

Article

## Development and Psychometric Validation of the Attention Seeking Scale (ASS)

Page | 45

Farwa Shafique<sup>1</sup>, Sajid Mehmood Alvi<sup>2</sup>, Naveed Gani<sup>3</sup>, Tahir Mehmood<sup>4</sup>, Huma Fatima<sup>5</sup>, Iqra Bukhari<sup>6</sup>, Rizwana Shabir<sup>7</sup>, Sehrish Irshad<sup>8</sup>

<sup>1</sup> Department of Psychology, International Islamic University, Islamabad, Pakistan, [farwa.msep309@iiu.edu.pk](mailto:farwa.msep309@iiu.edu.pk), 0009-0009-6039-3159

<sup>2</sup> Department of Psychology, Haripur University, Pakistan, [sajidmalvi@yahoo.com](mailto:sajidmalvi@yahoo.com),

<sup>3</sup> Psychiatry, Islam Medical & Dental College, Sialkot, Pakistan, [Naveedgani@gmail.com](mailto:Naveedgani@gmail.com)

<sup>4</sup> Paediatrics, Wah Medical College, Wah Canttt, Pakistan, [Drtahirnoor@hotmail.com](mailto:Drtahirnoor@hotmail.com), 0009-0005-4500-103X

<sup>5</sup> University of Punjab, Lahore, Pakistan, [fatimahuma57@gmail.com](mailto:fatimahuma57@gmail.com), 0009-0006-6618-6196

<sup>6</sup> Bahauddin Zakariya University, Multan, Pakistan, [Iqtra.bukhari77@gmail.com](mailto:Iqtra.bukhari77@gmail.com), 0009-0008-3386-7248

<sup>7</sup> Clinical Psychologist, University of Punjab, Lahore, Pakistan, [rizwna92@gmail.com](mailto:rizwna92@gmail.com)

<sup>8</sup> Clinical Psychologist, Bahauddin Zakariya University, Multan, Pakistan, [Sehrish@gmail.com](mailto:Sehrish@gmail.com), 0009-0006-5441-1544

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**Abstract:** The goal of the current research was to construct and test an Attention Seeking Scale (ASS) and to evaluate how ASS is related to narcissistic personality traits. The quantitative cross-sectional research design was used to explore the attention seeking tendencies among the female participants. This sample was composed of 300 females aged 18-30 years, and through convenience sampling, they were recruited in the education institutions in Islamabad and Wah Cantt. The researchers have designed the ASS to test the behavioural tendencies concerning the need of social recognition and validation. These findings provided evidence that the scale that was developed had a high internal consistency with a Cronbach alpha of .97. Further, correlation analysis was done to find out the relationship between attention seeking behaviour and narcissistic personality traits based on the Hypersensitive Narcissism Scale (HSNS). The results indicated that there exists a strong positive relationship between attention-seeking tendencies and narcissistic traits which implied that individuals with more narcissism tendencies are most likely to display attention-seeking behaviour. The research

Corresponding author. Email:

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is relevant to the psychological assessment since it offers a sound measure to assess attention seeking tendencies. The scale invented can be used in future studies examining the behavioural and psychological aspects that are related to attention-seeking behaviour.

**Keywords:** *Attention seeking behaviour, narcissism, scale development, psychological assessment*

## Introduction

Attention seeking behaviour is a psychological and social phenomenon that is prevalent and indicates the wish by an individual to acquire acceptance, approval or admiration by a group of people. Every day in social life, people can use different behaviours, which are aimed at attracting attention, starting with some simple attempts at self-presentation, to more obvious and dramatic behaviour that is meant to gain praise or confirmation. Despite the fact that the need to seek social recognition is a natural thing with human behaviour, extreme attention seeking can be a reflection of underlying psychological attributes that affect the way people view themselves and relations with others.

Narcissism is one of the most common psychological constructs that are linked to attention-seeking behaviour. Narcissistic personalities normally have a delusional sense of self-worth, high admiration and constant urge to appear good in the eyes of other people. Past studies have proposed that persons whose narcissistic traits are high will tend to develop behaviours that seek to draw attention and support their social worthiness. Such behaviours can be self-promotion, inflating of individual success or even the need to validate oneself by social interactions.

The study of attention-seeking behaviour has gained a lot of significance in the psychological studies, especially because such behaviours may affect the relationship between people, their social functioning, as well as their emotion. Nevertheless, even though there is an increasing number of studies on the subject, in some of the cultural and demographic backgrounds the access to well-developed and psychometrically valid instruments to assess the attention-seeking tendencies is still scarce. Assessing psychological construct is crucial and requires the use of reliable and valid measurement tools that can enable empirical study on behavioural tendencies as regards to self-presentation and social interaction. Standardisation of a scale that measures attention-seeking behaviour will thus make a large contribution in the psychological assessment and research. A properly designed scale permits the researcher to

methodically test the personal discrepancies in attention-seeking preferences and to test the associations between the preferences and other personality traits, including narcissism. In addition, a scale like that can offer some useful information concerning the behavioural patterns that determine the social interactions and the identity of a person.

In this respect, the proposed study is expected to design and test an ASS and examine the psychometric qualities of the scale. Moreover, the research examines the association between attention seeking behaviour and narcissistic traits with a view to shedding more light on the correlation between the two constructs as concerns the target population. The research aims to add to the greater body of personality and behavioural studies by the development of a dependable measuring instrument.

### **Literature Review**

Past psychological studies have investigated the connection between narcissistic personality and attention-seeking behaviour in different social situations. Narcissism is also a characteristic that is usually linked to much admiration, self-promotion and a tendency to be the centre of attention. According to Charoensukmongkol, the researcher explored three sub-dimensions of narcissism, namely, leadership/authority, grandiose exhibitionism, and entitlement/exploitativeness, and concluded that selfie-posting behaviour was strongly related to these narcissistic dimensions (Charoensukmongkol, 2016). On the same note, Rooney and Fox (2015) established a high correlation between narcissism and attention-seeking behaviour, which implies that narcissistic behaviours are commonly performed by an individual who wants to gain social attention and appreciation.

The expression of attention-seeking behaviours, both in social and digital settings, has also been studied in several research works. Nathan et al. (2011) established that self-disclosure techniques, including postings of selfies, are common among narcissistic and self-absorbed people in an attempt to make themselves more visible. Moreover, Dodgson (2018) claimed that females were more likely to post selfies and group selfies as compared to males, which showed that there might be a gender difference in self-presentation behaviours. Sorokowski et al. (2015) also added that narcissistic people often address their first-person singular pronouns (e.g., I and me) and post more self-promoting photos on the social network.

Attention-seeking behaviour is also associated to the broader psychological and social processes. To illustrate, Angstman and Rasmussen (2011) hypothesised that over-seeking attention could adversely affect the psychological health of people and cause an unsuitable or maladaptive behaviour. On the

same note, Edward et al. (2017) mentioned that persons with high-narcissistic scores are likely to desire to be the centre of attention as a means of achieving their agentic motives and establishing their social worth.

As the social media grows at a very high rate, the avenues of self-presentation and attention seeking have grown enormously. As Wisner (2015) mentioned, online platforms provide personal opportunities to present and advertise oneself and consciously achieve the attention and confirmation of others. Naumann et al. (2008) also alluded that most attention seeking behaviours are self-consciousness motivated and are external manifestations of personality traits and not internally motivated behaviours. Despite the fact that attention-seeking behaviour, narcissism and self-presentation have been studied in past, comparatively little literature has been done in order to come up with standardized measurement tools that specifically measure the attention tendencies. A reliable and valid scale can thus be a useful instrument in measuring the individual variations in attention seeking behaviour and its correlations to the personality traits of narcissism.

### **Research Gap**

Although the attention-seeking behaviour and its relationship to narcissistic personality characteristics are becoming increasingly popular, comparatively little has been done to ensure that the standardized and psychometrically validated devices of attentional-seeking behaviour in particular cultural settings are developed. The bulk of research conducted so far has focused on attention-seeking behaviour as a symptom of larger constructs of personality, as opposed to addressing it as a behavioural dimension that has to be precisely measured.

Moreover, despite the overwhelming literature on narcissism in psychology, the empirical correlation between narcissistic characteristics and attention-seeking behaviour has not been adequately investigated because of the newly developed measurement tools based on the specific population. This might make researchers incapable of asking attention-seeking tendencies and their psychological equivalents accurately due to the insufficiency of the culturally appropriate and empirically validated scales.

Hence, there is a desire to develop the reliable and valid tool that would be able to measure attention-seeking behaviour and study its dependence on narcissistic traits in the target population.

### **Objectives**

The present study aims to achieve the following objectives:

1. To develop a standardized scale for measuring attention-seeking behaviour.
2. To examine the psychometric properties of the ASS, including its reliability and internal consistency.
3. To explore the relationship between attention-seeking behaviour and narcissistic traits.
4. To provide a reliable instrument that may be used in future psychological and behavioural research.

## **Hypothesis**

Based on the theoretical background and previous research findings, the following hypotheses are proposed:

**H1:** Attention-seeking behaviour is positively associated with narcissistic personality traits.

**H2:** The ASS demonstrates satisfactory reliability and internal consistency.

**H3:** The developed ASS exhibits acceptable psychometric properties for measuring attention-seeking tendencies.

## **Methodology**

### **Research Design**

The current study has used a quantitative research design that was meant to formulate and test a quantitative psychological scale to evaluate attention-seeking behaviour. Data was collected using a cross-sectional survey technique among the participants. The research was aimed at testing the psychometric characteristics of the recently designed ASS such as its reliability, factor structure and investigating the relationship between the scale and narcissistic personality traits.

The research design was suitable to study the behavioural tendencies and test internal consistency and construct validity of developed instrument.

### **Participants**

The population sample was 300 female respondents who had been recruited using convenience sampling in educational institutions within Islamabad and Wah Cantt. There were also other female members of the same age bracket, including undergraduate students and postgraduate students.

The participants were between 18 and 30 years of age. The involvement in the study was voluntary and the respondents had an idea of what the research was about before filling the questionnaire. The data collection procedure was done with confidentiality and anonymity.

**Instruments**

The researchers developed the ASS to determine the propensity of individuals to act in ways that would bring them attention and recognition by others. The first scale comprised of 32 questions that were meant to represent various dimensions of attention-seeking behaviour.

The participants were requested to answer every statement on a Likert-type scale that would denote their degree of agreement. The scale was to be used in gauging the behavioural disposition associated with self-presentation, recognition desire and social validation.

The analysis of reliability revealed that ASS showed high level of internal consistency.

**Hypersensitive Narcissism Scale (HSNS)**

The HSNS by Hendin and Cheek (1997) was employed to test the hypothesis of the relationship between attention seeking behaviour and the narcissistic personality traits. The HSNS is a common psychological tool that is used to measure the hidden tendencies of narcissism.

The scale includes questions of hypersensitivity, self-consciousness and vulnerability related to the trait of narcissistic personality.

**Procedure**

A structured questionnaire was used to gather the data with two main parts, the ASS and the HSNS. The respondents were requested to take time to read all the statements and then point out their answers through the response options provided.

The questionnaires were handed out physically at the level of educational institutes. A survey was given to the participants on a voluntary basis, and nothing was taken in order to connect them to the form of identification.

**Data Analysis**

The data that were obtained were analysed using the Statistical Package of Social Sciences (SPSS). A number of statistical steps were used to check the psychometric characteristics of the scale developed. To determine the internal consistency of the ASS, the reliability analysis was done with Cronbach alpha. Second, the factor analysis was carried out to investigate the underlying structure of factors of the scale. Correlation analysis was also done to test the correlation between attention-seeking behaviour and narcissistic personality traits.

Descriptive statistics also were done to summarise the features of the sample and distribution of the study variables.

## Results

### Descriptive Statistics

The descriptive statistics were determined to analyse the overall distribution of the study variables. The samples were 300 female participants between the age of 18 to 30 years. The responses showed that there was some variation in the attention seeking tendencies of the participants implying that the scale that was developed measured the variation in behavioural patterns associated with the seeking of attention.

### Reliability Analysis

Cronbach alpha coefficient was used to test the reliability of the newly developed ASS in order to test the internal consistency of the scale. The findings showed internal consistency was high, which proves that the scale items are reliable to measure the same construct.

ASS was used in the research, and its alpha coefficient was .97, which is an excellent indicator of reliability.

On the same note, HSNS exhibited a good reliability with a Cronbach's alpha coefficient at =.79 implying a good internal consistency of the scale to the measurement of narcissistic traits among the sample.

**Table 1**

*Reliability of ASS and HSNS*

Scales	Number of Items	Cronbach's reliability coefficient
ASS	32	.97
HSNS	10	.79

*ASS, AS, HSNS*

The results in table 1 indicates that these two measures have significant Cronbach's reliability coefficient. The reliability for AS is .97 and HSNS is .79.

**Table 2**

*Mean, Standard Deviation, Reliability Coefficient of (AS) and HSNS*

Scales	N	M	SD	No. of items	Alpha coefficient
AS	300	79.93	13.27	32	.97
HSNS	300	25.99	6.30	10	.79

**Factor Analysis**

The exploratory factor analysis was used to explore the inherent structure of ASS. The appropriateness of the data to factor analysis was initially evaluated with the help of the Kaiser -Meyer-Olkin (KMO) measure of sampling adequacy and the Test of Sphericity.

The KMO value showed that the sample size was sufficient in factor analysis, whereas Bartlett's Test of Sphericity showed a significant value, which validated that the correlation matrix could be used in extracting the factors.

Exploratory factor analysis retained three factors with eigenvalues greater than 1, explaining a substantial proportion of variance in attention-seeking behaviour.

**Table 3**  
*Total Variance Explained for Attention Seeking Scale (ASS)*

Component	Initial eigenvalues			Extraction sum of squared loadings			Rotation sum of square loadings		
	Total	% variance	Cumulative %	Total	% variance	Cumulative %	Total	% variance	Cumulative %
1	3.92	12.256	12.256	3.98	9.275	9.275	3.71	8.641	8.641
2	2.22	6.961	19.218	2.56	5.975	15.250	2.60	6.055	14.696
3	1.99	6.248	25.218	2.33	5.426	20.676	2.57	5.980	20.676
4	1.86	5.829	31.294						
5	1.71	5.362	36.294						
6	1.64	5.154	41.810						
7	1.52	4.755	46.546						
8	1.44	4.516	51.081						

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9	1.23	3.804	54.945
	6		
10	1.19	3.474	58.692
	9		
11	1.03	3.222	61.913
	1		
12	.993	3.104	65.017
13	.874	3.733	67.750
14	.847	2.646	70.369
15	.797	2.490	72.886
16	.715	2.236	75.122
17	.699	2.184	77.306
18	.662	2.070	79.375
19	.644	2.012	81.388
20	.618	1.932	83.320
21	.589	1.839	85.159
22	.567	1.772	86.931
23	.539	1.683	88.614
24	.514	1.607	90.220
25	.492	1.538	91.759
26	.430	1.344	93.103
27	.406	1.268	94.372
28	.397	1.241	95.612
29	.386	1.208	96.820
30	.365	1.140	97.960
31	.345	1.078	99.038
32	.308	.962	100.000

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*Extraction method: principal component analysis*

Table 3 that statistical analysis extracted the 3 factors that have largest values and placed on the top of the list. Statistical analysis has identified 32 values within the data set. The eigenvalues associated with each factor represent the variance explained by that particular factor. The analysis also displayed the eigenvalues in the term of percentage of variance explained. As factor 1 explains 12.256%, factor 2 explains 9.275% and factor 3 explains 8.641% of total variance explained. It is clear that extracted

factor shows relatively large amount of variance and subsequent factors explains small amount of variance. Statistical analysis extracted 3 factors with eigenvalues greater than 1. The values in the part the Extraction Sum of Squared Loading are the same before extraction hence the table is blank after the 3 factor. In the final part of the Rotation Sum of Squared Loadings, the eigenvalues after rotation are displayed.

**Correlation Analysis**

The Pearson correlation analysis was performed to determine the connection existing between the attention-seeking behaviour and the narcissistic personality traits.

The findings indicated that there was an interesting positive correlation between the ASS scores and the HSNS scores ( $r = .438, p < .001$ ). This observation implies that those who depict greater amount of attention seeking behaviour are also the ones that depict greater amount of narcissistic characteristics. These findings confirm the hypothesis that attention seeking tendencies have positive relationships with the nature of narcissistic personalities.

**Table 4**

*Pearson product moment correlation table between ASS (AS) and Hyper Sensitive Narcissism Scale (HSNS)*

		(AS)
	r	Sig.
(HSNS)	.438**	.000

*Note= $p < 0.01$ \*\**

Table 4 indicates the significant correlation between ASS (AS) and Hyper sensitive Narcissism Scale is (\*\* $p < 0.00$ ). There is positive correlation between ASS (AS) and Hyper sensitive Narcissism Scale (HSNS) as ASS scores increase, HSNS scores also increase.

**Table 5**

*KMO and Bartlett's test of ASS (AS)*

Kasier-Meyer-Olkin Measure of Sampling Adequacy		.663
Bartlett's test of Sphericity	Approx Chi-Square	1950.834
	df	496
	sig	.000

Table 5 shows the KMO and Barlett's test values as it indicates the sampling adequacy and Bartlett's test sphericity. The KMO statistic varies between 0 to 1. This value indicates that the sum of partial

correlation is large relative to the sum of correlation indicating diffusion in the pattern of correlation. It shows that patterns of correlation are relatively compact and so factor analysis yield a reliable factor.

**Table 6**  
*Component matrix of factor analysis of ASS (AS)*

	Components		
	1	2	3
As14	.466		.178
As21	.463	.162	.309
As15	.447	.179	.417
As8	.445		.328
As13	.438		
As6	.412	.213.	.213
As17	.408	.180	
As5	.396		.316
As4	.388	.237	.363
As23	.386	.150	.152
As22	.382	.128	
As26	.382		.266
As7	.368	.220	.167
As3	.353	.329	.259
As25	.349		.249
As18	.348	.174	.218
As16	.345		
As2	.329	.321	.279
As27	.320	.277	.142
As9	.315	.135	.195
As10	.256		
As1	.209	.127	.160
As12	.180		
As32	.154	.127	.128
As31	.207	.600	
As30	.301	.584	
As29	.362	.523	.155

As28	.340	.357	.221
As24	.334	.152	.486
As19	.252		.473
As20	.362	.106	.450
As11	.179		.259

Factor matrix

Table 6 shows the 3 extracted factor and score loadings on them. It shows factor matrix before rotation. This matrix contains the loadings of each variable onto each factor.

### **Discussion**

The purpose of the current research was to construct and test an ASS and to identify the correlation between it and narcissistic personality traits. The research results are valuable as they shed some light on the behavioural patterns of attention-seeking behaviour and its psychological counterparts.

To begin with, the reliability analysis showed that the ASS also had high internal consistency. The alpha coefficient of Cronbach was used to show that the scale items were sufficient to measure the construct of attention-seeking behaviour. This observation implies that the scale constructed can be an effective tool in the measurement of attention seeking behavior in future study of psychology.

The factor analysis outcomes also indicated that the scale had a high level of structural validity. The resultant factors revealed that attention seeking behaviour can be made up of several behavioural dimensions connected to social recognition, self presentation and the urge of having other people validate them. These results are aligned with the past research which has emphasized the complexity of the attention-seeking trends.

The outcome of the correlation test showed that there is a significant positive correlation between attention seeking behaviour and the narcissistic personality traits. The finding is in line with earlier studies which propose that people with more degrees of narcissistic character are more likely to want to get more social recognition and admiration among others. Indeed, according to Charoensukmongkol (2016), narcissistic people tend to be involved in actions that aim at increasing their visibility and social presence. On the same note, Rooney and Fox (2015) discovered that the narcissistic personality traits are closely linked with attention-seeking tendencies.

These results also correlate with other studies made by Sorokowski et al. (2015) who opined that narcissistic people often resort to self-promotional behaviours and are constantly in need of validation. The growing popularity of social media sites has only heightened possibilities of attention seeking

behaviour in the sense that people can showcase themselves and have access to greater quantities of personal information.

On the whole, the findings of the current research apply that attention-seeking behaviour is a significant behavioural manifestation of narcissistic personality. The establishment of a valid scale to measure this behaviour is useful to the researchers because it gives them a good tool to investigate individual variation in attention-seeking behaviour and their psychological consequences.

### **Conclusions**

The current research was meant to build upon and test an ASS, and to test the connection of this scale to the narcissistic personality traits. The study results indicated that the scale developed possessed a good internal consistency and satisfactory psychometric measure, which implies that it could be useful as a dependable tool in the determination of attention-seeking behaviour.

The findings have also shown that there are significant positive correlation between attention-seeking tendencies and narcissistic personality traits. This implies that the more narcissistic an individual, the higher the chances of these people indulging in behaviours that help them to draw attention and acquire social recognition.

Generally, ASS development will add value to the psychological assessment field by offering a systematic instrument to be incorporated in the process of studying behavioural inclination to self presentation and social validation. The scale can also be used to support future studies regarding the psychological and social influence of attention seeking behaviour.

### **Limitations of the Study**

Although the current research has some contributions to make, a number of restrictions must be noted. First, convenience sampling was used to obtain the sample of participants based in Islamabad and Wah Cantt, which could reduce the quality of the findings in other populations. Second, the research based on self-report measures is subject to subjective perception and social desirability bias of the participants. Third, the research was limited to a definite demographic group of people in the narrow age group that might limit the generalizability of the results to other age groups and cultural backgrounds. The limitations can be resolved in future research by using bigger and diverse sample and use the developed scale in other social and cultural contexts.

### **Future Research Recommendations.**

The future studies can also investigate the extent to which ASS is applicable to other populations and cultures. Researchers can also consider the connection between attention-seeking behaviour and other personality traits or psychological outputs.

Secondly, longitudinal studies might be able to offer more information about the mechanisms of the formation and transformation of attention-seeking tendencies. These studies can help enhance the knowledge of behavioural and psychological aspects that affect attention seeking behaviour in the modern social world.

### **Declaration of competing interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. All authors contributed equally to this work.

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