Supplementary Table S8

Title: Detailed Description of Measures

This supplementary file provides comprehensive psychometric and structural information regarding the four self-report instruments employed in the present study. For each measure, we report the developer(s), year of publication, purpose, number of items, response format, subscale structure with item composition, scoring procedures, interpretation guidelines, and psychometric properties (internal consistency and validity) for both the original and Persian-validated versions.

Developer(s): Bagby, R. M., Parker, J. D. A., & Taylor, G. J. (1994)[1, 2]

Purpose: To assess alexithymia, a multidimensional construct characterised by difficulty identifying and describing emotions, and externally-oriented thinking.

Number of Items: 20

Response Format: 5-point Likert scale (1 = strongly disagree to 5 = strongly agree)

Total Score Range: 20–100 (higher scores indicate greater alexithymia)

Clinical Cutoffs: ≤ 51 = non-alexithymia; 52–60 = possible alexithymia; ≥ 61 = alexithymia

Subscale Structure

The TAS-20 demonstrates a three-factor structure theoretically congruent with the alexithymia construct:

Subscale	Definition	Item Numbers	Number of Items
Difficulty Identifying Feelings (DIF)	Assesses the ability to identify one's own feelings and to distinguish between feelings and bodily sensations of emotional arousal.	1, 3, 6, 7, 9, 13, 14	7
Difficulty Describing Feelings (DDF)	Assesses the ability to describe one's own feelings to others and to	2, 4, 11, 12, 17	5

	communicate emotional states verbally.		
Externally Oriented Thinking (EOT)	Assesses the tendency to focus attention externally, with limited introspection and attention to internal emotional experiences.	5, 8, 10, 15, 16, 18, 19, 20	8

Reverse-Scored Items:

4	5	10	18	19

Reverse-Scored Items: 4, 5, 10, 18, 19

Scoring: Sum all items after reverse-scoring.

Psychometric Properties

Original Version (Bagby et al., 1994):

- Internal consistency: Total = 0.81; DIF = 0.78; DDF = 0.75; EOT = 0.66
- Test-retest reliability: Total = 0.77 (3-week)
- Construct validity: Three-factor structure confirmed across clinical and non-clinical populations.

Persian Version (Besharat, 2007):

- Internal consistency: Total = 0.85; DIF = 0.82; DDF = 0.75; EOT = 0.72
- Test-retest reliability: Total = 0.85 (1-month)
- Construct validity: Confirmatory factor analysis supported the original three-factor structure in Iranian clinical and non-clinical samples.

2. Cognitive Flexibility Inventory (CFI) [3, 4]

Developer(s): Dennis, J. P., & Vander Wal, J. S. (2010)

Purpose: To assess cognitive flexibility, defined as the ability to challenge and replace maladaptive thoughts with more balanced and adaptive cognitions, and to perceive difficult situations as controllable while generating multiple alternative solutions.

Number of Items: 20

Response Format: 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*)

Total Score Range: 20–140 (higher scores indicate greater cognitive flexibility)

Subscales (Persian Version):

Dimension (Subscale)	Definition	Item Numbers	Number of Items
Problem-Solving Processing **(Alternative Solutions)**	Assesses the ability to identify multiple alternative solutions for difficult situations and to generate several different explanations for problems.	1, 3, 5, 6, 8, 10, 12, 13, 14, 15, 16, 18, 19	13
Perception of Controllability **(Perceived Control)**	Assesses the tendency to perceive difficult and challenging situations as controllable and manageable.	2, 4, 7, 9, 11, 17	6

Reverse-Scored Items:

4	7	9	11	17	19

Reverse-Scored Items: 4, 7, 9, 11, 17, 19

Scoring: Sum all items after reverse-scoring the indicated items.

Psychometric Properties

Original Version (Dennis & Vander Wal, 2010)[3]:

- Internal consistency (Cronbach's α): Total = 0.90; Alternatives = 0.91; Control = 0.84–0.86
- Test-retest reliability: Total = 0.81 (7-week)
- Convergent validity: Significant correlations with the Cognitive Flexibility Scale (CFS): Total (r = 0.73–0.75), Alternatives (r = 0.58–0.62), and Control (r = 0.65–0.66)
- Construct validity: CFI total and subscale scores were positively correlated with adaptive coping strategies and negatively correlated with maladaptive coping strategies.

Persian Version:

- Internal consistency (Cronbach's α): Total = 0.90; Problem-Solving Processing = 0.90; Perception of Controllability = 0.31

- Test-retest reliability: Problem-Solving Processing = 0.96 (2-week); Perception of Controllability = 0.91 (2-week)
- Construct validity: Confirmatory factor analysis supported the two-factor structure in the Iranian population.
- Discriminant validity: Significant negative correlations with measures of depression supported the discriminant validity of the Persian CFI.

3. Body Image Concern Inventory (BICI)[5, 6]

Developer(s): Littleton, H. L., Axsom, D. S., & Pury, C. L. S. (2005)

Purpose: To assess dysmorphic appearance concern, including worries about physical appearance, body dissatisfaction, and the functional interference of these concerns.

Number of Items: 19

Response Format: 5-point Likert scale (1 = never to 5 = always)

Total Score Range: 19–95 (higher scores indicate greater body image concern)

Subscale Structure

Subscale	Definition	Item Numbers	Number of Items
Dysmorphic Appearance Concern	Measures dissatisfaction, embarrassment, and shame regarding one's appearance, along with checking and concealing perceived defects.	1, 3, 5, 8, 9, 14, 15, 16, 17, 18, 19	11
Symptom Interference	Assesses the extent to which appearance-related concerns interfere with social and occupational functioning.	2, 4, 6, 7, 10, 11, 12, 13	8

Scoring: Sum of all 19 items.

Psychometric Properties

Original Version (Littleton et al., 2005):

- Internal consistency: Total = 0.93
- Item-total correlations: range = 0.32–0.73 (mean = 0.62)
- Convergent validity: Significant correlations with measures of obsessive-compulsive symptoms (r = 0.62) and eating disorder symptoms (r = 0.40)
- Discriminant validity: The BICI discriminated individuals with Body Dysmorphic Disorder or bulimia from those with subclinical symptoms.

Persian Version:

- Internal consistency: Total = 0.93–0.95 (Cronbach's α)
- Convergent validity: Significant positive correlations with the Fear of Negative Evaluation of Physical Appearance scale (r = 0.55 and 0.43)
- Construct validity: The Persian version of the BICI has demonstrated acceptable reliability and validity in Iranian populations.

. Food Craving Questionnaire – Trait (FCQ-T)[7-9]

Developer(s): Cepeda-Benito, A., Gleaves, D. H., Williams, T. L., & Erath, S. A. (2000)

Purpose: To assess food craving as a multidimensional trait construct, capturing the frequency, intensity, and context of food cravings in everyday life.

Number of Items: 39

Response Format: 6-point Likert scale (1 = *never/not applicable* to 6 = *always*)

Total Score Range: 39–234 (higher scores indicate greater trait-level food craving)

Factor Structure (Original Version)

The original FCQ-T comprises **nine factors**: Having Intentions and Plans to Consume Food; Anticipation of Positive Reinforcement; Anticipation of Relief from Negative States; Lack of Control over Eating; Thoughts or Preoccupation with Food; Craving as a Physiological State; Emotions before or during Cravings; Cues that Trigger Cravings; and Guilt from Cravings.

Five-Factor Structure (Persian Version)

A study exploring the factor structure of the Persian version of the FCQ-T revealed a **five-factor structure** which explained 60% of the variance (Ashrafi & Kachooei, 2016):

Subscale	Item Numbers	Description
Lack of Control (LOC)	1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 13	Assesses perceived loss of control over eating when experiencing food cravings.

Preoccupation with Food (PRE)	11, 14, 15, 16, 17, 18, 19, 20, 21	Measures intrusive thoughts and preoccupation with food.
Craving as a Physiological State (PHY)	22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 36	Assesses craving as a physiological state, including feelings of hunger and somatic experiences.
Emotions Before or During Craving (EMO)	32, 33, 34, 35	Measures the role of emotional states (e.g., anxiety, sadness, anger) in triggering or accompanying cravings.
Guilt from Cravings / Giving In (GUILT)	37, 38, 39	Assesses guilt experienced as a result of cravings or after giving in to them.

Scoring: Sum of all 39 items (range: 39–234). Higher scores indicate greater trait food craving.

Psychometric Properties

Original Version (Cepeda-Benito et al., 2000):

- Internal consistency: Total = 0.97; subscales = 0.81–0.94
- Test-retest reliability: Total = 0.88; subscales = 0.72–0.88 (3-week)
- Construct validity: Confirmatory factor analysis supported the factor structure. The instruments demonstrated appropriate discriminant validity, distinguishing between trait and state measures of food craving.

Persian Version (Ashrafi & Kachooei, 2016):

- Internal consistency (Cronbach's α): Total = 0.96; subscales = 0.76–0.92
- Test-retest reliability (2-week): subscales = 0.76–0.86
- Content validity: Face and content validity were established through expert review.
- Construct validity: Confirmatory factor analysis supported the five-factor structure (CFI = 0.950, GFI = 0.947, TLI = 0.932, RMSEA = 0.077, SRMR = 0.095).
- Concurrent validity: Significant positive correlations with External Eating (r = 0.83), Emotional Eating (r = 0.77), and Concern for Dieting (r = 0.82) from the DEBQ and RS.
- Discriminant validity: Weak correlations with Restrained Eating (r = 0.10–0.11), supporting discriminant validity.

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