

## Research Article

# Mediating role of Body Image in the Relationship between Appearance schemas and Indirect Aggression in Adolescents

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## Abstract

**Purpose:** The present co-relational study aimed to investigate the mediating role of Body Image in the relationship between appearance schemas and indirect aggression in adolescents. **Method:** The Sample size was calculated through G\*power. 120 participants having dissatisfaction with physical appearance were selected through the purposive sampling technique. The Appearance Schema Inventory-Revised, The Revised Objectified Body Consciousness Scale and Indirect Aggression Scale-Aggressor Version were used to assess the appearance schema, body image and indirect aggression respectively. **Results:** The data was analyzed through Pearson product moment correlation, and Hay's process macro. Descriptive and inferential statistical analyses were carried out. Results demonstrated a significant positive correlation among appearance schema, body image and indirect aggression. Results also indicated the mediating role of body image between the relationship of appearance schema and indirect aggression. **Conclusion:** The results of present the study suggested that appearance schema and body image concerns play a significant role in determining an adolescent's indirect aggressive behaviours. *ASEAN Journal of Psychiatry, Vol. 23(6) June, 2022; 1-7.*  
**Keywords:** Appearance Schema, Body Image, Indirect Aggression

## Introduction

Adolescence is a period of continuous physical and psychological changes. Acceptance and approval from peers become very important during adolescence. In this stage, as adolescents start to concentrate more on their body image, physical appearance and related self-ideas rise as critical elements related to wellbeing and prosperity. McCabe, Buttler and Watt (2007) described that body image consisted of attitudes as well as a person's perception. These body images may be negative [1]. Those with negative beliefs towards their body may possess the perception that their body does not meet the standards of society. Psychological construct, appearance schema used by individuals to understand information about their appearance put another way, appearance schemas are

convictions that people have about their physical appearances.

Most adolescents have worries related to their looks. Adolescents want to fit in the society and also want to look attractive to others. Young women made more decisions related to their appearance than young men. Nice hairs, good complexion and a well-proportioned body are considered as the elements of physical attractiveness for females. Any disturbance in the perception creates a distorted view of body shape and size. Dissatisfaction with body image affects a person's happiness with the appearance of their body or they become frustrated. Consequently, majority of the adolescent girls are not satisfied with their body shape and size. This is truer for those girls who, because of pressures or problems in their own lives, become fixated on

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body image as a way of achieving success or happiness. To deal with inner feelings of insecurity, threat and anxiety about negative perceptions and negative body image, people use different strategies [2]. They may use indirect aggressive strategies as competitive behaviors, directed toward others who perceived as threatening. Subsequently to diminish feelings of insecurity and anxiety, indirect aggressive behaviors may be used as defense mechanism in the circumstances that initiate to negatively evaluate their physical appearance.

The key objective of this research was to study the relationship between appearances schemas, body image and indirect aggression in adolescents. In our society, body image concerns are developed in adolescents due to parental and societal stereotypical remarks toward body appearance. Although these concerns affect individuals of all ages, especially the adolescence is the age when individuals develop a fear of being evaluated by others, due to psychological changes they experience i.e., changes in body shape, body hair, hormonal changes etc. and experience more negative body image that leads to serious psychological disorders [3]. The explorative nature of this study was a little effort to spot possible psychological variables that will affect

adolescents to use indirect aggression as competitive ways towards others. So present research aims to study how the appearance schema is related to indirect aggression as well as the role of body image in predicting indirect aggression [4].

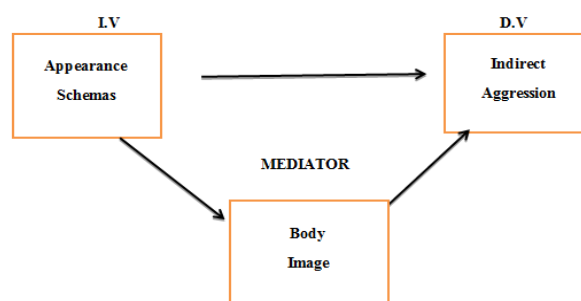
### Objective of the study

- To assess the relationship among appearance schema, body image and indirect aggression.
- To find out mediating role of body image between appearance schema and indirect aggression

### Hypothesis

- Appearance schemas are likely to have positive relationship with body image and indirect aggression among adolescents.
- Body image is likely to be positively associated with indirect aggression in adolescents.
- Body image is likely to mediate the relationship between appearance schema and indirect aggression (Figure 1).

### Conceptual Model



**Figure 1. Appearance schemas are likely to have positive relationship with body image and indirect aggression among adolescents**

### Methodology

#### *Study Site and Population*

A correlational survey was conducted on adolescents selected from public schools and colleges in Lahore, Pakistan

#### *Sample size and sample strategy*

The sample size was calculated through G\*power. 120 participants having dissatisfaction with physical appearance were selected through the purposive sampling technique.

#### *Study instrument and validation*

A separate demographic questionnaire was created for this study. Information concerning age, gender, level of education completed, family system, number of siblings and birth order satisfaction/ dissatisfaction with physical appearance was gathered through this demographic information form. Standardized tests having sound psychometric characteristics were used to collect data about the study variables. Appearance schemas were assessed by using ASI-R (The Appearance Schema

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Inventory-Revised). The ASI-R was designed to measure one’s psychological investment in his/her physical appearance [5]. ASI-R is a 20-item scale [6]. Respondents have to rate each item on a 5-point Likert scale, 5=strongly agree, 1=strongly disagree. A high score on ASI-R revealed more psychological investment in physical appearance. The ASI-R has adequate internal consistency  $\alpha=0.82-0.91$ . Body image was measured by “The Revised Objectified Body Consciousness Scale” which was developed and validated to measure objectified body consciousness in young people. The scale consists of 24 items. The items were scored on a 5-point Likert scale 1=strongly agree; 5=strongly disagree. A high score indicates more negative body image. The internal reliability of scale is Cronbach’s  $\alpha=0.75$ . Indirect aggression was measured using “Indirect Aggression Scale-Aggressor Version”. “Indirect Aggression Scale-Aggressor Version” is a 25-item self-reported measure that assesses the participants’ indirect aggression towards someone else [7]. Participants rate each item on a 5-point Likert Scale. Participants are required to report how much they used in the past 12 months each of the 25 behaviors towards other people. A high score indicates more indirect aggression [8].

*Statistical analysis*

The data were arranged and analyzed by using SPSS version 23 and Hay’s process macro v3.3. Descriptive statistics for sample and study variables were calculated and reported as mean standard deviation and percentage/frequency [9].

To find out the relationship between study variables, correlation was calculated through Pearson product-moment correlation analysis. To assess the mediating role of body image between the relationship of appearance schema and indirect aggression *Process* macro v3.3 was used. To quantify the relationship between variables, the standardized regression coefficient  $\beta$  was used. The p-value of  $<0.05$  and 95% confidence intervals (CIs) were used for statistically significant results [10].

**Results**

120 participants were recruited for the present study, with female (50%) and male (50%) through purposive sampling technique. The mean age of the respondents was 15.58 years with  $SD=1.16$ . 51.67% of students were studying in matriculation and 48.33% of students were studying in Intermediate (Table 1). The majority of the participants (62.5%) were living in a nuclear family system and 37.5% were living in a Joint family system [11]. Descriptive analysis for study variables of the present study was performed to examine the mean, standard deviation, minimum, maximum scores and reliability of the study variables. Appearance Schemas has mean value of 62.35 with  $SD=11.15$  and has Cronbach alpha.75, body image has a mean value 70.46 with  $SD=11.91$  and has Cronbach alpha .75 and indirect aggression has mean value of 62.37 with  $SD=17.77$  and has Cronbach Alpha 91.

**Table 1. Pearson product moment correlation among study variables (N=120)**

S.no	Variables	1	2	3
1	Appearance Schema	-	0.46***	0.39***
2	Body Image		-	0.47***
3	Indirect Aggression			-
	M	62.35	70.46	62.37
	SD	11.15	11.91	17.77

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Table 1 showed results of the Pearson product moment correlation analysis that was used to find out the relationship between study variables. Results showed that Appearance Schema has a positive significant relationship with body image ( $r=0.64$ ,  $p<0.001$ ) which means that adolescents who have concerns about their appearance, have more concerns about their body image and more

distorted appearance schemas [12]. Furthermore, body image has a positive significant relationship with indirect aggression ( $r=0.47$ ,  $p<0.001$ ), which means that adolescents who have concerns about their body image, they have more indirect aggression [13]. Appearance schema has also a positive and significant relationship with indirect aggression ( $r=0.39$ ,

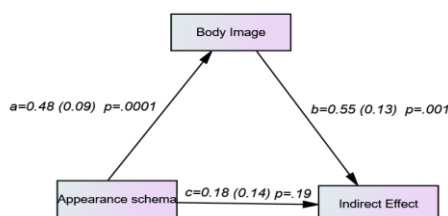
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$p < 0.001$ ) which means that if the adolescents, have indirect aggression towards others [14].  
 have concerns about their appearance, they also

**Mediation Analysis**

Mediation analysis using study variables, appearance schema, body image and indirect aggression (Figure 2).



**Figure 2. Body image as the mediator between the relationship of appearance schema and indirect aggression**

The figure shows the direct effect (a) of appearance schema on body image. According to the results, appearance schema appeared to be a significant predictor of body image. The regression coefficient between appearance schema and body image was statistically significant with  $\beta = .48$ ,  $p = .0001$  which is the direct effect of the predictor on the mediator [15]. The figure also shows the direct effect of body image on indirect aggression (Table 2).

Body image also appeared as the strong predictor of indirect effect. The regression coefficient between body image and indirect aggression was statistically significant with  $\beta = .55$ ,  $p = .001$  which is also the direct effect of mediator on outcome variable. Figure also represents direct effect of appearance schema on indirect aggression which is not statistically significant [16].

**Table 2. Indirect Effects of body image between appearance schema and indirect aggression (n=12) (n=120)**

Mediator	Effect	BootSE	95%BootCI	
			BootLL	BootUL
Body Image	0.26	0.08	0.1	0.43

*Note. Effect=standardized regression coefficient, BootCI=bootstrapped confidence interval, BootLL=bootstrapped lower limit, BootUL=bootstrapped upper limit*

Table 2 represents the indirect effect of appearance scheme on indirect aggression. The results showed that there was a significant indirect effect of appearance schema on indirect aggression through body image,  $b = 0.26$ , BCaCI (0.10, 0.43). Body image was found to be a significant mediator between appearance schema and indirect aggression. It implies that the person who invests psychologically more on physical appearance can have effect on indirect aggression in the presence of negative body images. Appearance schema has no direct effect

on indirect aggression; it only effects indirect aggression if negative body images are present.

**Discussion**

The present study aimed to investigate the association of appearance schema, body image and indirect aggression among adolescents. It was expected that body image, appearance schema and indirect aggression would be associated. Moreover, it was expected that body image would mediate the relationship between appearance schema and indirect aggression.

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Pearson product moment correlations were conducted to determine the relationships among the research variables. A process macro analysis was conducted to explore the mediating role of body image between the relationship of appearance schema and indirect aggression. Primarily it was hypothesized that appearance schema, body image and indirect aggression were related to each other.

Results of the research showed that there existed a significant relationship between appearance schema and indirect aggression among adolescents. Consistent with this finding, a researcher also concluded that participants who reported more psychological investment in their physical appearance as a basis for self-evaluation tended to report engaging in more indirect aggressive behaviors towards other participants and the participants who reported less psychological investment in their appearance as a basis for self-evaluation tended to report using fewer indirect aggressive behaviors towards other participants. It has also been explored that appearance schemas have positive relationship with body image. Results indicate that those who have scored high on appearance schema inventory also have high score on the objectified body consciousness scale which means those who invested psychologically more on their physical appearance and were more appearance schematic were more dissatisfied with their body image. The results of the finding are consistent with previous research work which documented the positive relationship between appearance schema and body image. A study by reported that women who perceived a general interaction as negative were more likely to attribute that negative interaction to their appearance and self-worth.

Similarly, if we take a view of our cultural background, importance of thinness and beauty greatly influences an individual's beliefs. For example, negative evaluation and feedback may have a strong effect on a person's beliefs about his/her body. Basically, evaluation of the body starts from an individual's own house by his/her parents. From the beginning parents used to call their child with nicknames based on his/her appearance. They don't even know how their words and thoughts can impact the lives of their children which leads to the development of appearance schemas. Body image concerns are carried out in every field of life especially in job recruitment. Females are evaluated on the basis of their body rather than other capabilities as

compared to males. The relationship between body image and indirect aggression in adolescents was also explored in this study. Results showed a positive and significant correlation among these variables. Results of the findings suggested that those who had maladjusted or negative body image also had high values of indirect aggression. The findings of the present study are consistent with previous findings that reported indirect aggressive competitive behavior has been significantly and positively associated with body image issues. However, it is important to consider other potential factors that may influence the results and thus explain the findings. Indirect aggression may also be a useful method that anxious individuals use to transfer negative attention away from themselves and onto others in the group because of fear of negative evaluation of themselves. Renee'M reported an association between indirect aggression and jealousy/competition, status, and appearance.

On the societal level physically, attractive people generally are perceived as more positive, more successful, possess more socially desirable traits, have more power and status are treated leniently than unattractive people. In other words, physically attractive people often get unfair advantages when compared to physically unattractive people. This can become a strong cause for the development of hostility in less attractive people. Likewise, feelings of inequity may provoke negative behaviors and hatred feelings that are judged negatively, perceived as inferior and less socially desirable in society which may spur angry and hatred feelings towards those who are getting privileges on the basics of their appearance. Finally, a mediation analysis was proposed for this research in a way that body image was likely to mediate the relationship between appearance schema and indirect aggression. The mediation analysis was run through process macro. Results support this assumption but previous literature does not provide any direct evidence for this assumption comprised of the mediation role of body image between appearance schemas and indirect aggression. Previous research suggested that negative appearance schemas are related to distress and negative reactions. The result of direct effects showed that appearance schema was found to be a significant positive predictor for body image and the body image was found to be significant positive predictor of indirect aggression. The results of the indirect effect showed that body image was found to be a

significant mediator between appearance schema and indirect aggression. It implies that if the person invests psychologically more in physical appearance and consequently develops negative body images about him/her, this can become the reason for indirect aggression towards others. This showed that an increase in appearance schema tends to increase concerns with body image. While increased negative body images, increase indirect aggression. Results obtained through regression analysis indicates that if mediator variable was removed then the relation between the independent variable and the dependent variable is very little. In summary, the main findings from this study are that participants with higher appearance schemas and more concerns with body image were more likely to engage in indirect aggression towards other adolescents.

### **Conclusion**

The present research provides support for both appearance schema and body image concerns in determining adolescents' indirect aggressive behaviors. The results further suggested that students with a higher level of indirect aggression have more appearance schemas and poor body image. Findings from the present study contribute to the research literature which indicates that women may be competing with their rivals (*i.e.*, using indirect aggressive strategies) in the body image domain as a result of their negative appearance schemas.

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