

Translation and Adaptation of Bergen Shopping Addiction Scale: A Validation Study

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The main objective of the current research was translation and adaptation of Bergen Shopping Addiction Scale (Andreassen et al., 2015) in Urdu language and its validation. The sample ($N = 400$) was selected from two cities of Punjab by using convenient sampling technique from adults above age 18 years. The forward-back translation method was used for translation followed by expert panel evaluation, linguistic and conceptual verification of the measure, and then a final translated version was confirmed. After analysis the sample adequacy was in acceptable range with seven factors including salience, conflict, relapse, mood modification, problems, withdrawal, and tolerance. For confirmatory factor analysis data was collected from 350 participants with age range 18 to 40 years through convenient sampling. Results showed that indices of good fit model were adequate. For validation of the translated scale, data was collected from 356 individuals aged 18 years and above (186 participants for test-retest reliability, 170 participants for convergent validity) from Gujrat and Gujranwala by using convenient sampling. The values of test re-test reliability and convergent validity were up to acceptable levels. The finding of the current research would provide direction to new researches and awareness about shopping addiction.

Keywords: Shopping addiction, salience, conflict, tolerance, relapse, mood modification, withdrawal, problems

Shopping is a normal part of life, but it can become a problem when it interferes with a person's ability to meet their basic needs of life and limits their ability to engage in personal and social activities and has a negative financial and moral impact (Hratney, 2020; Maraz et al., 2015). Shopping addiction refers to the uncontrollable thoughts, motivation and compulsive buying behavior which effect or create problems in other areas of the life (Hartney, 2020).

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People with shopping addiction do not always buy something new, they frequently spend a lot of time browsing online stores or reading reviews of particular goods, which can cause them to put their jobs in danger (Hartney, 2020; Muller et al., 2014). Shopping eventually becomes a means to deal with unpleasant feelings. Even though the person feels guilty and remorse after engaging in an act of purchasing, as the issue worsens, it becomes more difficult for them to manage their shopping sprees. Because of the compulsive shopping, there may be issues in the home and with the spouse, performance at work may suffer, and rising debts and associated legal issues may even lead to the employment of illicit means to address financial issues. However, an increasing recent body of research demonstrates that people with problematic shopping habit describe specific addiction symptoms such craving, withdrawal, loss of control, and tolerance (Aboujaoude, 2014).

Shopping addiction has been found like other addictions in a number of ways. People who overspend get obsessed with spending and invest a lot of time and money in the habit, just like those who have other addictions. Window shopping does not qualify as an addiction, and the addictive behavior is fueled by the act of spending money. Actual spending is crucial to the process of developing a shopping addiction (Hartney, 2020; Muller et al., 2019). The act of shopping itself is frequently regarded as enjoyable, even ecstatic, and as offering respite from unpleasant emotions (Zhang et al., 2017). Like other addictions, shopping addiction is highly ritualized and follows a typical addictive cycle of thoughts about shopping, trip preparation, and shopping itself (Correa, 2020). The shopper finally collapses, feeling guilt especially disappointed in himself or herself (Grüsser et al., 2004).

Shopping is becoming more and more popular as a leisure activity in Pakistan also (Khan et al., 2019; Tausif, 2022). According to the findings of a survey conducted in 35 countries it has been found that online shopping is on rise in Pakistan day by day (Khan et al., 2019). Pakistanis have joined the trend of mobile commerce as half of the orders are made solely through mobile device. The results indicated that Pakistanis are more indulge in online shopping as compared to the people living in Turkey and Hungary (Tausif, 2022). Almost every person has a mobile phone and internet access in this time and the online stores offer attractive items, flash sales and other packages on social media and a heavy number of users compel to buy these items. Online shopping putting people more at risk to get shopping addict because new internet-related technologies can greatly facilitate the emergence of problematic shopping behavior due to

factors like accessibility, affordability, anonymity, convenience, and disinhibition (Aboujaoude, 2014; Babic et al., 2018; Widyanto & Griffiths, 2011). In other words, people can do online shopping easily by using their mobile and handy devices such as smart phones, tablets and laptops anywhere and anytime.

Besides the easy access to online shopping this modern age making people materialistic through social media. The people watch the luxurious lifestyles of others and tried to have items which are difficult to manage in the budget of the majority of the buyers which lead towards frustration, anxiety, depression and poor social emotional adjustment (Tausif, 2022). Pakistani women have been found to compel to buy clothing, skin, and hair products. It has been reported that their compulsive shopping is creating difficulties in managing their budget which further causes impaired relationships with spouse and other family members (Khan et al., 2019; Tausif, 2022).

Therefore, these poor interpersonal relationships and financial difficulties may interfere the routine life activities and disturbs the social emotional adjustment of the individuals with maladaptive shopping behavior. This problematic behavior should be assessed and treated in a proper way at the time when other activities of the life are getting affected. In order to assess the problematic behaviors reliable and valid measures are needed however, in case of unavailability, the measures have to be developed. In the procedure of the development of scales defining the construct to be measured correctly is a very first step. Lack of agreement on how problematic shopping should be characterized, conceptualized, and assessed has been a limitation of earlier research (Aboujaoude, 2014; Maraz et al., 2015; Muller et al., 2019). The question of whether compulsive and excessive shopping is indicative of an addiction, obsessive-compulsive, or impulse-control condition has been disputed for several years. The numerous terms for this issue, such as compulsive shopping, oniomania, compulsive consumption shopaholism, impulsive buying, compulsive spending, and compulsive buying (Hartney, 2020; Maraz et al., 2015) have been using for problematic shopping behavior.

For many years the problematic shopping behavior has been perceived as a part of impulse-control paradigm. Consequently, a couple of decade ago most of the scales were developed on the basis of impulse-control model (Maraz et al., 2015; Ridgeway et al., 2008). The Richmond Compulsive Buying Scale (Ridgeway et al., 2008) is a good example of this paradigm. The scale consists of six items of which three items represent obsessive-compulsive buying and other three items measure the impulsive buying. Further, the other available scales consist of items that assess the old shopping trends (Andreassen

et al., 2015; Rose & Samouel, 2009). For example cheques are no longer used by consumers nowadays; moreover, people prefer online shopping over the traditional one for many reasons. The emergence of the internet has changed how people purchase during the past ten years. The act of making a purchase as well as the information search phase of buying can both benefit from internet or online shopping (Rose & Samouel, 2009). Online customer purchasing behavior is influenced by a variety of internal and external factors according to Cheung et al. (2005). In addition to external advantages that stem from the medium itself, such as convenience, ease of use, perceived usefulness, control, and enjoyment, these include internal characteristics such as the individual shopper's attitude toward the Internet medium, personal motivations, perceptions of risk, and personal inventiveness (Correa, 2020; Gefen, 2003). Even a few recently developed measures (Cristo et al., 2003; Ridgway et al., 2008) do not approach problematic shopping behavior as an addiction in terms of the core addiction criteria.

In the current study this scale has been selected for translation and validation on the consumers of Pakistan mainly because of the two reasons. Firstly, the Bergen Shopping Addiction Scale (BSAS; Andreassen et al., 2015) is the first comprehensive scale which has been developed based on addiction paradigm. This scale reflects the core addiction criteria in form of seven factors of addiction (i.e., salience, mood modification, tolerance, withdrawal, conflict, relapse, and problems). These seven components or elements have been emphasized in several addiction behavioral models (e.g., Andreassen et al., 2015; Brown, 1993; Griffiths, 2005). Existing problematic shopping measures (Cristo et al., 2003; Ridgway et al., 2008) frequently exhibit one or more of the characteristics explained by these factors but they do not cover all of them. Secondly, BSAS is an advanced psychometrically sound tool that evaluates problematic shopping within the current consumer's shopping trends across face to face and online shopping. The main objectives of the present study were to translate and adapt the Bergen Shopping Addiction Scale as well as to validate the adapted version of BSAS.

Method

Initially, translation of scale was done in native language (Urdu). The forward-back translation method was used for translation followed by expert panel evaluation, linguistic, and conceptual verification of the measure, and then a final translated (version) was confirmed.

Phase I: Translation and Adaptation of the Scale

Sample

First of all for the process of forward translation original English version of BSAS was presented to three female language experts familiar with both languages. After the forward translation of scale in Urdu, three other experts (women = 2; man = 1) were approached for back translation, who did not know about the original English version of scale. All the translators fall within age range from 42 to 55 years ($M = 45.35$; $SD = 4.99$). These experts were PhD degree holders with minimum three years of experience in their relevant fields and have knowledge of translation and adaptation process of the scale and in concerned field. An expert committee was approached to point out the discrepancies between original and translated version of shopping addiction scale and to resolve the discrepancies by suggesting alternatives according to requirements in terms of words or phrases. This approach was used for translation of selected measure in which group of linguistics translate the source language to the target language and also discuss the cultural, linguistic or conceptual differences, comes up during the process.

Measure

The Bergen Shopping Addiction Scale (Andreassen et al., 2015) was selected to translate and validate in the current study, BSAS was developed to measure shopping addiction in participants. The scale comprised of 28 items and responses are given on 5-point rating scale with response options range from 0 = *totally disagree*, 1 = *disagree*, 2 = *neither disagree nor agree*, 3 = *agree*, and 4 = *completely agree*. Possible score ranged from 0-112 and higher scores indicate higher levels of shopping addiction. BSAS showed seven factors structure (CFI = .98, RMSEA = .06, TLI = .97). The internal consistency of the scale was adequate with $\alpha = .86$ and it has good convergent validity with Richmond Compulsive Buying Scale (.79). Each factor containing four items was assigned a label based on communality of the themes and literature review after close examination. Items were originally generated based on components of addiction originally proposed by Brown (1993) and developed and modified by Griffiths (2005). The description of seven factors is as follows:

Relapse. Statements represent the relapse symptoms individual started to have in his/her life due to shopping addiction like he/she again thinking about shopping all the time. He/she started to utilize more time in shopping.

Withdrawal. Withdrawal depicts individual becomes grumpy and sour if he/she is obstructed from shopping. They feel stress if they are unable to do shopping.

Problems. It represent problematic symptoms individual started to have in his/her life due to shopping addiction like he/she unable to sleep, irritable behavior, and problems starting to occur in everyday routine.

Conflict. This factor is related to conflicts occur in one's life because of shopping addiction like how they started to ignore their jobs, spending less time with their family members, and delaying important tasks of work.

Salience. It refers to persistent thoughts of shopping, how much shopping is important to them and how everything related to shopping seems so special and beautiful.

Tolerance. This factor is related to individual tolerance against addiction of shopping. Statements in this factor depicts he/she cannot live without doing, their attention is increasing day by day and they remain anxious without shopping.

Mood Modification. People use addictive substances or indulge in addictive behavior to shift or change their mood as a coping strategy for feeling better.

Procedure

Firstly, copyright of Bergen Shopping Addiction Scale (Andreassen et al., 2015) with the aim of translation into Urdu language was obtained from the author of scale by fulfilling all the prerequisites. Although there is a shortage of literature documenting the process of translation of scale that would be enable their application in cross cultural settings and standardization of procedure, following steps were taken to translation the BSAS in Urdu language. The translation was done by using Forward-Back translation method.

Phase II: Exploratory Factor analysis

Sample

The data were collected from 400 participants (men = 190; women = 210) for exploratory factor analysis and 350 participants (men = 167; women = 183) for confirmatory factor analysis from the markets and shopping malls of two districts of Punjab by using convenient sampling technique. The participants age ranged for EFA

was 18-32 years ($M = 25.98$, $SD = 3.72$) and CFA was 18-49 years ($M = 22.55$, $SD = 3.06$). The inclusion criteria of the participant were those who can read Urdu language and who do not suffer from any chronic, terminal, or psychological problem or having other substance addiction. For construct validity of BSAS, 170 participants (men = 98; women = 72) with age range 18-27 years ($M = 21.45$, $SD = 2.49$) were recruited.

Results

The closeness of the translated version and original scale was established through simultaneous administration of the original version, Urdu translated version and back translation of that Urdu version on a conveniently selected sample of 80 participants (men = 35; women = 45) age ranged from 19 to 45 years ($M = 24.08$; $SD = 2.50$) from the shopping malls of Gujranwala and correlation coefficient of .81 was acquired which indicated that the three versions are correlated.

Table 1

Correlations Among Extracted Factors After Varimax Rotation (N=400)

Factors	1	2	3	4	5	6	7
1.Problems	-	.48**	.20**	.36**	.45**	.66**	.44**
2.Withdrawal		-	.61**	.65**	.66**	.61**	.53**
3.Tolerance			-	.66**	.48**	.36**	.47**
4. Conflict				-	.54**	.52**	.53**
5.Salience					-	.57**	.59**
6.Relapse						-	.51**
7.Mood							-
8.Modification							

** $p < .01$.

According to Ratner (2009) values ranges from .30 to .70 are moderately correlated through a fuzzy-firm liner rule. Results indicated that all factors are moderately correlated to each other.

Exploratory Factor Analysis

Principal component analysis with varimax rotation (to maximize the variance of factors and simplification of factors) was used for data reduction. The sample adequacy using Kaiser-Meyer-Olkin measure of Sampling Adequacy and Bartlett's test of Sphericity is established. The value of KMO is .79 which is greater than 0.5 so we can say that the data is adequate. Further the values of Bartlett's test of Sphericity are significant at $p < .001$.

Table 2

Factor Loadings of 28 Items of Shopping Addiction Scale With Promax Rotation (N = 400)

S. No.	Items	Factors						
		F1	F2	F3	F4	F5	F6	F7
20	Not manage to limit shopping	.78	.24	.13	.21	.16	.03	.35
24	Strong urge to do shopping	.57	.27	-.07	.42	.15	.25	.28
25	Face economic problems	.91	.51	.19	.19	.20	.36	.06
26	Impaired well-being	.80	.30	.14	.31	.28	.04	.09
27	Sleeplessness	.86	.47	.21	.23	.33	.18	.07
28	Poor conscious	.85	.15	.12	.09	.11	.24	.10
21	Feel stressed without shopping	.12	.87	.28	.39	.25	.14	.14
22	Became sour and grumpy	.34	.87	.36	.44	.17	.16	.17
23	Feel bad without shopping	.22	.88	.29	-.02	.21	.30	.08
12	End up in arguments	.22	.26	.81	.22	.22	.06	.15
13	Increasing inclination	.25	.35	.63	.27	.23	-.05	.22
14	Shop more than intended	.33	.23	.79	.31	.29	.26	.10
15	Shop more to get satisfaction	.44	.23	.69	.24	.08	.04	.17
10	Give less priority to other	.10	.24	.15	.59	.10	-.06	.07
11	Ignore partner	.10	.09	.25	.65	.20	.09	.16
16	Spend more time in shopping	.07	.18	.13	.56	.21	.23	.05
01	Shopping is important	.25	.17	.17	.36	.84	.19	.19
02	All the time think about shopping	.37	.21	.22	.11	.60	.13	.23
03	Spend a lot on shopping	.32	.23	.23	.18	.45	.18	.13
04	Thoughts keep pooping	.16	.15	.12	.07	.31	.18	.22
06	Shop to change	.14	.34	.25	.15	.73	.10	.17
17	Try to cut down	.50	.18	.12	.29	.21	.77	.09
18	Not listing other	.38	.24	.26	.32	.13	.76	.07
19	Not able to do less shopping	.15	.16	.09	.19	.09	.74	.31
05	Shopping to feel better	.46	.18	.19	.23	.26	.31	.58
07	Shopping to forget things	.40	.37	.14	.26	.20	.24	.70
08	Shopping to reduce guilt	.39	.30	.23	.29	.14	.27	.44
09	Shopping negative effect	.18	.07	.41	.28	.29	.15	.46
	Eigenvalue	4.01	3.50	2.42	2.30	2.12	2.02	1.61
	% of variance	14.33	12.53	8.66	8.22	7.58	7.21	5.78
	Cumulative %	14.33	26.87	35.53	43.76	51.34	58.55	64.33

All of 28 items of translated version were loaded on seven factors with the values greater than .30.

Confirmatory Factor Analysis

After removal of 10 items (item no 5, 6, 7, 8, 12, 15, 18, 20, 24 and 26) the value of RMESA is .07 which shows that the model is fit. The value of CMIN/DF is 3.35 which show fitness of the default model. To increase the value of CFI modification indices were applied. After that CFA was run, the value of Comparative Index was .92 which shows the confirmation of the model. The values of CFI, GFI and IFI are greater than .90 so the model is adequately fit. CFA model showed six factors each contained 3 items.

Convergent Validity

Convergent validity of translated version of BSADS is established through the following process. For construct validity 170 participants (men = 72; women = 98) with age range of 18 to 45 years ($M = 27.89$, $SD = 4.58$) who can read Urdu language were recruited from the markets and shopping malls of districts Gujranwala and Gujrat through convenient sampling. Richmond Compulsive Buying Scale (Ridgeway et al., 2008) describe that compulsive buying is a disorder that combines impulsivity and compulsivity. Here, the need to purchase dominates a person's thoughts, the behavior is used to decrease anxiety, and the drive to purchase is uncontrollable in the case of the consumer. Scale comprised of six items with 7-point Likert scale ranges from *strongly disagree* (1) to *strongly agree* (7). The reliability of the scale was $\alpha = .88$. This scale was selected to estimate the convergent validity of the Urdu version of the BSAS. It is similar to BSAS in a sense that it consists of 6 items which measure the obsessive-compulsive behavior of buying and the assessment of this behavior is also a part of BSAS. However, BSAS is more comprehensive as it measures the components of addictive behavior in context of shopping other than compulsive buying as compared to Richmond Compulsive Buying Scale (Ridgeway et al., 2008). The scale was translated in Urdu by the same method opted for translating BSAS as mentioned above. Findings indicated that BSAS is significantly positively correlated ($r = .88$, $p < .000$) with Richmond Compulsive Buying Scale (Ridgeway et al., 2008) which shows adequate convergent validity.

Reliability

Cronbach Alpha was used to estimate the internal consistency whereas test re-test reliability was used to check the consistency of the response over time. They were given the Urdu version of BSAS to

complete it. After one week, the same scale was given to the people who were tested before on this test and their results were compared. For this purpose, bivariate correlation was administered to estimate the test-retest validity of the translated version. A sample of 186 adults (men = 81; women = 105) with age range of 18 to 50 years ($M = 26.85$; $SD = 3.09$) was taken comprising of professionals and students from Gujrat University by using convenient sampling technique. Results indicates acceptable level of alpha reliability of total BSAS ($\alpha = .93$) before and after one week are significantly correlated with each other ($r = .84$, $p < .000$) which shows good test-retest reliability.

Discussion

The aim of the current research was translation, adaptation, and validation of Bergen Shopping Addiction Scale (Andreassen et al., 2015). The results indicated that the translated Urdu version of the BSAS has been up to the acceptable levels of reliability and validity. It has been decided to extract seven factors by careful examination values through exploratory factor analysis. Most of the factor correlation values appeared to be moderate in strength which are in acceptable range (Moore et al., 2013; Pantazis et al., 2022). The emerged seven factor structure also supported the theoretical model (Brown, 1993) on which BSAS has been constructed.

In confirmatory factor analysis, after removal of ten items, the value of model fit indices shows that the model is fit. Results of CFA model represents the fair distribution of the items, three each on six factors named as salience, conflict, relapse, withdrawal, problem, tolerance, and conflict. However, one component named as mood modification was removed. In the original scale, mood modification component consisted of four items which stated that an individual does shopping to feel good or to change one's mood. It seems that the seven factors of Bergen Shopping Addiction Scale (Andreassen et al., 2015) are not consistent across the culture (Griffiths, 2005). He argued that addiction is a part of biopsychosocial process. He modified the components of addiction presented by Brown (1993) and presented the six elements instead of seven. Thus, the CFA results of this study by the removal of one component, mood modification are in line with the model presented by Griffiths (2005) in which he removed the factor named as Problem. Therefore, it is evident that the seven factors of shopping addiction are not fixed and can be varied across culture and the results of the study supported the theory to be explained addiction as a biopsychosocial process presented by Griffiths (2005).

There is a plausible explanation of removal of the factor mood modification in Pakistani culture in the context of the psycho-social process theory. First of all this research has been conducted in the post COVID era when there is a high economic recession around the globe. Particularly Pakistan is facing economic as well as political instability at present (Sareen, 2020). The prices are high and income is low therefore people have no money to spend on shopping just the sake of changing their mood. The other possible reason of removal of the mood modification component may be the less attractive shopping places or malls in cities of Gujrat and Gujranwala. The malls here have limited variety of items and the quality is not comparable with the articles available in the malls of metropolitan cities like Islamabad and Lahore. The shopping malls in Gujrat and Gujranwala (small cities) are not spacious and do not offer the variety in food and other international brands. Therefore, the shopping for the sake of satisfaction and mood change is less likely done by the customers who belong to the small cities like Gujrat and Gujranwala as compared to the metropolitan cities of Pakistan. These statements are supported by the recent studies which concluded that the variety and quality of articles in various shopping places as well as the environment of the shopping malls may affect the satisfaction of the consumers (Rashmi, 2021; Vinotha & Gurupandi, 2020).

In short, the results of this study indicated acceptable levels of internal consistency and test-retest reliability of Urdu version of BSAS. The results of this study indicated relative high correlation coefficient between Richmond Compulsive Buying Scale (Ridgway et al., 2008) and BSAS (Andreassen et al., 2015). The reason may be that the shopping needs, places and methods are still not as advanced in Pakistan like developed countries. However, the shopping needs, modes and places is changing rapidly in Pakistan also. The small shops and markets are converting into huge malls where the quality and quantity of items is being improved to attract the customers as well as online shopping is expected to increase in Pakistan in future also. Ordering articles from home, sitting on sofas is like a treat for people (Khan et al., 2019). Therefore, the people in Pakistan are also at the risk of facing the problem of shopping addiction so we cannot deny the significance and usage of Urdu translated version of BSAS.

Limitations, Suggestions, and Implications

The shopping trends and practices may be different according to the demographic characteristics of the participants like age, gender, marital status, socio-economic status, qualification, monthly income

and residential areas. The future studies are recommended to carry out on diverse people of different culture and demographic characteristic in other places of Pakistan which may have diverse facilities with respect of shopping. The future mixed method design studies with the participants belong to different places will help to determine the validity of the scale.

Conclusion

The current research was conducted to translate and valid Bergen Shopping Addiction Scale (BSAS) to screen out shopping addiction among adults in Pakistan. The results showed that the tool reached to acceptable levels of validity and reliability. Shopping addiction is not currently included in psychiatric illness and there is no diagnostic criteria for it but this translated tool will help screening the trend of shopping addiction in individuals that may be triggering the other psychological disorder. However further studies are needed to determine and establish the psychometric properties of original as well as Urdu version at the larger scale across Pakistan.

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