Translation and Validation of the Appearance Anxiety Inventory (AAI) for College Students in Azad Jammu and Kashmir

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Abstract

In today's rapidly evolving society, appearance anxiety is an increasingly prevalent psychological problem that has gained importance, especially among youngsters. The purpose of the study was to validate and translate the appearance anxiety inventory. For this study, a method of quantitative research was used. 350 college students were selected for the sample with the help of convenience sampling technique from Azad Jammu and Kashmir. The Urdu translation was done using the appearance anxiety inventory (AAI), which was developed by Veale et al. in 2014. AMOS 21 and SPSS version 22 were applied for data analysis. Results demonstrate that a good alpha value of 0.89 was obtained by computing the alpha reliability of the translated scale. Confirmatory factor analysis was used to validate the AAI-Urdu version. The one-factor model that originally appeared in CFA for the AAI-Urdu revealed mixed findings about the model's fitness, with an acceptable fit measured by RMSEA=0.051, CFI=.956, and TLI=.941. The cultural adaptation and validation of AAI in Pakistan is a step toward further development and research in the wider discipline of psychology. In line with Pakistan's modern standards and culture, it would facilitate the adaption and development of new instruments. Because the majority of Pakistanis struggle with proper English comprehension, Urdu version instruments are necessary for psychological assessments

Keywords: Appearance Anxiety, Translation, Validation, Students

1. Introduction

Overly worrying about one's physical appearance is known as appearance anxiety. This particular form of social anxiety has the potential to seriously impair an individual's sense of self-worth and general well-being, as well as cause them great distress. A person suffering from appearance anxiety may exhibit a variety of symptoms, including worrying about perceived imperfections or flaws experiencing nervousness in social settings, or avoiding particular activities or social gatherings because of appearance-related worries. Especially in the realm of psychology, appearance anxiety has been extensively studied. The social comparison theory, which contends that people judge their own looks by comparing themselves with others, is one prominent theory in this field. If they believe they fall short of others, this could cause them to feel inadequate or unhappy (Suls, & Wheeler, 2012). Further research has looked at how society's and the media's beauty standards affect appearance anxiety as well as the possible benefits of cognitive-behavioral therapies for easing appearance-related misery (Claes et al., 2012). Living with anxiety is challenging; sufferers may give up on hobbies or begin to avoid social situations and other people. When they experience anxiety, they could completely cease leaving their houses and withdraw (Wong,2023). Fear of what might occur in the future is what causes anxiety. This anxiety can occasionally be related to anything that is anticipated to occur in three minutes. For example, presenting something to an audience while on stage.

Studies on cultures also reveal that social anxiety affects people in all cultures. Many of us encounter anxiousness in a variety of circumstances, some of which are social in nature. An additional component of social anxiety is concern related to one's looks. According to Yuceant & Unlu, 2017, People who are socially nervous are prone to developing appearance anxiety. This is the most prevalent form of anxiety that currently affects our generation. A thin body desire and physical dissatisfaction can result from a number of factors, including unfavorable evaluations from others (Claes et al.,2012). This is prevalent in today's world because we live in a highly developed era where everyone is exposed to media that promotes unrealistic standards of appearance and beauty, such as a slim figure, a perfect face, an ideal personality, and ideal skin tone. These standards are unachievable because not everyone can achieve these ideals, which lead to negative self-perceptions. Nevertheless, the current generation assesses other people's appearance in light of these standards in addition to striving to live up to them. As a result of poor self-esteem, when someone doesn't live up to these expectations and is always afraid of what other people will think of them, it affects their mood and causes social anxiety (Turan et al.,2019).

Remarkably, appearance anxiety is very common in teenagers, mostly because of their developing self-awareness, that period of development's rapid physiological and hormonal changes, and their increased sensitivity to social influences. Even though appearance anxiety may seem to encourage people to work toward bettering their appearances, a large number of studies has shown that it can also negatively impact adolescents' physical and mental health. Initially, anxiousness about appearance is linked to undesirable personality qualities. For example, high appearance anxiety in women is frequently associated with low self-esteem, greater timidity, and increased self-pity. Secondly, there is a close relationship between neuroticism and appearance anxiety. People who struggle with severe anxiety about their appearance are more likely to experience depression and to develop mental health conditions such as body dysmorphic disorder (BSD), anorexia nervosa, and bulimia nervosa. Thirdly, issues communicating socially are linked to appearance anxiety. Individuals who struggle with social appearance anxiety typically avoid social situations and experience increased anxiety associated to speaking. Finally, appearance anxiety has a detrimental effect on a person's subjective wellbeing, frequently leading to a decline in pleasant emotions and an increase in negative ones as appearance anxiety levels rise.

According to particular studies, adolescents undergo significant physical and psychological transformations throughout this period of their growth. Students become more self-conscious about their appearance during adolescence and are constantly exposed to impractical mass media standards of body type, appearance, and beauty. If people believe they don't measure up to these norms, their self-esteem is likely to suffer, which can lead to worry and melancholy. The development and establishment of confidence during adolescence and early adulthood are influenced by appearance. Anxiety about one's appearance most likely casts them in a negative light because it undermines confidence (Lee & Kim, 2023), which lowers one's sense of self-worth and makes it difficult for the person to successfully navigate social situations and integrate into society. The dread that one's appearance may result in an unfavorable appraisal is known as appearance anxiety (Hart et al., 2008). According to earlier research, there is a connection between appearance anxiety and higher levels of body dissatisfaction, a lack of self-worth, and thoughts of self-harm (Satghare, 2019). With the challenges of growing up and more scrutiny during this critical developmental stage, university students are subject to an even greater degree of social pressure. Concerns about one's looks and excessive anxiety are hallmarks of appearance anxiety, a widespread mental health condition among this population. A person suffering from appearance anxiety is fixated on how they look, feels more self-conscious about it, and is overcome with uncontrollable concern that others will criticize them for how they look (Moscovitch, 2013).

The AAI has demonstrated a unidimensional factor structure in many studies, although some researchers suggest a multidimensional model depending on the sample. For example, Cash et al. (2004) supported the idea that the AAI predominantly measures a single factor, "appearance anxiety," but other researchers have argued for the existence of sub-factors, such as "social anxiety related to appearance" and "self-consciousness about physical appearance" (Tiggemann & Lynch, 2001). The AAI has been found to be effective in assessing appearance anxiety in clinical populations, particularly in individuals with body dysmorphic disorder (BDD). Research by Veale et al. (2000) suggests that the AAI is a useful tool for identifying individuals at risk for BDD due to heightened appearance concerns. The psychometric properties of the AAI have been tested across different cultures, and while the tool is generally valid in Western contexts (e.g., Cash & Pruzinsky, 2002), its applicability in non-Western cultures has received mixed reviews. Researchers like Shafran et al. (2007) have emphasized the need for further exploration of cultural factors that may influence the expression and perception of appearance anxiety. While there is limited research specifically on the cross-cultural validation of the Appearance Anxiety Inventory (AAI) in Pakistan, several studies have explored related constructs and have adapted similar scales to the Pakistani context. A study in Lahore examined the relationship

between appearance anxiety, rejection sensitivity, and loneliness in patients with alopecia areata. The researchers translated the AAI into Urdu following standardized guidelines and reported a Cronbach's alpha of 0.70, suggesting acceptable internal consistency. Additionally, the Body Dysmorphic Disorder Scale (BDDS) was developed and validated in Urdu for the general Pakistani population. The scale demonstrated strong psychometric properties, with a Cronbach's alpha of 0.98, and was found to be a reliable tool for screening body dysmorphic symptoms (Shoaib et al., 2021). These studies highlight the growing interest and efforts in adapting and validating appearance-related psychological assessment tools in Pakistan. While the AAI has been used in research settings, comprehensive cross-cultural validation studies are still needed to establish its psychometric robustness fully. The successful adaptation of related scales like the SAAS and BDDS provides a foundation for future research to develop and validate culturally sensitive tools for assessing appearance anxiety in Pakistan. In Pakistan, appearance anxiety remains a relatively under-researched area, especially when it comes to the availability of reliable and culturally relevant measurement tools. The Appearance Anxiety Inventory (AAI) is a commonly used instrument to assess this type of anxiety in western contexts. However, its application in non-western societies, such as Pakistan, requires translation and cultural adaptation to ensure its relevance and effectiveness. The present study aimed to translate and investigate the validity, reliability, and confirmatory factor structure of the AAI in the Azad Kashmir population.

2. Method

2.1 Sample size

For this study, a quantitative research design was used. 30 students were chosen for the pretesting phase, and 350 college students from Azad Jammu and Kashmir were included in the main study using a convenient sampling technique. Only participants who were satisfied and willing to cooperate were approached after the inclusion criteria were determined. Questionnaires were filled out following the obtaining of informed consent. Only college students who were willing to take part in the study met the inclusion criteria. Incomplete questionnaires and participants' reluctance to participate in the study were the exclusion criteria.

2.2 Instrument

The AAI is a ten-item self-report questionnaire designed to measure the extent of behavioral responses (such as appearance checking and social avoidance) and mental processes (such as rumination and self-centered thinking) associated with body image disorders (BDD).

People answer questions on a 5-point Likert scale (0 = not at all to 4 = always). According to Veale et al. (2014), two components were found in a clinical sample: the Threat Monitoring sub-scale (items 2, 4, 6, 8) and the Avoidance sub-scale (items 1, 3, 5, 7, 9, 10). The BDD group data were used for reliability analysis, which revealed that the AAI had strong internal consistency with Cronbach's α =.86. The results of our study indicated that the translated and adapted scale demonstrated good and acceptable reliability (α = 0.89).

2.3 Procedure

The cross-cultural translation protocols were followed when translating the AAI into Urdu. Initially the scale was translated from English into Urdu using the parallel back-translation method (Brislin, 1986), which entails having a bilingual individual translate the scale from the target language to the native language. This version is translated into the original language once more by a bilingual person who is not familiar with the original scale. The previously outlined steps were repeated twice

to assure accuracy and prevent any biases. As a result, four bilingual participants completed the parallel back-translation process in this study, producing pilot versions of the AAI Urdu. Second, a committee consisting of the people who translated the items and two psychology teachers evaluated the items that were obtained in this way. They chose the items that retained the original meaning and created the scale format and instructions exactly as they had been in the original version. After completing the translation and adaptation procedures, a study was conducted to evaluate whether the translated version was conceptually equivalent to the original version. This was achieved using a single-group bilingual design, which involves administering both the original and translated versions of the scale to the same group of bilingual individuals. At this stage, a sample of 60 bilingual students (30 boys and 30 girls), aged between 15 and 18 years (mean age = 17-18 years), was selected using a convenience sampling technique. Both versions of the AAI (Urdu and English) were administered to the participants, with a 15-day interval between the two administrations. In the second stage, test-retest reliability was assessed with an inter-test interval of fifteen days.

Thirty college students (20 boys and 10 girls) were enlisted for a pilot study to assess the reliability of the translated version of the Appearance Anxiety Inventory (AAI). Following the pilot, the main study was conducted to further examine the validity and reliability of the translated AAI. A total of 350 college students (165 boys and 185 girls), aged between 15 and 19 years, were recruited from various colleges across Azad Jammu and Kashmir. Participants were informed about the objectives of the study to stimulate their interest and were asked to provide informed consent prior to participation. They were assured of the confidentiality of their responses and reminded that they could withdraw from the study at any point. Upon completion of data collection, participants were thanked for their valuable time and contribution.

3. Results

Table 1

Alpha reliabilities of English and Urdu versions of Appearance Anxiety Inventory (N=60)

AAI	English		Urdu	
	r	α	r	α
		.01	.85**	.01
	.82**			

Table 2

Test-retest reliability of Appearance Anxiety Inventory-Urdu (N=60)

Scale	r	α
AAI	.83**	.01

Table 3

Cronbach's Alpha Reliabilities of Appearance Anxiety Inventory at Pretest (N=30) and Main Study (N=350)

	No. of items	α
Pretesting (N=30)	10	.81
Main Study (350)	10	.89

Table 4

Factor Loading of Appearance Anxiety Inventory (AAI)-Urdu (N=350)

Items	Factor Loading
1	.601
2	.671
3	.714
4	.693
5	.710
6	.733
7	.698
8	.716
9	.600
10	.632

Note: The factors in the above table indicate that all of the variables were weighted higher than 0.6. Factor loadings, which vary from 0.6 to 0.7, demonstrate strong connections between the variables and the factor.

Table 5

Model Fit Summary of Appearance Anxiety Inventory Urdu-Version (N=350)

Scale	X2	df	X2/df	TLI	CFI	RMSEA
AAI One-Factor Model	301.125	102	3.06	.941	.956	0.051

4. Discussion

Lack of a native language instrument may result in erroneous findings and may also affect respondents' responses because of cultural differences. This is the reason why many researchers would rather translate and modify an already-existing instrument to make it appropriate for a new population rather than developing a new scale. Success in the field of psychology depends extensively on the cross-validation and adaptation of culturally accepted scales. Using the Brislin technique of translation, this study sought to translate and validate the appearance anxiety assessment into Urdu. The initial 10-item scale was designed by Veale et al. (2014). The study was conducted in two stages to evaluate the reliability and validity of AAI. Analyzing the content and construct validity of the translated version of AAI was done in the first phase. Using the forward and backward methods described by Brislin, the original scale was translated into Urdu during this step. A committee then selected the most appropriate translation. Initial pretesting results showed that the AAI demonstrated good validity and high internal consistency, with a Cronbach's alpha of 0.81, in a sample of thirty participants. Convenience sampling was employed to select a sample from Azad Jammu and Kashmir (AJK) for the second phase of the study. A total of 350 students were administered the scale after ensuring all necessary ethical considerations were met. To examine the psychometric properties and validity of the Urdu version of the Appearance Anxiety Inventory (AAI-Urdu), two main statistical analyses were conducted: calculation of Cronbach's alpha and confirmatory factor analysis (CFA). SPSS 21 and AMOS 21 were used to perform these analyses. Table 3 presents the Cronbach's alpha value for the scale, calculated using SPSS, which indicated a high internal consistency reliability ($\alpha = 0.89$). Additionally, confirmatory factor analysis was conducted to validate the factor structure of the AAI-Urdu among college students in AJK. Factor loadings, ranging from 0.6 to 0.7, indicate strong correlations between the variables and the factor (Table 4). The one-factor model initially tested in the CFA for the AAI-Urdu showed mixed results regarding

model fit, with acceptable indices: RMSEA = 0.051, CFI = 0.956, and TLI = 0.941 (Table 5). Overall, the Urdu adaptation of the AAI has demonstrated strong psychometric properties. Roberts et al. (2018) evaluated the factor structure of the AAI among Australian university students (mean age 21) and adolescents (mean age 13). The study found that a 9-item version of the AAI had excellent reliability and convergent validity, particularly with measures of body dysmorphic symptoms and appearance-based rejection sensitivity. The AAI was translated and validated for Polish-speaking populations, showing high internal consistency (Cronbach's $\alpha = 0.91$) and good test-retest reliability (ICC = 0.78). It also demonstrated strong convergent validity with the Cosmetic Procedure Screening Questionnaire (COPS) and a negative correlation with the Rosenberg Self-Esteem Scale (RSES), supporting its use in both clinical and research settings.

The study employs a convenience sampling technique, which may limit the generalizability of the findings. Future studies should aim to use more diverse and randomized sampling methods rather than convenience sampling. Employing random sampling or other probability-based techniques would improve the representativeness of the sample, thereby enhancing both the validity and generalizability of the findings. This study focused on Azad Kashmir College students; however, future research should include other regions and cities of Pakistan to enhance the generalizability of the findings. Researchers could further validate the tool across various populations to ensure that it reliably measures appearance anxiety in different groups, particularly in terms of factors such as age, gender, and social background. Factor analysis and testing for reliability across different demographic groups would be crucial to confirm the instrument's robustness and generalizability.

In the aforementioned studies, the scale showed good internal consistency and construct validity, making it a reliable tool for assessing appearance-related anxiety among students. These validations are crucial, considering the cultural nuances and societal pressures prevalent in Pakistan that can influence body image perceptions. The culture of Pakistan places a high priority on appearance anxiety, particularly in women. Fair skin, which is considered a beauty standard in Pakistan, may make those with darker skin feel anxious about their looks. By promoting unattainable ideals of beauty, social institutions like the media, newspapers, and fashion industry can exacerbate appearance anxiety. Individuals want to fulfill the standards of beauty established by society. It makes people more anxious about their appearance, especially young people, and as a result, they have low self-worth

Conclusion

Youngsters are a particularly vulnerable demographic for those suffering from appearance anxiety, since they frequently endure overwhelming concerns and expectations about how they look. Persistent fixation on one's appearance, misreading of criticism, and a lowered self-esteem are common signs of appearance anxiety in youngsters. Researchers and the general public should pay more attention to appearance anxiety because it has serious negative effects on teenagers' physical and mental health. Teenagers who experience less appearance anxiety may develop a more positive self-image, have greater confidence, and be better able to adjust to both family and school life. The adequate reliability estimates of the Pakistani version of the Appearance Anxiety Inventory (AAI) suggest that it is a useful tool for assessing appearance anxiety symptoms within the Pakistani cultural context. It can be particularly beneficial for mental health professionals, as well as for parents and teachers in educational settings. The AAI can aid in the early identification and diagnosis of

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appearance anxiety-related problems during adolescence, a critical period for early intervention that may help prevent the development of more severe disorders. Furthermore, the Pakistani version of the AAI provides a foundation for the development of additional scales aimed at measuring appearance anxiety among adolescents in Pakistan.

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