

Appearance anxiety and loneliness: the mediating role of rejection sensitivity in patients with alopecia areata in Lahore Pakistan

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Abstract

Objective: To investigate the association involving appearance anxiety, rejection sensitivity and loneliness in patients with alopecia areata.

Method: The correlational study was conducted from February to September 2020 at public-sector and private-sector hospitals in Lahore, Pakistan, and comprised alopecia areata patients of either gender aged 20-40 years. Data was collected using the Appearance Anxiety Inventory, the Appearance-based Rejection Sensitivity Questionnaire and the University of California-Los Angeles Loneliness Scale. Data was analysed using SPSS 23.

Results: Of the 240 patients, 120(50%) each were males and females. The overall mean age was 28.39 ± 3.87 years. Appearance anxiety and rejection sensitivity were positive predictors of loneliness ($p < 0.000$), while rejection sensitivity was positively significantly mediated between appearance anxiety and loneliness ($p < 0.000$).

Conclusion: The association involving appearance anxiety, rejection sensitivity and loneliness was found to be significant.

Keywords: Alopecia areata, Appearance anxiety, Rejection sensitivity, Loneliness. (JPMA 73: 800; 2023)

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Introduction

Alopecia is a disease in which baldness, or hair loss patterns occur on different body parts, especially on the scalp.¹ Alopecia aetiology is not clear, but many causes have been studied in present times and the most important reason is correlated with autoimmune disorder.² Spontaneous hair re-growth and eventual re-loss are documented as well. It happens in 60% patients before the age of 20 years, and a family history of the disease is shown in 20% patients.³ In patients with alopecia, mood swings, depression and anxiety have been reported.²

Appearance is primarily linked with social interaction and social encounter. People who are physically attractive receive preferential treatment while growing up in all social settings compared to those who do not have such an attribute. Appearance anxiety is apprehensiveness concerning various facets of one's physical appearance and how this appearance is evaluated by others.⁴ Clinical experiences show that even minimal disfigurements can cause behaviour dysfunctions and generate severe distress in most people.⁵ Those who encounter disfigurements face social stigmatisation which can affect their self-esteem, self-concept, quality of life, and social expertise.⁶ The appearance becomes a despised entity for them. Individuals suffering from appearance anxiety remain extremely worried and preoccupied with minimal or

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imaginary defect in their appearance.⁷ Appearance anxiety affects relationships, work and the whole life, and can cause discomfort with regard to appearance, leading people believe that a happy life is possible only if they modify their appearance. They try somehow to cover or change the disliked parts of their physical appearance to avoid rejection.⁸

Individuals develop a sensitivity of rejection which becomes a part of their personality. Rejection sensitivity can create a barrier between one's true relations with others along with interpersonal rejection sensitivity. There is an emerging concept of appearance-based rejection sensitivity that connects intrapersonal physical appearance-related apprehensions with interpersonal rejection fears that are based on appearance.⁹ Appearance-based rejection sensitivity is the dispositional propensity to eagerly expect, quickly perceive, and show exaggerated reaction to signs of rejection based on physical appearance. It comprises an emotional aspect (anxiety about how the appearance is observed and assessed by others) and a cognitive component (anticipation of rejection based on one's looks).

It was presented as a simplified model of rejection sensitivity that recognises that rejection by others can contribute to the creation of rejection expectations at any time during one's life. According to this model, repeated exposure to rejection leads to development of the tendency to anticipate, recognise and over-react to imagined reaction i.e., rejection sensitivity. This expectation gets triggered in circumstances where there is a likelihood

of rejection and the individual readily perceives harmless signs as evidence of rejection. Individuals with high appearance-based rejection sensitivity, after receiving critical comments about their physical appearance, prefer to escape from social interaction in general, even with their significant others.¹⁰ The fear of being rejected can cause a person to withdraw into isolation or search to seek relationship affirmation.¹¹

Loneliness is defined as the state in which discrepancies are found between what one has and the desired or preferred level of social relationship one wants to have.¹² Inherently, humans are social animals and they prefer not to be alone. When people are asked to rate the things that are most pleasurable and bring happiness in their lives, majority of them choose intimacy, companionship and social affiliation over money, power and even physical health. It shows how important social connection is in one's life.¹³ Loneliness becomes distressful for people when their social circle and relationships become lesser and unsatisfactory compared to their desires. Social psychologists give great attention to loneliness as it is defined as a subjective state of discrepancy between actual and preferred/desired relationships. Loneliness has been defined sometimes as constant, and serious social problems may occur due to some unpleasant experience in the network of social relations in some important way that may affect either qualitatively or quantitatively.¹⁴ Loneliness is a condition that consists of different components including emotional, cognitive, and motivational and behavioural.

There are two components of loneliness; affective and cognitive. The former component deals with negative emotional experiences of loneliness, while the latter is related to the differences between expected and actual social connection.¹⁵ Females experienced greater feelings of loss, were more concerned about their looks and their future, and reported more negative thoughts and emotions. However, both females and males blamed their fate.¹⁶

The current study was planned to investigate the equation involving appearance anxiety, rejection sensitivity and loneliness in alopecia areata patients, and to find out the predictor of loneliness, and to assess the mediating role of rejection sensitivity between appearance anxiety and loneliness.

Patients and Methods

The correlational study was conducted from February to September 2020 at public-sector and private-sector hospitals in Lahore, Pakistan. After approval from the ethics review committee of Riphah Institute of Clinical and Professional Psychology, Riphah International University,

Lahore, the sample size was calculated using G*Power calculator with 80% power and medium effect size 0.3.¹⁷ The sample was raised using non-probability purposive sampling technique. Those included were patients of either gender aged 20-40 years with alopecia areata history of at least one year post-diagnosis. Patients who had alopecia areata since birth. and those diagnosed with any psychological problem or physical disability were excluded.

After taking informed consent from all the subjects, data was collected using a demographic questionnaire to noted age, gender, education, monthly income, family system, socio-economic status (SES), marital status, family history with alopecia, and medical history regarding visits to doctor and treatment.

The Appearance Anxiety Inventory (AAI)¹⁸ was used, which consists of 10 questions measuring appearance anxiety. It was translated into Urdu language by following standardised Mobilisation Around an Integration Project (MAPI) guidelines after getting due permission.¹⁹ Each AAI item was scored on a 5-point Likert scale, ranging from 0 = not at all to 4 = all the time". The internal consistency of the original scale is $\alpha = 0.86$,¹⁸ while in the current study it was 0.70.

Also used was the Appearance-based Rejection Sensitivity Scale (ARSS),²⁰ which was also translated into Urdu language following the MAPI guidelines after getting due permission.¹⁹ It is 6-point Likert scale, which indicates the extent to which people felt anxious about the possibility of rejection, ranging from 1= very unconcerned to 6 = very concerned, and the extent to which they expected an accepting response, from 1= very unlikely to 6 = very likely. Cronbach's alpha and test-retest reliability of the tool is 0.83 and 0.78.²⁰ In the current study, Cronbach's alpha reliability was 0.93.

The 20-item Urdu version of the University of California-Los Angeles (UCLA) Loneliness Scale²¹ was also used. Each item was scored on a 4-point Likert scale, ranging from 0 = never to 3 = always. Cronbach's alpha value of the scale is 0.94,²¹ while in the current study it was 0.84.

Data was analysed using SPSS 23. Descriptive statistics, like mean, standard deviation, frequencies and percentages, as well as inferential statistics, like Pearson product correlation analysis, linear regression analysis and mediation through Process analysis²² were done. All the assumptions of parametric tests were confirmed before extracting analyses, which included normality, checked through p-p plots, q-q plots, and Kolmogorov Simrnov test, homogeneity of variance, checked using Levene's tests, and level of measurement as ratio or scale. $P < 0.05$ was considered statistically significant.

Results

Of the 240 patients, 120(50%) each were males and females. The overall mean age was 28.39±3.87 years. Overall, 79(32.9%) participant’s qualification was, 86(35.8%) had done masters, 229(95.4%) belonged to middle class families and 192(80%) were living in a nuclear family system. The mean monthly income was Pakistan Rupees 48925.00±32369.4. There were 197(82.1%) participants with no family history of alopecia. The mean age of alopecia onset was 25.9±3.49 years. Majority 99(41.3%) participants had visited a doctor for the first time for treatment 1 year ago, 89(37.1%) 1-2 years ago and 52(21.7%) 2-3 years ago. Of the total, 200(83.3%) had visited more than one doctor.

There was significant positive correlation among appearance anxiety, rejection sensitivity and loneliness

Table-1: Inter-correlation among appearance anxiety, rejection sensitivity and loneliness in patients with alopecia areata (n=240).

Variables	Mean±SD	1	2	3	4	5
1. Appearance Anxiety	21.84±4.51	-	0.45**	0.49**	0.39**	0.24**
2. Rejection Sensitivity	142.33±12.19		-	0.98**	0.98**	0.46**
3. Rejection Sensitivity (Anxious)	70.35±6.32			-	0.93**	0.50**
4. Rejection Sensitivity (Expectation)	71.98±6.08				-	0.40**
5. Loneliness	29.38±3.48					-

**= $p < 0.01$, *= $p < 0.05$; SD: Standard deviation

Table-2: Un-standardised coefficient, standard error (SE) and model summary for the predictors of loneliness (n=240).

Variables	Loneliness Model		
	B	SE	95% C.I
Constant	10.4***	2.34	5.828-15.069
Appearance Anxiety	0.03	0.05	-0.064-0.132
Rejection Sensitivity	0.12	0.01	0.091-0.164
R ²	0.22		
F	33.3		
ΔR ²	0.22		
ΔF	33.3		

Note. $p < .05$, $p < .01$; $p < .001$; B: Un-standardised regression coefficient, ΔR²: Change in R², ΔF: Change in F, CI: Confidence interval.

Table-3: Regression coefficients, standard error (SE), and model summary information for appearance anxiety, rejection sensitivity and loneliness (n=240).

Antecedents		Consequences						
		M (RS)			Y (L)			
		β	SE	p-value	β	SE	p-value	
X (A.A)	a	1.19	0.23	.000***	c	0.17	0.07	0.02*
M (R.S)					b	0.12	0.02	0.00***
Constant	i	115.82	5.25	.000***	i	10.79	3.55	0.003**
		R ² =.19			R ² =.21			
		F(1,108)=26.04, $p=0.000$ ***			F(2,107)=13.84, $p=0.000$ ***			

A.A: Appearance anxiety, R.S: Rejection sensitivity, L: Loneliness, SE: Standard error. * $p < .001$. ** $p < .01$, *** $p < .05$.

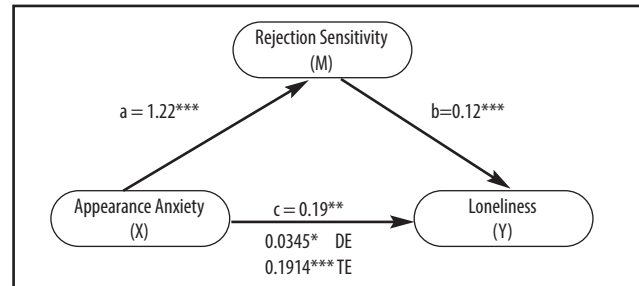


Figure: Process analysis22 showing rejection sensitivity as mediator between appearance anxiety and loneliness.

DE: Direct effect, TE: Total effect, a: Path a, b: Path b. c: Path c.

($p < 0.05$) (Table 1).

Appearance anxiety and rejection sensitivity were significant predictors of loneliness (Table 2).

There was a significant indirect effect of appearance anxiety on rejection sensitivity, there was a significant indirect effect of appearance anxiety on loneliness through rejection sensitivity, and there was a significant direct effect of appearance anxiety on loneliness (Table 3; Figure).

Discussion

Alopecia, or baldness, especially at a young age, is a major issue as it potentially causes psychological problems. The current study explored the relationship of appearance anxiety, rejection sensitivity and loneliness in alopecia patients.

The findings were consistent with literature.^{23,24}

Appearance anxiety being a significant predictor of loneliness, and social rejection and appearance anxiety being positive predictors of loneliness have also been reported earlier.^{24,25}

T Literature also supported the current findings that rejection sensitivity was a significant mediator of anxiety,²⁶ a mediator between maladaptive schemas and eating disorder²⁷ and that loneliness is mediated by the tendency of rejection sensitivity.²⁸

The current study has limitations as the sample size was too small to allow generalisation of the findings. Qualitative analysis should have been incorporated because of the subjectivity of several factors.

Despite the limitations the findings suggest that healthcare providers and student counsellors need to understand the negative psychosocial consequences for adolescents living with a visible disfigurement, and provide appropriate psychological and social support.

Conclusion

The association involving appearance anxiety, rejection sensitivity and loneliness was found to be significant. Reducing the feeling of loneliness in patients with alopecia areata can be possible only by controlling appearance anxiety and rejection sensitivity.

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