree). It consists of two subscales: reward probability and environmental suppressors. Higher scores indicate higher levels of reward. The Colombian study reported good internal consistency (α = .88) and good fit indices (RMSEA = .063; CFI = .99; NNFI = .98) for the two-dimensional model (Reyes-Buitrago et al., 2023).

The *Values Questionnaire* (VQ; Smout et al., 2014) assesses the values process through the subscales of obstruction and progress, with 10 Likert-scale items (0: Not at all true; 6: Completely true). Higher scores on the obstruction subscale indicate greater difficulty in moving towards values, and higher scores on the progress subscale indicate greater progress towards values. The Colombian validation reported good internal consistency for obstruction (α = .82) and progress (α = .83), and for the two-factor model, it showed good fit indices (RMSEA = .061; CFI = .98; NNFI = .97; Ruiz et al., 2022).

The *Automatic Thoughts Questionnaire* (ATQ; Netemeyer et al., 2002) assesses negative automatic thoughts through eight Likert-type items (1 = Not at all, 5 = All the time). Higher scores indicate a greater frequency of negative automatic thoughts. The Colombian adaptation of the ATQ-8 (Ruiz, Suárez-Falcón et al., 2017) was used, which demonstrated good internal consistency (α = .89) and adequate-to-good fit indices (RMSEA = .083; CFI = .96; NNFI = .95) for the two-factor model. According to Netemeyer et al. (2002), the ATQ-8 performs as adequately as the full version, supporting its efficiency and suitability for research contexts.

Procedure

Phase 1. Development, dissemination, and administration of the questionnaire

A Microsoft Forms questionnaire was created, including informed consent, the sociodemographic survey, and evaluation instruments. Data collection took place online between April and June 2022 through social media. Colombian regulations and international ethical principles for data and human subject protection were considered.

Phase 2. Data analysis

The sample was randomly divided into two subsamples. For the first subsample (n = 257), an Exploratory Factor Analysis (EFA) was conducted using polychoric

correlations, with the robust Diagonally Weighted Least Squares (DWLS) estimation method, and direct oblimin rotation. The optimal implementation of Parallel Analysis (PA; Timmerman & Lorenzo-Seva, 2011) and the Hull method with the robust CFI index (Lorenzo-Seva et al., 2011) were used. Additionally, the Unidimensional Congruence (UniCo), Explained Common Variance (ECV), and Mean of Item Residual Absolute Loadings (MIREAL) indices were calculated to evaluate essential unidimensionality. Values greater than .95 for UniCo, greater than .85 for ECV, and less than .30 for MIREAL suggest that the data should be treated as essentially unidimensional (Ferrando & Lorenzo-Seva, 2018).

For the second subsample (n = 273), CFA was conducted using the DWLS estimator. The fit of three models was evaluated: (a) the original two-factor model (Manos et al., 2011), (b) a two-factor model excluding item 8 (2F-8) per Cordero-Torres (2021) and García (2019), and (c) a two-factor model excluding item 8 with a second-order factor (2F-8 2nd order), following the scale creators' recommendation (Manos et al., 2011). Fit indices considered were χ^2/gl < 4, CFI ≥ .95, NFI, TLI, and IFI > .90, and RMSEA < .05 (Rial et al., 2006). Multi-group CFAs tested configural, metric, scalar, and residual invariance across sex. Models were rejected if Δp < .050 (Lippke et al., 2007), ΔTLI > 0.050, ΔSRMR > 0.015 (Putnick & Bornstein, 2016), or ΔCFI < -0.010 (Cheung & Rensvold, 2002).

The internal consistency of the instruments was estimated using the McDonald's omega (ω) and Cronbach's alpha (α) indices. Values < .70 were considered low, between .70 and 90 acceptable, and 90 redundant for omega and alpha (Ventura-León & Caycho-Rodriguez, 2017). Item-total and item-factor correlations accounted for item discrimination.

Spearman's rho measured correlations with other variables: .10-.29 (small), .30-.49 (medium), and > .49 (large; Goss-Sampson & Meneses, 2019). The Mann-Whitney U test (U) compared individuals with and without depressive symptoms, using the biserial rank correlation (rbc) as the effect size, given violations of normality and homogeneity for student's t-test (Goss-Sampson & Meneses, 2019).

EFA was conducted using Factor 10.5 software (Lorenzo-Seva & Ferrando, 2006). The R programming language (R Core Team, 2022) and the Lavaan (v0.5-12) and semTools (v0.5-6) packages within the RStudio integrated development environment (v2022.7.1.554; RStudio Team, 2022) were used for the remaining statistical and psychometric analyses.

Results

Psychometric analysis

Evidence of internal structure validity

Exploratory Factor Analysis. An EFA was conducted on the first subsample (n = 257). Bartlett's test of sphericity was statistically significant (χ^2 = 1078.5, df = 36, p < .001), and the KMO index was fair (.76, 95% CI [.726, .810]). The parallel analysis recommended extracting two factors, which explained 66.43% of the variance. Results from Hull's method, applied with the robust CFI, also suggested that two factors should be retained for a good fit (CFI = 0.989). The Unidimensional Congruence (UniCo = .594, *IC95%* [.563,.685]), Explained Common Variance (ECV = .600, *IC95%* [.552,.644]) and Mean of Item Residual Absolute Loadings (MIREAL = .379, *IC95%* [.324,.421]) suggest that the data should not be treated as essentially unifactorial. In conclusion, the EFA results suggest that the BADS-SF should be considered using a two-factorial scale. Table 1 presents the factor loadings for each item.

Confirmatory Factor Analysis. To corroborate the results of the EFA, a CFA was conducted on the second subsample (n = 274). The CFA was run on three models (see Table 2). Model fit was evaluated following standard recommendations (Hu & Bentler, 1999), where Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) values greater than .90 and .95 are considered indicative of acceptable and excellent fit, respectively. Regarding the Root Mean Square Error of Approximation (RMSEA), values below .08 indicate acceptable fit, while values below .06 suggest excellent fit. The 2F model without item 8 showed excellent fit indices (CFI = 0.992, TLI = 0.988, NFI = 0.988, IFI = 0.992; RMSEA = 0.040, 90% CI [0.017, 0.060]), slightly better than the second-order 2F-8 model.

Table 1. BADS-SF items and factor loadings from the Exploratory Factor Analysis (EFA)

Item	Activation	Avoidance
1. Hubo ciertas cosas que tenía que hacer pero que al final no hice. (AV)	-0.095	**0.598**
2. Estoy contento/a con la cantidad y el tipo de cosas que hice. (AC)	**0.787**	-0.092
3. Participé en diferentes actividades. (AC)	**0.795**	0.029
4. Tomé buenas decisiones sobre el tipo de actividades y situaciones en las que participé. (AC)	**0.832**	-0.003
5. Fui una persona activa y cumplí los objetivos que me propuse. (AC)	**0.848**	-0.025
6. La mayor parte de lo que hice fue para escapar o evitar algo desagradable. (AV)	-0.049	**0.768**
7. Pasé mucho tiempo pensando una y otra vez sobre mis problemas. (AV)	-0.098	**0.758**
8. Hice actividades para distraerme y evitar sentirme mal. (AV)	0.233	**0.700**
9. Hice cosas agradables. (AC)	0.639	0.134

Note. AC = Activation factor; AV = Avoidance factor.

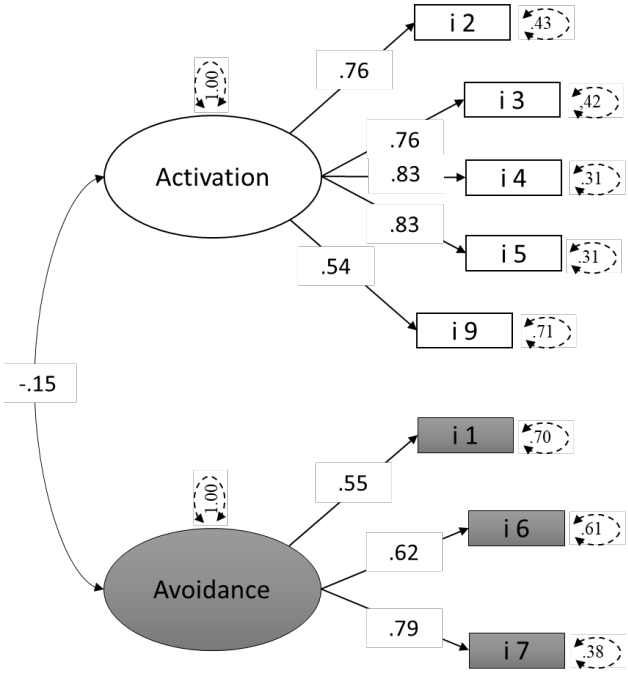
In the 2F model without item 8, the item loadings for the Activation factor were greater than .54, and for the Avoidance factor, they were greater than .54 (see Figure 1).

Table 2. Goodness-of-fit indices

Models	χ^2	*gl*	*CFI*	*TLI*	*NFI*	*IFI*	*RMSEA [IC90%]*
2F original	169.881***	26	0.93	0.90	0.92	0.93	0.102 [0.088, 0.117]
2F without item 8	**34.719***	**19**	**0.99**	**0.99**	**0.99**	**0.99**	**0.040 [0.017, 0.060]**
2F-8 2nd order	34.719*	18	0.99	0.99	0.98	0.99	0.042 [0.020, 0.063]

Note. ***: $p < .001$, *: $p < .05$; original 2F: two factors; 2F without item 8: two factors with item 8 removed; 2F-8 2nd order: two factors with item 8 removed and a second-order factor.

Figure 1. Standardised solution of the 2F model without item 8 of the BADS-SF



*Measurement Invariance***.** A factorial invariance analysis was conducted to examine the measurement equivalence of the 2-factor model of the BADS-SF (without item 8) across sex and presence of elevated depressive symptomatology (elevated vs. not elevated). The results indicated that the factor structure of the BADS-SF was invariant across both sex and presence of elevated depressive symptomatology groups, as no significant differences were found in the factor loadings, intercepts, or residual variances across groups (see Table 3). This suggests that the BADS-SF measures the same underlying constructs in the same way for both men and women, and regardless of their level of depressive symptomatology.

Internal consistency and discrimination

The Activation dimension demonstrated good internal consistency (ω = 0.86, 95% CI [0.85, 0.88]; α = 0.86, 95% CI [0.84, 0.88]), while the Avoidance dimension exhibited acceptable to questionable internal consistency indices (ω = 0.70, 95% CI [0.66, 0.74]; α = 0.68, 95% CI [0.63, 0.73]).

Table 3. Factorial Invariance with the variables "Sex" and "Emotional Symptoms" of the 2F model without item 8

Variable	Invariance	Δ *RMSEA*	Δ *CFI*	Δ *TLI*	Δ SRMR
Gender	Configural				
	Metric	-0.006	0.001	0.002	0.002
	Scalar	-0.006	0.001	0.002	0.001
	Residual	-0.013	0.002	0.002	0.002
Depressive symptoms	Configural				
	Metric	-.005	0.001	0.004	0.002
	Scalar	-.003	0.009	0.002	0.003
	Residual	0.000	0.000	0.000	0.000

Item discrimination was adequate, with values ranging from 0.51 for items 9 to 0.75 for items 4 and 5 of the Activation dimension. For the Avoidance dimension, values ranged from 0.42 for item 1 to 0.56 for item 7 (Table 4).

Table 4. Discrimination index of the BADS-SF

	Item-rest correlation
Activation	
2. Estoy contento/a con la cantidad y el tipo de cosas que hice [I am content with the amount and types of things I did].	0.687
3. Participé en diferentes actividades [I engaged in many different activities].	0.702
4. Tomé buenas decisiones sobre el tipo de actividades y situaciones en las que participe [I made good decisions about what type of activities and/or situations I put myself in].	0.745
5. Fui una persona activa y cumplí los objetivos que me propuse [I was an active person and accomplished the goals I set out to do].	0.747
9. Hice cosas agradables [I did things that were enjoyable].	0.509
Avoidance	
1. Hubo ciertas cosas que tenía que hacer pero que al final no hice [There were certain things I needed to do that I didn't do].	0.424

(*Continued*)

	Item-rest correlation
6. La mayor parte de lo que hice fue para escapar o evitar algo desagradable [Most of what I did was to escape from or avoid something unpleasant].	0.522
7. Pasé mucho tiempo pensando una y otra vez sobre mis problemas [I spent a long time thinking over and over about my problems].	0.558

Evidence in the relationship with other variables

In line with theoretical expectations, the BADS-SF demonstrated significant correlations ($p < .001$) with all psychopathological and behavioural process measures. Higher levels of behavioural activation were associated with lower scores in automatic thoughts, experiential avoidance, depression, anxiety, and stress. Conversely, higher behavioural avoidance was linked to greater psychopathology indicators. Moreover, activation was positively correlated with progress and reward, while avoidance was positively correlated with obstruction and suppression. The only exception was the non-significant correlation found between avoidance and progress towards goals (Figure 2).

Evidence of validity related to the criterion depressive symptomatology

Table 5 presents the means and standard deviations of BADS-SF dimensions, categorised by the presence (Depression) or absence (WDepression) of elevated depressive symptoms. The Mann-Whitney U test was selected as the non-parametric test due to the violation of the assumptions of normality (Shapiro-Wilk test) and homogeneity of variances (Levene's test).

Results indicated that the mean avoidance scores for individuals with elevated depressive symptomatology were significantly higher compared to those with low depressive symptomatology, with a large effect size ($r > 0.50$). Regarding Activation, scores were significantly lower in those with elevated depressive symptomatology, with *rbc* values > 0.30, corresponding to a medium effect size (Table 5).

Discussion

This study examined the internal structure of the BADS-SF and its associations in a Colombian sample. Parallel analysis and the Hull method supported a two-factor structure, with strong item loadings for Activation (> .53) and Avoidance (> .54). Indices of essential unidimensionality (UniCo, MIREAL, and ECV) did not support a single-factor model. Confirmatory factor analysis showed a good overall fit, except for the RMSEA (.102). In line with García (2019) and Cordero-Torres (2021), removing item 8 or testing a second-order 2F-8 model improved the fit indices. The factor scores reflect levels of Activation and Avoidance; however, as in the original study (Manos et al., 2011), it is recommended to compute the total scale score, which represents a General Activation factor.

Within the Activation dimension, item 9 showed the lowest factor loading (.54), consistent with previous validations. This suggests that the item reflects effortful or value-driven activation rather than reinforcement-based engagement, capturing a distinct yet theoretically relevant facet of behavioural activation. From a practical standpoint, the two-factor model without item 8 offers a psychometrically cleaner structure for research purposes, whereas the second-order model supports the clinical use of a total score to monitor overall behavioural activation.

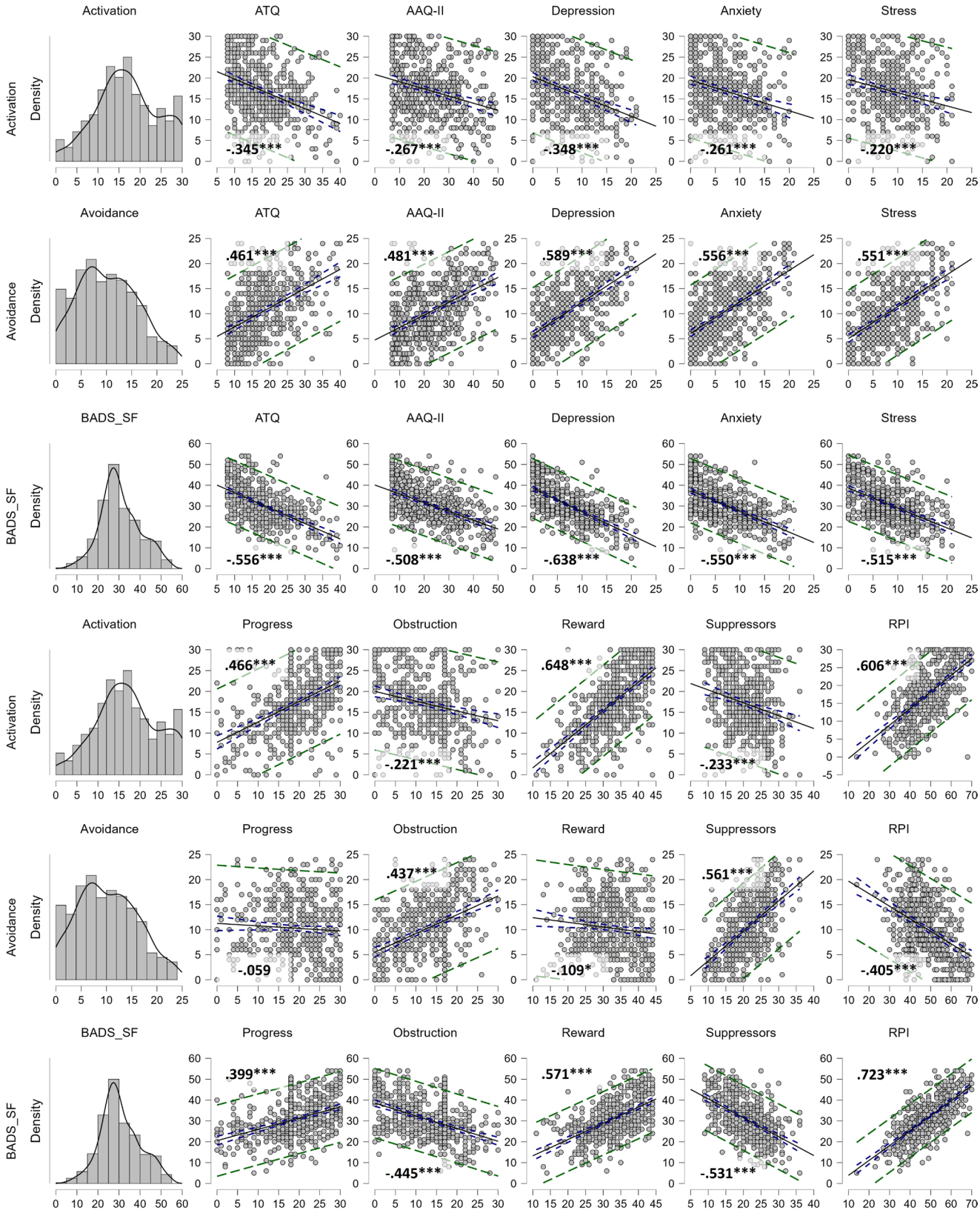
In terms of factorial invariance, the criteria of Lipke et al. (2007), Putnick and Bornstein (2016), and Cheung and Rensvold (2002) were met, suggesting that there are no differences in the factorial structure of the BADS-SF-8 with respect to the variables "sex" or "Depressive symptomatology." The importance lies in determining the variability in measurements to be able to compare scores of different groups of participants (Putnick & Bornstein, 2016) and thus avoid the problem of "comparing apples to oranges" (Greiff & Scherer, 2018).

Table 5. Descriptive statistics and Mann-Whitney U test to compare instrument scores between groups with and without elevated emotional symptoms

Instruments	Group	Descriptives		Assumptions				Comparison	
				S-W		Levene's			
		M	*SD*	*W*	*p*	*F*	*p*	*U*	*rbc*
BADS SF									
Avoidance	Depression	7.84	5.03	0.97	***	2.07			
	Without Depression	13.67	5.24	0.98	**		**.15**	**14286.0*** **	**-0.58**
Activation	Depression	18.33	7.49	0.97	***	4.32			
	Without Depression	15.18	6.63	0.99	*		*	**46470.5*** **	**0.35**

Note. *= $p < .05$; ** = $p < .01$; *** = $p < .001$; *M* = mean; *SD* = standard deviation; *U* = U the Mann-Whitney test; *rbc* = Rank biserial correlation, effect size.

Figure 2. Correlations of the BADS-SF and its factors with the ATQ, AAQ-II, depression, anxiety and stress, RPI and VQ



Note. *** = $p < .001$; * = $p < .05$

The BADS-SF demonstrated adequate internal consistency as indicated by α and ω coefficients. The Activation dimension showed good reliability, whereas the Avoidance dimension presented acceptable yet comparatively lower values (ω = .70; α = .68). This pattern, consistent with prior Spanish-speaking studies (Cordero-Torres et al., 2021; García et al., 2019; Santos, 2013), may reflect cultural differences in how avoidance is expressed, often as emotion-focused or interpersonal coping rather than overt behavioural withdrawal, and the exclusion of item 8, which reduced redundancy but also item breadth.

Evidence of validity in the BADS-SF's relationship with other variables showed expected moderate (rho > .30) and large (rho > .50) correlations. Avoidance correlated directly with the AAQ-II and ATQ, while Activation showed inverse relationships with the ATQ (Li et al., 2014). Activation also correlated directly with Environmental Reward (RPI and its Reward Probability factor), whereas Avoidance related to Environmental Suppressors of the RPI (Wagener et al., 2015). Emotional symptoms correlated directly with Avoidance and inversely with Activation (Echabaudes Ilizarbe, 2020). An inverse relationship with depression was also found, consistent with Reyes-Buitrago et al. (2023). None of the observed correlations exceeded .70, supporting the discriminant validity of the BADS-SF dimensions and suggesting that they capture related but distinct constructs.

Otherwise, the absence of a statistically significant association between the Avoidance dimension of the BADS-SF and the Progress dimension of the VQ suggests that behavioural avoidance and valued progress may represent functionally distinct processes. While avoidance reflects disengagement from aversive experiences, valued progress emphasises purposeful engagement driven by personal values rather than the mere reduction of avoidance.

Validity evidence shows that BADS-SF Avoidance and Activation scores differ between individuals with and without elevated depressive symptoms. Those with higher depressive symptoms exhibited lower Activation and greater Avoidance. The effect sizes suggest not only statistical significance but also clinically meaningful differences in behavioural engagement and avoidance patterns. Our study used the DASS-21, a validated instrument for differentiating depression from anxiety while concurrently assessing stress (Bibi et al., 2020).

The results regarding item discrimination, internal consistency, and validity evidence support the removal of item 8 from the Avoidance factor, aligning with the recommendations of García (2019) and Cordero-Torres (2021) in the Colombian general population, and Correa and Bianchi (2025) in Bogotá caregivers. Although the removal of item 8 was primarily based on statistical criteria, this item reflects a more situational and potentially adaptive coping strategy rather than persistent behavioural avoidance. Its exclusion, therefore, enhances the conceptual coherence and clinical interpretability of the Avoidance dimension. Moreover, the factorial structure is influenced by sex (male and female) and emotional symptomatology, as the original 9-item version was not invariant.

Limitations and future directions

Some limitations of this study are: (a) the BADS-SF was evaluated in a general and convenience sample, limiting the generalisability of the results to the Colombian population. Future studies should analyse its psychometric properties in a larger, more homogeneous sample in terms of regional representation, socioeconomic level, and education. (b) Although significant differences were found between the BADS-SF scores and its dimensions based on emotional symptomatology, no systematic clinical diagnosis information was gathered. Including standardised diagnostic criteria in future research could enhance the external validity and generalisability of the findings (Braslow et al., 2005). (c) Another limitation is the potential for self-selection bias, as participants were recruited online and voluntarily. Those who chose to participate may have differed from those who did not, possibly showing greater interest in the research topic

The results of this study may reflect sampling issues rather than the psychometric properties of the BADS-SF in Colombia. It is recommended to explore the instrument's sensitivity to treatment effects, especially in populations with affective and emotional disorders. Additionally, further studies are needed to enhance the understanding of change mechanisms in Latin American populations (Vargas-Nieto et al., 2022).

Conclusion

This study established that the BADS-SF-8 is reliable and valid for measuring Activation, with no differences by gender or emotional symptom intensity. Further research on validating transdiagnostic constructs is recommended.

Ethical considerations

This study was conducted as part of a master's thesis at the Graduate School of the Fundación Universitaria Konrad Lorenz (FUKL). The research project underwent double-blind review at both the proposal and final thesis stages. The study followed the ethical and methodological regulations of the Research Centre of the FUKL, which are aligned with the principles of the Declaration of Helsinki. Participants provided electronic informed consent via Microsoft Forms, which included information about the study's objectives, procedures, potential risks, and their right to withdraw at any time.

Conflict of interest

The authors declare that they have no conflicts of interest.

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