Development of an Indigenous Measure of Hoarding Disorder

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Hoarding disorder (HD), a persistent and severe mental condition, is characterized by an intense difficulty in discarding possessions, leading to significant clutter and hazardous living conditions. Current study aimed to develop an indigenous measure of Hoarding disorder. To develop the scale, a sample of *(N=321)* was selected from the community based on Gorsuch's criterion *(1983)* of 5 items per participant. Participants with any physical disability and arthritis were not included in the current study. Study was conducted in two phases. In phase I, Focus Group Discussions were conducted, and items were generated. In phase II, data was collected based on the item pool reviewed by professionals and statistical analysis were run on the data and an indigenous measure was developed. Psychometric properties were also calculated which showed good validity of .82. The measure developed appears to have sound psychometric properties and can be used in multidisciplinary settings i.e., clinical, social, and educational settings. The developed measure is a culturally and socially relevant tool that can be used affectively in a variety of settings.

Keywords: hoarding disorder, hording measure, hoarding in Pakistani culture

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Introduction

Saving possession for later use or for its aesthetic value is quite common but when the individual is unable to give up on his/her possession either because the objects become centric to one's identity or a reminder of important information or due to its aesthetic values and leads to cluttering of house, categorizes oneself into a clinical disorder known as Hoarding disorder. Hoarding particularly refers to excessive acquisition of items which are kept in disorganized fashion that results in chaos and such items may not be of monetary significant to the hoarder (APA, 2021). A hoard is usually very disorganized, takes up much room and the items are largely inaccessible (National Health Service, 2022).

Hoarding symptoms are notably dimensional in that they occur along a continuum, rather than as a dichotomy. While general saving tendencies can be normative, at the severe end of the continuum, symptoms of HD can have an enormous impact on public health outcomes (Mathes et al., 2020).

The overall prevalence of hoarding disorder is considered to be approximately 2.6%. It is more prevalent in geriatric population and is highly comorbid with psychiatric concerns like anxiety and depression. The prevalence and features of hoarding appear to be similar across countries and cultures (Postlethwaite et al, 2019). In the United States and Europe its prevalence is approximately 2%-6% (APA, 2013). Prevalence of hoarding in Asian countries is reported to be as high as 2% for lifetime prevalence and 22.6% prevalence in those having obsessive-compulsive disorder (Subramaniam, et al., 2014). Prevalence of hoarding in the Chinese population is 29.1% in the form of compulsive buying (He et al., 2018).

Such substantial rates of prevalence can be caused due to certain vulnerabilities, contribute to development of hoarding. These vulnerabilities include genetic (Iervolino et al., 2009), neurobiological (An et al., 2009), environmental (Frost & Harl, 1996). and personality features (Timpano et al., 2013). The phenomena of hoarding can be understood by the underlying theoretical frameworks that play a crucial role in elucidating the complex nature of hoarding disorder, exploring its cognitive, emotional, and behavioral aspects. In Cognitive-Behavioral Model of hoarding disorder several cognitive factors are highlighted. These refer to the thoughts, beliefs, and information processing that individuals with hoarding disorder may exhibit such as attachment to possessions, where people with hoarding disorder often attach strong emotional significance to their possessions, viewing them as an extension of themselves or having sentimental value beyond their practical use; an exaggerated perceived responsibility, where individuals may feel an excessive sense of responsibility for their possessions, believing that they are the only ones capable of taking care of them properly and a fear of discarding where hoarders may experience intense distress and anxiety when faced with the idea of getting rid of their possessions, often due to perceived potential negative consequences or loss (Kyrios et. al., 2018).

The information processing model posits that individuals with hoarding disorder face difficulties in processing information related to possessions, leading to impairments in decision-making and problem-solving. This model suggests that hoarders have deficits in attention,

categorization, and memory processes, which contribute to their persistent difficulty in organizing and discarding possessions (Kyrios et al., 2019).

The attachment theory offers valuable insights into the emotional and interpersonal aspects of hoarding disorder. According to An et al. (2020), hoarding behaviors can be understood through the lens of insecure attachment styles. Individuals with hoarding disorder may have experienced early attachment experiences that led to the development of insecure attachment styles, such as anxious or avoidant attachment. Anxious attachment is characterized by a heightened need for emotional closeness and reassurance but a fear of abandonment, while avoidant attachment is marked by a reluctance to depend on others and a tendency to suppress emotional needs (Mathes et al., 2020).

The metacognitive model of hoarding disorder, as proposed by Solem et al. (2019), offers a unique perspective on the underlying cognitive processes that contribute to hoarding behaviors. According to this model, individuals with hoarding disorder possess maladaptive metacognitive beliefs that play a central role in driving their hoarding behaviors.

Hoarding as a neglected condition in Pakistan has its roots in our cultural and religious contexts as well. Pakistani society places importance on family cohesion and social connections. The fear of judgment and social stigma associated with discarding items can discourage individuals from decluttering. Collectivist values, where individual desires may be subordinated to family and community needs, can further complicate the decision-making process related to possessions (Gross & Haynes, 1998). In Islam, the concept of moderation is emphasized in all aspects of life, including the acquisition and use of material goods. The Holy Qur'an reminds believers to avoid excessiveness in their possessions, as Allah dislikes those who commit acts of extravagance. This principle encourages individuals to maintain a balanced approach, recognizing the impermanence of worldly possessions and prioritizing spiritual growth and contentment over material accumulation (Samoh et. al., 2024).

Hoarding disorder (HD) is a psychiatric condition characterized by persistent difficulty in parting with possessions, regardless of their actual value, leading to clutter that hinders the use of living spaces. This situation causes considerable distress and functional impairment in individuals (American Psychiatric Association, 2013). Often, these symptoms are accompanied by excessive acquisition behaviors, with approximately 85% reported by individuals themselves and 95% reported

by informants (Frost et al., 2009). Comorbidity is also notable, with 31% displaying obsessive hoarding and 26% exhibiting hoarding compulsions in conjunction with obsessive-compulsive disorder (Frost et al., 1996). Furthermore, hoarding disorder is reported in 11-75% of individuals with depression (Fontenelle & Ferrão, 2012), and associations with other disorders such as dysthymia (5-27%), social phobia (7-71%), and generalized anxiety disorder (15-24%) have been identified (Lochner et al., 2005; Pertusa et al., 2008; Samuels et al., 2007).

Successful early intervention may curtail the worsening of symptoms, particularly excessive clutter accumulation, while simultaneously enhancing functioning and productivity. Consequently, individuals may not require as intensive treatment or rely heavily on social services compared to those who did not receive early intervention. Thus, it is crucial to accurately assess HD in children and adolescents.

While some assessment tools for hoarding disorder already exist, such as the Structured Interview for Hoarding Disorder (SIHD: Nordsletten et al., 2013) and the Hoarding Rating Scale Interview (Tolin et al., 2010), both have their limitations. The SIHD requires a trained professional to conduct interviews and administer the measure, making it more resource-intensive and less feasible for widespread use. On the other hand, the Hoarding Rating Scale Interview is a very brief measure, potentially lacking the depth needed for a comprehensive evaluation.

A self-report measure, the SI-R, does exist and has demonstrated sound psychometric properties except for its consistency in scores over time. However, the study by Yousaf et al. (2022) raised some concerns about its reliability, particularly regarding the subscale of cluttering. The research also indicated that hoarding may impact religious functioning, although without rendering it completely absent.

Given the clinical significance of hoarding disorder and the limitations of existing assessment measures, the current research endeavors to develop an indigenous measure of hoarding that considers cultural and religious backgrounds.

Theoretical background

The development of the indigenous measure of hoarding disorder is guided by several well-established psychological models that explain the complex nature of the disorder. The Cognitive-Behavioral Model (Frost & Harts, 1996; Kyrios et al., 2018) emphasizes distorted beliefs, maladaptive attachment to possessions, and decision-making difficulties. Individuals with hoarding disorder often believe their possessions hold

unique personal value or utility, making it emotionally distressing to discard them.

The Information Processing Model (Kyrios et al., 2019) further suggests that individuals with hoarding disorder experience deficits in categorization, attention, memory, and executive functioning. These deficits impair their ability to organize and make rational decisions about possessions, contributing to excessive accumulation and clutter. Additionally, the study incorporates Attachment Theory, which posits that early childhood experiences and insecure attachment styles, such as anxious or avoidant attachment, can influence hoarding behavior (Mathes et al., 2020; An et al., 2020). Possessions may serve as emotional surrogates for interpersonal relationships, offering a sense of comfort and security.

The Metacognitive Model of hoarding (Solem et al., 2019) explains how individuals hold dysfunctional beliefs about their thoughts (e.g., "If I discard this item, something bad will happen"), leading to compulsive saving and avoidance of discarding. Finally, cultural and religious frameworks also shape the conceptualization of hoarding in Pakistan. Collectivist norms, fear of social judgment, and religious teachings such as Islamic values emphasizing moderation and avoidance of excess further influence the experience and expression of hoarding behaviors (Gross & Haynes, 1998; Samoh et al., 2024).

Rationale

Hoarding disorder has received increased clinical attention globally, however most assessment tools are developed in Western contexts and may not align with the cultural, religious, and social values of non-Western populations, particularly in Pakistan. Tools like the Saving Inventory-Revised (SI-R) and the Structured Interview for Hoarding Disorder (SIHD) offer psychometric strength but are limited by contextual irrelevance, language barriers, or logistical constraints such as requiring trained interviewers (Tolin et al., 2010; Nordsletten et al., 2013; Yousaf et al., 2022). Moreover, cross-cultural differences in the manifestation of hoarding symptoms such as social facilitation of clutter or the religious sanctification of saving items underscore the need for indigenous assessment tools. Research suggests that cultural norms around family dynamics, resource conservation, and religious beliefs can moderate the presentation and severity of hoarding (Lie et al., 2009; An et al., 2009). Hence, an indigenous measure tailored to the Pakistani cultural context is essential for accurate diagnosis, early detection, and appropriate intervention planning. This study addresses this gap by

developing and validating a culturally sensitive, psychometrically sound measure of hoarding disorder for use in clinical, educational, and research settings within Pakistan.

Objectives

- To explore the cultural representation and underlying beliefs about hoarding disorder through qualitative data collection (i.e., Focus Group Discussions).
- To develop an indigenous self-report measure of hoarding disorder based on thematically derived constructs from expert interviews.
- To establish the factor structure of the developed measure using Exploratory and Confirmatory Factor Analyses.
- To examine the psychometric properties of the new measure, including reliability and convergent validity.
- To contribute a culturally and religiously appropriate diagnostic tool for use in clinical practice, academic training, and psychological research in Pakistan.

Method

The present study was conducted in two phases. In phase 1, Focus Group Discussion (FGD) was conducted to explore the cultural presentation of hoarding disorder and from the data gathered from FGD, themes emerged, and items were generated. Focus Group Discussion was used to generate themes and the item pool was elicited from the data gathered through FGD. Then those items were reviewed, and the content validity of the measure was established. In phase 2, data was collected based on those items through the Survey method. Statistical analysis was run on the data to develop the scale of hoarding disorder.

Phase 1: Item Generation

To generate items, FGD was conducted after the previous literature was reviewed and qualitative studies in the current cultural and social context of the study were also reviewed, and an interview protocol was developed to conduct FGD. Data from FGD was transcribed and themes emerged from them, Items were generated from those themes. Then those items were reviewed by professionals to establish their content validity.

Research Design

In the first half of the study, qualitative inquiry was employed to explore the construct of hoarding disorder through Focus Group Discussion.

Sampling Strategy

Participants were selected using purposive sampling. The purposive sampling strategy (Patton, 1990) is a commonly used strategy in qualitative research design, as it involves purposively selecting specific settings, events, and persons according to the need of the study. Participants qualifying the below-given criteria were included in the study.

Participants Characteristics

According to Krueger and Casey (2009), the focus group usually consists of 4 to 12 participants. The focus group must not be too large that it becomes difficult to handle and shouldn't be too small to lack its impact. In the current study, 7 professionals with relevant clinical experience were selected as participants of FGD in the current study.

All the professionals have at least a minimum of 5 years of relevant experience and all of them were working in public sector hospitals.

Procedure

Initially, approval was taken from Departmental Doctoral Program Committee (DDPC) for conducting the present study after reviewing its implication, rationale and ensuring that all ethical guidelines were followed. Then permissions for Focus Group Discussion (FGD) were taken from mental health experts. After taking approval from respective mental health experts, FGD was conducted. FGD was comprised of 7 participants who were experts in the field of mental health and 1 moderator to conduct the FGD.

For focus group discussion, a semi-structured interview protocol was developed while keeping the literature review and opinions of experts in view. The interview protocol was reviewed beforehand. Following the interview protocol, FGD was conducted. It took 60min for the discussion to end. FGD was audio recorded for later transcription of data. Thematic analysis was conducted on the data gathered from FGD and major and minor themes were identified from the data.

Based on the data collected from FGD and existing literature, an item pool of 25 items was generated. Item pool of 25 items was sent to 5 experts for review who were currently working in any mental health facility for at least the past 5 years. Experts were asked to rate the relevance of the items to the construct of hoarding disorder on a scale of 0-10 and they were asked to provide comments on the structure and clarity of the items.

They were requested to provide suggestions regarding rephrasing items and merging and deletions items based on their content validity. After incorporating the reviews, a measure of 23 items was finalized to be used in the main study.

Phase II: Scale Development

Research Design

The survey research design was used to collect data.

Sampling Strategy

Participants were selected based on purposive and convenience sampling. Participants qualifying the below-given criteria were included in the study.

Inclusion

Only those participants were selected.

- Adults below the age of 55 years.
- Those with a score of 40 and above on Saving Inventory-Revised.
- Those with basic reading and writing skills with formal education.

Exclusion

The following were excluded,

- Those having arthritis and any low back pain.
- Those with any kind of physical disability

Sample Characteristics

A community sample of N=321 participants was selected as a sample in the present study. General criteria for the current sample size was five times the number of items developed in item pool. The sample consisted of both men (Mage =29.8, SD= 9.82) and women (Mage =26.4, SD= 8.58). 350 participants were approached out of which 325 gave their consent to participate in the study. 4 of the participants did not complete the questionnaire so, their forms were discarded, and data was analyzed from the responses of the sample (N=321). The response rate of participants in the current study was 91.7%.

Statistical Analysis

The methods applied included thematic analysis, exploratory analysis and confirmatory analysis.

Ethical Considerations

The following ethical considerations were maintained in order to conduct the study. Board of Studies (BOS) and the Internal Departmental Ethical Committee approved the objects, procedures, and materials used for this study. Informed consent was taken from the participant. Permission was sought from the participants. Minimal risk to the participant was assured. Confidentiality of the participant was

maintained. Participants were informed about the research objectives. The results were reported without any biases. It was assumed that results will only be used for research purposes. It was assumed that data would not be shared with anyone. Researcher and supervisor had access to the data.

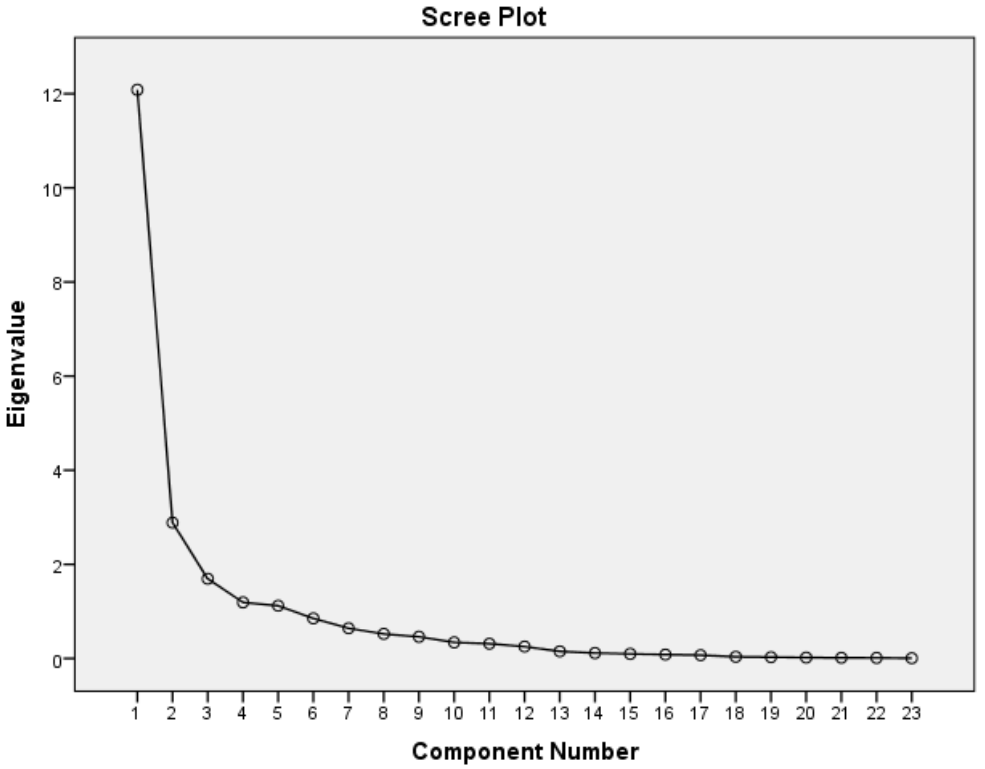
Findings

Thematic Analysis

Major themes that emerged from FGD were related to acquiring, distress, difficulty discarding, and clutter whereas minor themes included were organized hoarding, distress related to being unable to acquire, distress upon acquiring, distress related to discarding, beliefs underlying the value of objects, emotional attachment to possessions, Usefulness of objects, infrastructure of one's home, clutter and family response as social facilitation related to hoarding behavior. Items were generated based on these themes. Unique themes identified were organized hoarding, distress upon acquiring, and infrastructure of one's home. The theme of organized hoarding differ from universal and already existing themes as such clutter is considered one of the hallmark diagnostic feature of hoarding disorder but it was noted that excessive accumulation and distress regarding accumulation was present but clutter was not significantly present due to the interventions of family, loved ones and it is also greatly impacted by the size of one’s residence.

Exploratory Factor Analysis

EFA was conducted on a scale of 23 items through varimax rotation. Suppression of .3 was used for the analysis. Based on Kaiser criteria of 1, 4 factors emerged. Factor analysis with suppression of .3 and 4 fixed factors was run again. All 23 items loaded on 4 factors accounted for variance of 79.6% of the measure. The results of KMO Measure of Sampling Adequacy were .83 which is greater than the recommended value of .6. This indicates that the sample was sufficient according to items. Results of Bartlett’s test of Sphericity were significant indicating that Correlation Matrix was significant.



Scree plot indicates that 4 points were above the Eigenvalue of 1 so, EFA was re-run while keeping 4 factors constant. All the items show good factor loadings and all 23 items were retained in the present study. The result of Exploratory Factor Analysis with the number of items and their loadings on respective factors is shown below.

Table 1

Results from Exploratory Factor Analysis of Indigenous Measure on Hoarding Disorder. (N= 321)

	Factor Analysis			
Items	*1*	*2*	*3*	*4*
Item 1	.68			
Item 2	.55			
Item 3	.46			
Item 4	.59			
Item 5	.66			
Item 6	.44			
Item 18	.35			

Item 7	.46			
Item 8	.56			
Item 9	.72			
Item 10	.75			
Item 11	.83			
Item 12	.63			
Item 13		.81		
Item 14		.78		
Item 15		.69		
Item 16		.69		
Item 17		.75		
Item 19		.79		
Item 20			.83	
Item 21			.82	
Item 22		.	.82	
Item 23			.89	

*Note: **p< .01, *p< .05*

Table 2

Items Retained in Each Factor, Variance and Eigenvalue. (N=321)

Factors	*Factor name*	*Items retained*	*No. of items*	*Variance (%)*	*Eigenvalue*
1	Acquiring	1, 2, 3, 4, 5, 6, 18	7	19.18	11.58
2	Distress	7, 8, 9, 10, 11	5	19.67	2.78
3	Difficulty discarding	12, 13, 14, 15, 16, 17, 19	7	25.67	2.28
4	Clutter	20, 21, 22, 23	4	15.2	1.19

*Note: **p< .01, *p< .05*

Table 2 showed 4 factors were retained in the measure comprising 23 items accounting for a total variance of 79.6%. Four factors were acquiring, distress, difficulty discarding, and clutter accounting for an individual variance of 19.18%, 19.67%, 25.67%, and 15.2% respectively.

Table 3

Psychometric properties of an indigenous measure of Hoarding Disorder

Factors	*N*	*M*	*SD*	*Range*	*A*
1. Acquiring	7	24.65	7.1	.73	.89
2. Distress	5	15.78	5.6	.54	.87
3.Difficulty discarding	7	27.23	6.8	.49	.91
4. Clutter	4	11.83	4.5	.44	.74

*Note: ***p< .001, **p< .01*

Results indicated that Cronbach's α values of Factor 1, 2, 3, and 4 are all satisfactory and above .7 indicating good internal reliability. Moreover, the Inter-factor and Inter-Item correlation on each factor was also calculated.

Table 4

Inter-Factor Correlations of 4 Factors of Indigenous Measure of Hoarding Disorder.

		N	*M*	*SD*	*1*	*2*	*3*	*4*
1.	Acquiring	321	24.65	7.1	1	.74**	.83**	.55**
2.	Distress	321	15.78	5.6		1	.50**	.63**
3.	Discarding	321	27.22	6.7			1	.45**
4.	Clutter	108	1.56	1.22				1

** indicates p< .001 and * indicates p< .05.

The inter-item correlation coefficient of all the factors was statistically significant and showed positive correlations indicating a coherent and correlated tool measuring the same construct. Inter-item correlations for each factor were also calculated as given below.

Results of Exploratory Factor Analysis suggested a factor structure of 23 items comprising of 4 subscales; acquiring, distress, difficulty discarding, and clutter. EFA was run through Principal Component Analysis with varimax rotation and suppression of .4 on a measure of 23 items. Factor loadings were calculated for each factor and items were subsequently placed into their respective factor.

Confirmatory Factor Analysis

Confirmatory Factor Analysis was done through AMOS 23 statistical package to confirm the factor structure emerged through EFA earlier in the study. Model for CFA is given below.

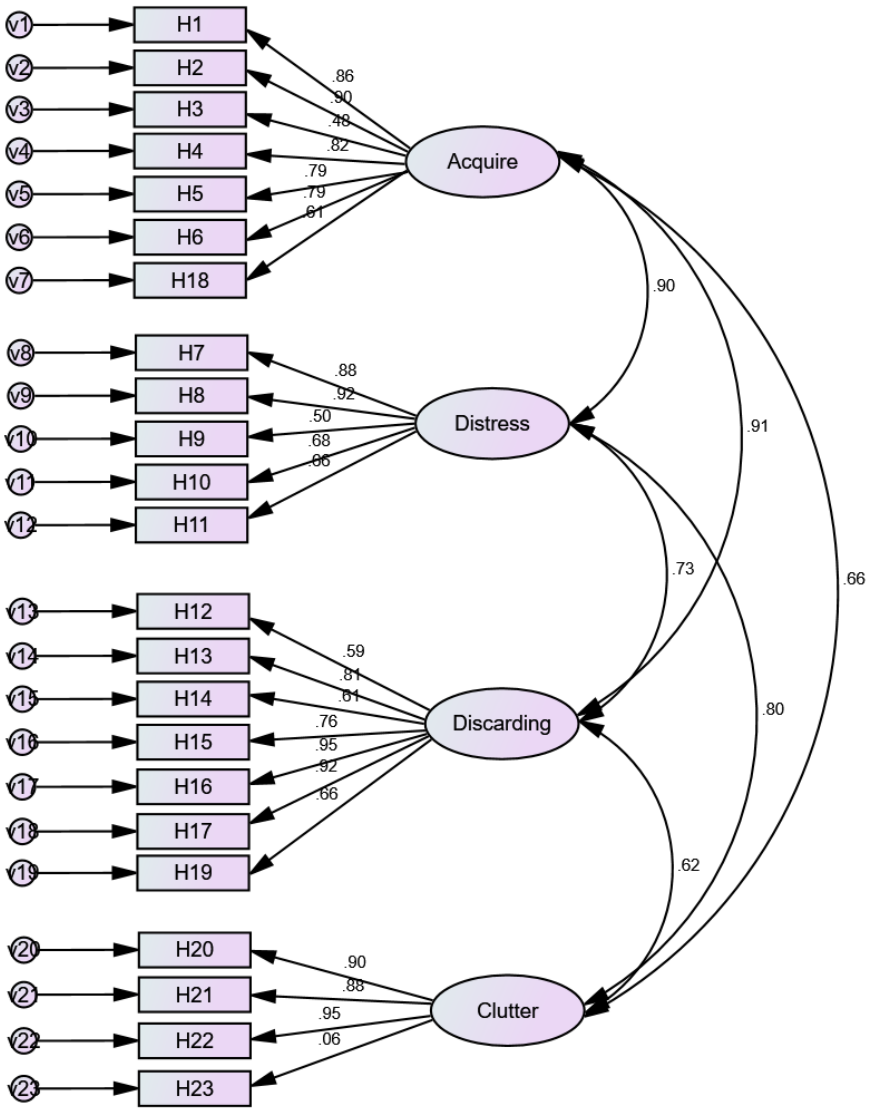


Fig1: Model of Indigenous Measure of Hoarding Disorder.

Analysis was run on AMOS using the Maximum Likelihood method while calculating means and estimates of all of the latent variables (items) and their construct (factors). The overall model suggested all the correlations and covariances of variables and their

intercepts were significant. Baselines for model fit were also calculated using Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) and the RMSEA value was also calculated to ensure whether the current study model is valid or not. The following are the results of the model fit analysis.

Table 5

Goodness-of-Fit Indices for Model of Indigenous Measure of Hoarding Disorder

Model	$\chi 2$	df	TLI	CFI	RMSEA
MTS	416.64	224	.90	.89	.05

*Note: ***p< .001, **p< .01*

Model 1 (Figure 1) and hypothesized model with 4 factors and 23 items suggested by EFA showed a good fit to our sample (CFI > .90, TLI > .90) and all assumptions are fulfilled. Moreover, this model contained all items with loadings of > 0.30 (Muller, 1994).

RMSEA value is also below the suggested value of < .08 and the values of CFI and TLI are above the suggested value of > .9 which indicated a good model fit indicating that the factor structure of the indigenous measure of Hoarding disorder is valid and statistically significant with a good model fit.

Establishing Psychometric Properties of Indigenous Measure of Hoarding Disorder

To establish the psychometric properties of the measure, convergent validity was calculated by using the Saving Inventory-Revised measure (n=60).

Convergent Validity

Convergent validity measures the degree of sameness of a phenomenon or any measurable construct. It measures how closely the new scale or construct is related to a previously established scale or construct (Krabbe, 2017).

Table 6

Convergent Validity of Indigenous Measure of Hoarding Disorder(N=60).

		M	SD	1	2	3	4	5
1.	Total Hoarding	63.16	26.8	1	.75**	.67**	.80**	.82**
2.	SI Clutter	25.3	9.3		1	.53**	.86**	.93**
3.	SI Discarding	22.56	5.9			1	.73**	.82**
4.	SI Acquisition	18.73	6.3				1	.96**
5.	SI-R Total	69.2	19..3					1

*Note: ***p< .001, **p< .01*

Results of the correlation analysis showed that all the subscales of SI-R and its total scores are highly correlated with total scores on the indigenous scale of hoarding disorder thus, suggesting a valid measure with sound psychometric properties.

Discussion

The aim of the current study was to develop an indigenous measure of hoarding disorder. In the current study, Hoarding was operationally defined as the excessive acquisition of items and underlying beliefs regarding the utility and value of items which make it impossible to discard possession resulting in clutter that sometimes is not visible due to interventions of third-party members and such behaviors result in distress and impairment in daily life functioning.

The sample was selected from a community in the age range of 18-55 years. The majority of the participants were females (80%). Participants who reported distress related to hoarding and acquiring and reported having any area of their house cluttered scored highest on SI-R and indigenous measure of Hoarding disorder, indicating clinically significant hoarding behavior. Most of the participants who lived in rented houses and felt relieved when someone else decides on their behalf to throw away their possessions, reported lower scores on the grand total of Saving-Inventory Revised indicating that hoarding behavior is neither severe nor problematic. All of such participants also reported that their family members criticize them for their acquiring habits which restricts any social reinforcement and upon discarding the possessions they felt relieved. The data obtained through demographics can also be related to empirical findings which suggested that symptoms of hoarding are associated with social anhedonia, decreased social support, and reduced social motivation (Chen et al., 2020).

Items in factor 1 were usually related to collecting unnecessary items, keeping very old items having no use, spending excessive time and effort in acquiring items, identifying the self with the acquired objects, and feeling distressed when not being able to acquire the desired or intended objects. Literature also suggested that individuals with Hoarding disorder reported more distress pertaining to acquiring and greater urges to acquire the item of interest (Levy et al., 2019). Maladaptive emotional attachment to possessions may center around factors like beauty, sentimental value, emotional comfort, personal identity, and perceived utility for future use in craft projects or other purposes (Levy et al., 2017). Especially in Asian cultures, the phenomenon of acquisition may be related to the beliefs regarding saving possessions and being

responsible for one's possession. Saving and collecting things is considered a virtue in collectivistic cultures (Lie et al., 2009).

Items in factor 2 were relevant to the inability to control the urges related to acquiring, delaying everyday tasks, financial loss, and distress experienced by family members, and item no 11 is about distress upon acquiring the intended object which was unique as compared to previous literature. Empirical findings suggested that impairments associated with hoarding disorder are depression, diminished self-control as well as psychosocial impairments, and social impairments (Weiss et al., 2020). Numerous psychological processes have been linked to HD, including psychological inflexibility. Psychological inflexibility refers to inflexible responses to distressing thoughts and emotions that obstruct valued actions. For instance, someone rigidly adheres to the belief that they "cannot discard gifts" despite the clutter affecting their family relationships. Maladaptive emotional attachment to possessions may center around factors like beauty, sentimental value, emotional comfort, personal identity, and perceived utility for future use in craft projects or other purposes (Cruz et al., 2013).

Items in factor 3 are related to strong belief about the utility of hoarded objects, perceived use in time of need, emotional attachment with hoarded objects and difficulty in making decisions regarding discarding and executing them, and distress upon misplacement or missing of any hoarded object. It can also be explained by the concept of material scrupulosity. Material scrupulosity involves an exaggerated perception of a moral obligation to preserve and manage possessions to prevent harm or wastage (Frost et al., 2011). The information Processing Model also explained that problems in processing information in higher structures of the brain result in deficits in attention, and difficulty in organizing and discarding possessions. These cognitive deficits also included difficulty making decisions regarding discarding (Thomas, 2016).

Items are related to cramped living spaces due to clutter or excessive acquisition. Item 23 measures the organized excessive acquisition which indicated that there are excessive acquisitions, but the clutter is not visible due to social facilitation (third-party intervention). As Kouskoussi et al. (2020) differentiated hoarding from the construct of cluttering as hoarding is characterized by disorganized clutter, taking over living spaces and preventing them from their intended use whereas clutter referred to disorganized clutter generally located in storage spaces and does not prevent living spaces for their intended use. In Western

cultures these two concepts are different whereas, in the Pakistani cultural context, there seems to be no difference between these two constructs as supported by the findings of Yousaf et al. (2020) which suggested that although participants reported all clinical characteristics of Hoarding disorder and were diagnosed with hoarding their scores on the subscale of clutter on the scale of SI-R were not significant thus, rendering limitations in the use of psychological measure.

Conclusion

In conclusion, the current study embarked on the development of an indigenous measure of Hoarding Disorder, considering the unique cultural dimensions and beliefs surrounding hoarding behaviors. The study successfully constructed a comprehensive assessment tool based on key themes that emerged from in-depth discussions with professionals. This culturally relevant measure reflects the nuances of hoarding behaviors within the local context, capturing elements such as the religious perspective, material scrupulosity, and the influence of social facilitation on clutter perception.

Limitations and Suggestions

The participants were primarily young adults; including a sample comprising older individuals could have provided more relevant insights.

Future Implications

The indigenous measure of Hoarding Disorder in Pakistani cultures holds significant future implications across various multidisciplinary settings. In clinical psychology, the measure can serve as a valuable diagnostic tool, enabling mental health professionals to accurately assess and identify hoarding disorder cases within the cultural context. Within the field of research, the indigenous measure opens doors to in-depth studies on the prevalence, risk factors, and consequences of hoarding disorder in Pakistan. This would contribute to a better understanding of the cultural factors influencing hoarding behaviors and their impact on individuals and families. In educational institutions, the measure can be integrated into psychology and counseling programs, fostering awareness, and understanding of hoarding disorder's cultural nuances among aspiring mental health professionals. Overall, this indigenous measure has the potential to promote comprehensive care, research, and collaboration across various multidisciplinary domains.

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