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Psychometric Properties of Saving Cognition Inventory in Italian Nonclinical Samples

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Abstract

The main purpose of the study was aimed to examine the psychometric properties of the Saving Cognition Inventory (SCI) in Italian nonclinical samples. Two studies were conducted: (a) study 1 was focused on the confirmation of the factorial structure, internal consistency reliability, and subscales' intercorrelations on a sample of 252 participants; (b) study 2 was focused on gathering construct validity data on a sample of 244 participants. In addition to the SCI, other seven self-report measures were administered in order to assess hoarding, depression, anxiety, and obsessive compulsive disorder symptoms. Our results supported the hypothesis of four adequately reliable dimensions. Support for both concurrent and convergent validity was provided by significant and positive correlations between SCI scores and the other administered measures. Despite generalization of outcoming findings are limited, overall our research suggests that the SCI may be a valuable tool. Nevertheless, additional studies are still needed.

Key words: hoarding disorder, factor analysis, reliability, validity.

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Novelty and Significance

What is already known about the topic?

- Hoarding Disorder is characterized by a severe and continuing difficulty with discarding possessions, and a strong desire to save a large number of items regardless of their value, resulting in the accumulation of clutter considerable enough to interfere with the functionality of an individual's living space.

What this paper adds?

- This paper examines the dimensionality and the psychometric properties of the Saving Cognition Inventory in Italian non clinical samples.
- In spite of some limitations, our findings suggest that the Italian version of the Saving Cognition Inventory is a psychometrically promising scale to assess Hoarding Disorder.

Hoarding Disorder (HD) represents one of the new diagnoses included in the recently developed DSM-5 (American Psychiatric Association, 2013), characterized by an intense and continuing difficulty with discarding possessions, a strong desire to save a large number of items, regardless of their value, resulting in the accumulation of clutter considerable enough to interfere with the functionality of an individual's living space. The presence of excessive acquisition is not a criterion for the disorder in DSM-5, but it is considered as a relevant specifier, since it is present in more than half of

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individuals with HD, and it is also associated with greater severity of the symptoms (Timpano, Muroff, & Stetekee, 2016; Tompkins, 2016). People affected by HD often report significant clinical levels of distress, serious interpersonal problems, feelings of discomfort about having visitors at home, functional impairment in different activities of daily living, and diminished quality of life (Burgess, Frost, Marani, & Gabrielson, 2018; Shaw & Timpano, 2016; Taylor, Theiler, Nedeljcovik, & Moulding, 2019; Tolin, Hallion, Wootton, Levy, Billingsley, Das, & Steven, 2018).

Frost and Hartl (1996) proposed a cognitive-behavioral model in order to explain where the core HD symptoms derive from. According to this model, difficulty with discarding items, excessive acquisition, and clutter result from problems in (a) information-processing (b), beliefs about and attachments to possessions, and (c) maladaptive emotional responses and behavioral patterns.

This approach emphasizes the role of dysfunctional beliefs in the development and maintenance of hoarding behavior. The overstated meaning and the inflated emotional attachment conferred to saved possessions, the exaggerated need and desire to maintain control on them, and the decreased confidence in their own memory are some common examples of dysfunctional beliefs (Kyrios, Mogan, Moulding, Frost, & Fassknacht, 2018; Sketekee & Frost, 2003). Identifying these hoarding related beliefs can be useful both for clinicians and researchers in order to recognize which malfunctional thoughts generate the reasons why people save objects (Grisham, Roberts, Cerea, Isemann, Svehla, & Norberg, 2018; Wheaton, 2016; Wheaton, Abramowitz, Jacoby, Zwerling, & Rodríguez, 2016).

Prevalence estimates of HD disorder range from 2-6% (Nordsletten, Reichenberg, Hatch, de la Cruz, Pertusa, Hotopf, & Mataix Cols, 2013), suggesting that hoarding disorder is quite common.

Hence, in the last few decades, a substantial increase of empirical studies focused on hoarding symptoms have been conducted, several self-report instruments have been created, and therapeutic treatments and interventions have been designed.

Steketee, Frost, and Kyrios (2003) developed the Saving Cognitions Inventory (SCI), a self-report questionnaire assessing beliefs and attitudes people experience when trying to discard items. It consists of 24 items assessing four domains: emotional attachment to possessions ("Losing this possession is like losing a friend"), concerns about memory ("I must remember something about this, and I can't if I throw this away"), beliefs about responsibility for object ("If this possession may be of use to someone else, I am responsible for saving it for them") and the need to control possessions ("It upsets me when someone throws something of mine away without my permission").

The SCI has been found to be a reliable and valid scale to assess the presence of HD. Empirical evidence show that hoarders report higher scores on the SCI than both healthy controls and other clinical groups. Furthermore, total scores on the SCI correlate with hoarding symptoms, even after controlling for relevant covariates, such as depression and anxiety symptoms (Steketee, Frost, & Kyrios, 2003; Wheaton, Fabricant, Berman, & Abramowitz, 2013).

Consistent with the idea of the usefulness and significance of existing adaptations measures for use in different socio-cultural contexts (Faraci & Tirrito 2013; Triscari, Faraci, D'Angelo, & Urso, 2011; Schimmenti 2016), the present study is aimed to develop an Italian version of the SCI and to further examine its psychometric properties in nonclinical samples.

Study 1: Dimensionality and Reliability

Method

Participants and Procedure

The first sample was composed of 252 participants (67.1% females) from Northern Italy (0.4%), Central Italy (48%), and Southern Italy (51.6%), ranging in age from 18 to 71 years (*M*= 28.69; *SD*= 11.23). They were students (65.7%), full-time employees (18.3%), part-time employees 6.8%), housewives (1.6%), unemployed (3.6%), retired people (0.8%), other (3.2%). The most frequent marital status was single (77.8%), followed by married (20.2%), separated (1.6%), and widowed (0.4%). Their educational level ranged from 1 to 26 school years (*M*= 15.08, *SD*= 3.28).

The participants were asked to fill in the questionnaire providing sincere answers. They were informed that their participation in the study was voluntary. They were also assured of the confidentiality of the information obtained from the administered measure.

All procedures were performed in compliance with relevant laws and institutional guidelines, approved by the Internal Review Board of Research in Psychology of University of Enna "Kore" (UKE).

The Italian version of the SCI was developed through a mixed forward and back translation procedure (Behling & Law 2000). The English version of the instrument was translated into Italian by one bilingual Italian-English person and two of the authors independently. After a shared translation among the authors, the bilingual translator, blind to the original version, back translated this version into English. Finally, the translators discussed the discrepancies in the versions until to reach an agreement on a common translation. The SCI Italian language version was administered to eight people to check the items understandability.

Instrument

Saving Cognitions Inventory (SCI; Steketee, Frost, & Kyrios, 2003). The SCI is a 24-item questionnaire aimed to assess the cognitive aspects of compulsive hoarding. Participants are asked to rate the extent to which they had each thought when they were deciding whether to throw something away during the past week using a 7-point Likert scale ranging from 1 (not at all) to 7 (very much). A total SCI score is derived by calculating the sum of all items. The inventory is structured in four subscales: Emotional Attachment, Control, Responsibility, Memory. The SCI showed internal consistency, and known groups, convergent and discriminant validity differentiating between individuals with compulsive hoarding, obsessive compulsive disorder without hoarding, and community controls.

Results

Confirmatory factor analysis was performed using maximum likelihood robust estimation. Based on subscales' intercorrelations, factors were allowed to correlate. The chi-square statistic for the proposed model is SBS $\chi^2(242)= 401.19$, $p < .001$. Although the chi-square test indicates that the model does not provide a good fit to the data, other goodness-of-fit indices suggest an acceptable model fit *(CFI*= .92; *NNFI*= .91; *RMSEA*= .052; *SRMR*= .064).

The results for this measurement model are presented in Table 1. Figure 1 reports the standardized factor loadings for the verified model. Examination of Figure 1 shows that all the items loaded significantly (p <.05) on their respective factors, yielding coefficients of .49 or higher.

Table 1. Fit indices for the SCI four-factor model.

SBS χ^2	*df*	*p*	χ^2/df	*NNFI*	*CFI*	*SRMR*	*RMSEA*	90%*CI*
401.19	242	.000	1.66	.91	.92	.064	.052	.043-.061

Notes: SBS χ^2= Satorra-Bentler Scaled chi-square test; NNFI= Non-Normed Fit Index; CFI= Comparative Fit Index; SRMR=Standardized Root Mean Square Residual; RMSEA= Root Mean Square Error of Approximation; CI= Confidence Interval.

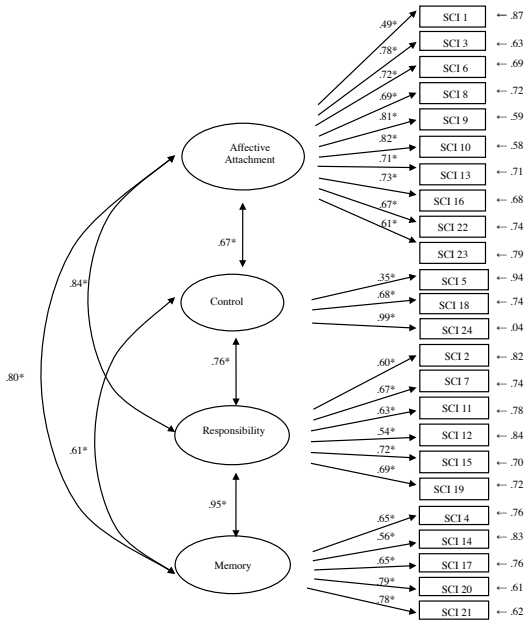

Figure 1. Empirical Model (standardized solution; *= p <.05).

Based on the 4-factor structure emerged, SCI data were analyzed to assess the internal consistency of the scale. Cronbach's α coefficients are as follows: Affective Attachment (α= .91, corrected item-total correlations range: from .45 to .78); Control (α= .80, corrected item-total correlations range: from .58 to .68); Responsibility (α= .80, corrected item-total correlations range: from .48 to .66); Memory (α= .81, corrected item-total correlations range: from .54 to .64). All the items are substantially and linearly correlated with the underlying construct it is intended to measure (i.e., corrected item-scale correlation is .45 or more), indicating good subscales homogeneity. The corrected item-total correlations for the three subscales are presented in Table 2.

Table 3 shows the Pearson's correlation coefficients between the four SCI subscales. As expected, subscales correlated significantly (p <.01, two-tailed tests) with each other (.49≤ r ≤.75, p <.01), indicating that the scale dimensions measured several aspects of the hoarding that are relatively distinct from one another.

Table 2. Internal consistency reliability and corrected item-total correlations for the four subscales.

Item No.	F1	F2	F3	F4
1	.45			
3	.75			
6	.68			
8	.66			
9	.78			
10	.75			
13	.69			
16	.68			
22	.63			
23	.58			
5		.58		
18		.67		
24		.68		
2			.48	
7			.54	
11			.62	
12			.50	
15			.66	
19			.56	
4				.62
14				.54
17				.61
20				.64
21				.63
α	.91	.80	.80	.81

Notes: F1= Affective Attachment; F2= Control; F3= Responsibility; F4= Memory.

Table 3. SCI subscales' intercorrelations

	F1	F2	F3
F1 Affective Attachment	--		
F2 Control	.598**	--	
F3 Responsibility	.733**	.630**	--
F4 Memory	.677**	.490**	.748**

Note: **= p <.01.

Study 2: Construct Validity

Method

Participants and Procedure

The second sample was composed of 244 participants (66.3% females) from Northern Italy (0.8%), Central Italy (56.8%), and Southern Italy (42.4%), ranging in age from 18 to 79 years (*M*= 29.1 years, *SD*= 12.95). They were students (63.5%), full-time employees (17.3%), part-time employees (10.2%), housewives (0.4%), unemployed (1.6%), retired people (3.3%), other (3.7%). The most frequent marital status was single (78.2%), followed by married (20.2%), and separated (1.6%). Their educational level ranged from 5 to 26 school years (*M*= 15.07, *SD*= 2.81).

All procedures were performed in compliance with relevant laws and institutional guidelines, approved by the Internal Review Board of Research in Psychology of UKE.

Instruments

In order to gather construct validity, in addition to the SCI, seven self-report measures were administered:

Hoarding Rating Scale-Interview (HRS-I; Tolin, Frost, & Steketee, 2010). The HRS-I is a 5-item self-report measure of the following dimensions of hoarding: *Clutter*, which

measures difficulty using living spaces due to chaos; *Difficulty Discarding*, which measures difficulty discarding (or recycling, selling, giving away) ordinary things that other people would get rid of; *Acquisition*, which measures excessive acquisition of objects; *Distress*, which measures emotional discomfort due to hoarding behaviors; and, *Impairment*, which measures functional disturbance due to hoarding behaviors. Each item is rated on a 9-point Likert scale from 0 ("None") to 8 ("Extreme"). A total score was derived by calculating the sum of all 5 items. Cutoff scores for item 1 Clutter, item 4 Distress and item 5 Impairment was 3, cutoff scores for item 3 Acquisition was 2, cutoff score for item 2 Difficulty Discarding was 4, and cutoff score for the HRS-I total score (as the sum of all 5 items) was 14. The HRS-I has shown high internal consistency and inter-rater reliability, correlated strongly with other measures of hoarding, and effectively discriminated hoarding from non-hoarding individuals.

Compulsive Acquisition Scale (CAS; Frost, Steketee, & Williams, 2002). The CAS is a 18-item self-report scale measuring the extent to which individuals feel compelled to acquire possessions. It contains two subscales: Buy, which assesses compulsive buying behaviour, and Free, which assesses the excessive acquisition of free objects. Each item is rated on a 7-point Likert scale ranging from 1 (not at all or rarely) to 7 (very much or very often). The CAS has shown satisfactory internal consistency reliability and convergent validity, supported by correlations with buying-related cognitions, OCD symptoms, perfectionism, and indecisiveness. Besides, CAS distinguishes compulsive buyers from controls. A cutoff score of 47.8 was found to maximize sensitivity and specificity for clinically significant compulsive buying.

Clutter Image Rating (CIR; Frost, Steketee, Tolin, & Renaud, 2008). The CIR is a pictorial measure of clutter severity. This scale contains three cards, each containing 9 equidistant, standardized pictures of severity of clutter, with one card for each of three people homes' main rooms: living room, kitchen, and bedroom. Respondents are asked to select the picture that most closely resemble the level of clutter in each room of their home. It showed good internal consistency, test-retest reliability, and inter-rater reliability, and convergent validity, supported by stronger associations with measures of clutter than with other hoarding and psychopathology scales.

Saving Inventory-Revised (SI-R; Frost, Steketee, & Grisham, 2004). The SI-R is a 23-item questionnaire consisting of three subscales designed to measure Clutter, Difficulty Discarding, and Acquisition. Participants are asked to rate the extent to which each statement describes them on a 5-point Likert scale ranging from 0 (strongly disagree) to 4 (strongly agree). It showed good internal consistency and adequate test-retest reliability for the total score and subscales. Convergent and discriminant validity was supported by correlations with hoarding and non-hoarding indices. SI-R distinguishes individuals with hoarding from OCD participants without hoarding as well as from nonclinical samples.

Beck Depression Inventory II (BDI-II, Beck, Steer, & Brown, 1996). BDI-II is a 21-item self-report inventory, that measures affective, cognitive, motivational, psychomotor, and vegetative components of depression. Each item consists of four statements, which are scored from 0 to 3. Sum score consisting of the individual scores to the 21 items is used to estimate the overall severity of depression. Raw scores ranging from 0 to 13 indicates minimal depression, 14-19 indicates mild depression, 20-28 indicates moderate depression, 29-63 indicates severe depression. It has been widely used in psychological research, which has demonstrated the scale's good reliability and validity.

Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988). The BAI is a 21-item questionnaire assessing the severity of self-reported anxiety. Items refer to common symptoms of anxiety. Participants are asked to indicate how much they have been bothered by that symptom during the past month on a 4-point Likert scale ranging from 0 (not at all) to 4 (Severely-it bothered me a lot). The total score is achieved by the sum of the 21 item scores. A grand sum between 0-21 indicates very low anxiety; a grand sum between 22-35 indicates moderate anxiety; a grand sum that exceeds 36 is a potential cause for concern. The BAI showed high internal consistency and good one-week test-retest reliability.

Obsessive Compulsive Inventory-Revised (OCI-R; Foa, Huppert, Leiberg, Langner, Kichic, Hajcak, & Salkovskis, 2002). The OCI-R is an 18-item self-report questionnaire of Obsessive Compulsive Disorder (OCD) symptoms containing 6 subscales: *Hoarding*,

Checking, Neutralizing, Obsessing, Ordering, and *Washing*. Each statement refers to experiences that many people have in their everyday lives. People are asked to circle the number that best describes the extent to which that experience has distressed or bothered them during the past month. Items are rated on a 5-point Likert scale ranging from 0 (not at all) to 4 (extremely). Scores are calculated by adding the item scores. The possible range of scores is 0-72. Mean score for persons with OCD is 28.0 (*SD*= 13.53). Recommended cutoff score is 21, with scores at or above this level indicating the likely presence of OCD. The OCI-R showed excellent psychometric properties, in terms of internal consistency, test-retest reliability, and convergent and discriminant validity, with good levels in all cases. The OCI-R and its subscales effectively differentiates between patients with OCD and other groups, further supporting the clinical utility of the scale.

Results

Support for concurrent validity was provided by significant and positive correlations between SCI scores and the other measures of hoarding severity (Clutter Image Rating, CIR; Saving Inventory-Revised, SI-R; Compulsive Acquisition Scale, CAS; Hoarding Rating Scale, HRS-I) (see Table 4). Except for the correlation between the SCI Control subscale and CIR, both SCI subscales and total score correlated significantly and positively with each of the other administered hoarding measures: from r= .39 to r= .44 (p <.01) with the CIR; from r= .27 to r= .67 (p <.01) with the SI-R; from r= .37 to r= .61 (p <.01) with the CAS; from r= .15 (p <.01) to r= .55 (p <.01) with the HRS-I.

Convergent validity was gathered examining correlations between SCI and: (1) depression, as measured by Beck Depression Inventory-II (BDI-II); (2) anxiety, as measured by Beck Anxiety Inventory (BAI); and (3) obsessive compulsive disorder, as measured by Obsessive Compulsive Inventory-Revised (OCI-R). As depicted in Table 5, the SCI subscales correlated positively with both depression and anxiety. The relationships were significant and in the expected direction: from r= .29 to r= .42 (p <.01) and from r= .23 to r= .42 (p <.01), respectively. SCI scores did correlate significantly also with all of the OCI-R subscales and total score (from r= .24 to r= .66, p <.01).

Discussion

The purpose of this study was to examine the dimensionality and the psychometric properties of the Italian adaptation of the SCI. Results of confirmatory factor analysis revealed a four-factor structure, resembling the same factorial structure of the original version. Regarding internal consistency reliability and corrected item-total correlations, for the four subscales emerges good subscale homogeneity. Furthermore, the SCI subscales' intercorrelations indicate that the scale dimensions measure related but distinct aspects of the same construct.

Evidence for concurrent validity was provided by correlations between the SCI subscales and other measures of hoarding severity. Except for the correlation between the SCI Control subscale and CIR, both SCI subscales and total score correlated significantly and positively with each of the other administered hoarding measures.

With regard to convergent validity, correlations between the SCI subscales scores and selected measures of depression, anxiety and obsessive compulsive disorder were examined. The outcoming results were in line with our expectations.

This study investigated the effect of the questionnaire translation on its psychometric properties, concluding that the dimensional structure of the measure resembles that of

the original one. As the psychological measures might depend on cultural influences, we have examined the Italian version of the scale using factorial analyses. Cultural differences may indeed have occurred, so we have looked for possible evidence that the main structure remains the same as in the original questionnaire. This could provide a sounder basis for international comparisons, at least with the Italian version.

Unlike the original study (Steketee, Frost, & Kyrios, 2003), which included healthy controls, hoarding participants, and other clinical groups, our study was conducted only on non clinical samples, limiting the generalization of our results. Further studies involving both clinical and non clinical participants are needed.

In spite of some limitations, our findings suggest that the Italian version of the SCI is a psychometrically promising scale to assess HD. All the findings reported in this paper support the possible application of the adapted measure. However, as it is well known, the process of testing an instrument never ends: a measure is incessantly validated. Future empirical and theoretical studies, therefore, are needed to support psychometric adequacy of the scale.

Additional research could be focused on examining possible relationships with boredom proneness (Craparo, Faraci, Fasciano, Carrubba, & Gori, 2013; Craparo, Faraci, Gori, Hunter, Pileggi, Costanzo, Lazzaro, & Eastwood, 2017), decision making tendency, in terms of maximizing, satisficing, and minimizing (Misuraca, Faraci, Cangemi, Carmeci, & Miceli, 2015), guilt sensitivity (Perdighe, Cosentino, Faraci, Gragnani, Saliani, & Mancini, 2015), and self-actualization (Faraci & Cannistraci, 2015).

REFERENCES

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th edition). Washington DC: Author.

Beck AT, Epstein N, Brown G, & Steer RA (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinic Psychology, 56,* 893-897. Doi: 10.1037/0022-006X.56.6.893

Beck AT, Steer RA, & Brown GK (1966). *Manual for the Beck Depression Inventory-II (BDI-II)*. San Antonio, TX: Psychological Corporation.

Behling O & Law KS (2000*). Translating questionnaires and other research instruments: Problems and solutions (Sage University papers series on quantitative applications in the social sciences, series no. 07-131)*. Thousand Oaks, CA: SAGE.

Burgess A, Frost RO, Marani C, & Gabrielson I (2018). Imperfection, Indecision, and Hoarding. *Current Psychology, 37*, 445-453. Doi: 10.1007/s12144-017-9695-4

Craparo G, Faraci P, Fasciano S, Carrubba S, & Gori A (2013). A factor analytic study of the Boredom Proneness Scale (BPS). *Clinical Neuropsychiatry, 10*, 164-170.

Craparo G, Faraci P, Gori A, Hunter A, Pileggi V, Costanzo G, Lazzaro A, & Eastwood JD (2017). Validation of the Italian version of the Multidimensional State Boredom Scale (MSBS). *Clinical Neuropsychiatry, 14*, 173-182.

Faraci P & Cannistraci S (2015). The Short Index of Self- Actualization: A factor analysis study in an Italian sample. *International Journal of Psychological Research, 8*, 23- 33.

Faraci P & Tirrito A (2013). Fifty years studying the Beck Depression Inventory (BDI) factorial stability without consistent results: A further contribution. *Clinical Neuropsychiatry, 10*, 274-279.

Foa EB, Huppert JD, Leiberg S, Langner R, Kichic R, Hajca G, & Salkovskis PM (2002). The Obsessive-Compulsive Inventory: Development and validation of a short version. *Psychological Assessment, 14,* 485-496. Doi: 10.1037/1040-3590.14.4.485

Frost RO, Steketee G, & Grisham J (2004). Measurement of compulsive hoarding: Saving Inventory-Revised. *Behavior Research and Therapy, 42,* 1163-1182. Doi:10.1016/j.brat.2003.07.006

Frost RO, Steketee G, & Williams L (2002). Compulsive buying, compulsive hoarding, and obsessive-compulsive disorder. *Behavior Therapy, 33,* 201-214. Doi: 10.1016/S0005-7894(02)80025-9

Frost RO, Steketee G, Tolin DF, & Renaud S (2008). Development and validation of the Clutter Image Rating.

Journal of Psychopathology and Behavioral Assessment, 32, 401-417. Doi: 10.1007/s10862-007-9068-7

Grisham JR, Roberts L, Cerea S, Isemann S, Svehla J, & Norberg MM (2018). The role of distress tolerance, anxiety sensitivity, and intolerance of uncertainly in predicting hoarding symptoms in a clinical sample. *Psychiatry Research, 267*, 94-101. Doi: 10.1016/j.psychres.2018.05.084

Kyrios, M, Mogan C, Moulding R, Frost RO, & Fassknacht DB (2018). The cognitive behavioural model of hoarding disorder: Evidence from clinical and non-clinical cohorts. *Clinic Psychology and Psychotherapy, 25,* 311-321. Doi: 10.1002/cpp.2164

Misuraca R, Faraci P, Gangemi A, Carmeci FA, & Miceli S (2015). The Decision Making Tendency Inventory: A new measure to assess maximizing, satisficing, and minimizing. *Personality and Individual Differences, 85,* 111-116. Doi: 10.1016/j.paid.2015.04.043

Nordsletten AE, Reichenberg A, Hatch SL, de la Cruz LF, Pertusa A, Hotopf M, & Mataix-Cols D (2013). Epidemiology of hoarding disorder. *The British Journal of Psychiatry, 203*, 445-452. Doi: 10.1192/bjp.bp.113.130195

Perdighe C, Cosentino T, Faraci P, Gragnani A, Saliani A, & Mancini F (2015). **Individual differences in guilt sensi**tivity: The Guilt Sensitivity Scale (GSS). *Testing, Psychometrics, Methodology in Applied Psychology 22*, 349-362. Doi: 10.4473/xxx

Schimmenti A (2016). Psychometric properties of the Adolescent Dissociative Experiences Scale in a sample of Italian adolescents. *Journal of Trauma and Dissociation,* 17, 244-57. Doi: 10.1080/15299732.2015.1064507

Shaw AM & Timpano KR (2016). An experimental investigation of the effect of stress on saving and acquiring behavioral tendencies: The role of distress tolerance and negative urgency. *Behavior Therapy, 47,* 116-129. Doi: 10.1016/j.beth.2015.10.003

Steketee G, Frost RO, & Kyrios M (2003). Cognitive aspects of compulsive hoarding. *Cognitive Therapy and Research, 27,* 463-479. Doi: 10.1023/A:1025428631552

Taylor JK, Theiler S, Nedeljcovic M, & Mouding R (2019). A qualitative analysis of emotion regulation in hoarding disorder. *Journal of Clinical Psychology, 75*, 520-545. Doi: 10.1002/jclp.22715

Timpano KR, Muroff J, & Steketee G (2016). A Review of the Diagnosis and Management of Hoarding Disorder. *Current Treatment Options in Psychiatry, 3*, 394-410. Doi: 10.1007/s40501-016-0098-1

Tolin DF, Frost RO, & Steketee G (2010). A brief interview for assessing compulsive hoarding: The Hoarding Rating Scale-Interview. *Psychiatry Research, 178*, 147-152. Doi: 10.1016/j.psychres.2009.05.001

Tolin DF, Hallion LS, Wootton BM, Levy HC, Billingsley AL, Das A, & Stevens MC (2018). Subjective cognitive function in hoarding disorder. *Psychiatry Research, 265,* 215–220. Doi: 10.1016/j.psychres.2018.05.003.

Tompkins MA (2016). *Clinician's Guide to Severe Hoarding*. New York: Springer-Verlag.

Triscari MT, Faraci P, D'Angelo V, & Urso V (2011). Paura di volare: struttura fattoriale di due questionari. [Fear of flying: Factor analyses of two questionnaires]. *Psicoterapia Cognitiva e Comportamentale 17*, 2, 211-226.

Wheaton MG, Fabricant LE, Berman NC, & Abramowitz JS (2013). Experiential avoidance in individuals with hoarding disorder. *Cognitive Therapy and Research, 37*, 779-785. Doi: 10.1007/s10608-012-9511-2

Wheaton MG (2016). Understanding and treating hoarding disorder: A review of cognitive-behavioural model and treatment. *Journal of Obsessive-Compulsive and Related Disorders, 9,* 43-50. Doi: 10.1016/j.jocrd.2016.02.006

Wheaton MG, Abramowitz JS, Jacoby RJ, Zwerling J, & Rodriguez CI (2016). An investigation of the role of intolerance of uncertainly in hoarding symptomps. *Journal of Affective Disorders, 193,* 208-214. Doi: 10.1016/j.jad.2015.12.04

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