
Modeling Media Exposure, Appearance-Related Social Comparison, Thin-Ideal Internalization, Body Image Disturbance And Academic Achievement Of Female University Students

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Abstract: There is extensive research where social, economic and interpersonal factors influence was investigated in the relationship of academic achievement. However, the studies where social pressure induces via media exposure on students' academic achievement are scant. Rare studies investigate the social-cultural, socio-psychological, media and marketing constructs that influence academic achievement. This study investigates the sequential mediating effect of appearance-related social comparison, thin-ideal internalization, and body image disturbance in the relationship between media exposure and female university students' academic achievement in Punjab, Pakistan. Multistage cluster random sampling technique was used for data collection for sampling frame. It is necessary to develop a sampling frame because the population was unknown. The study based on the cross-sectional survey was conducted with 1322 female students across Punjab to develop the sampling frame. Out of 1322 for the final sample, 504 questionnaires were randomly selected using the SPSS random value selection option. However, 20 questionnaires were removed from the sample because of missing values and outliers and a total of 484 survey questionnaires were used for data analysis. Two-stage structural equation modeling is used to measure the causal relationship among constructs. In the first stage, constructs validity and reliability were measured with confirmatory factor analysis. In the second stage, the structural model measures the causal relationship. All the direct hypotheses are statistically significant. Whereas appearance-related social comparison and thin-ideal internalization fully mediate the relationship between media exposure and body image disturbance. Moreover, body image disturbance partially mediates the relationship between appearance-related social comparison and academic achievement and thin-ideal internalization and academic achievement. Findings revealed that greater exposure to media disturbs body image and eventually, female students affect their academic performance.

Keywords: Media Exposure, Appearance-related social comparison, Thin-ideal internalization, Body image disturbance, Academic achievement

INTRODUCTION

Economic growth and achievement depend upon the prospects that are made assessable for individuals in education (Kaleem & Kashif, 2017, p.20). However, university education is pondered as a capital investment that benefits society and economic development (Batoool, 2013). Universities serve as incubators to provide scholars, researchers, innovators, entrepreneurs, workforce, educated and trained individuals for new up-gradation, efficient solution for the betterment of the economy (Qazi, Raza & Sharif, 2017). These skilled intellectuals create new businesses and hunt for better opportunities available in the country; effective workers can achieve economic growth (Qazi, Raza & Jawaid, 2014). However, academic achievement at the university level is imperative because students have to attain better knowledge and skills to seize the technological and skilled-based careers for their professional growth (Regier, 2011). Yet, academic achievement is arguable because of its vague identity, dependent on changing subjective perspectives.

Academic achievement refers to the acquisition of knowledge confirmed via higher grade achievement, also defined as individual graduate capacity to achieve his/her professional goals aligned with their academic discipline (York, Gibson & Rankin, 2015). Steinmayr et al. (2014) defined academic achievement as student performance consequences that stipulate the extent to which a student has achieved his/her academic goals in a

learning environment. So academic achievement at the university level is apparent to be personal as well as development (process) and outcome (degree) by students (Moira, Siobhan & Rosemary, 2018). So it is essential to determine the constructive predictors that affect students' academic achievement, particularly female students. Because nothing is vague, students who have better success in their academic tenure are more likely to hunt better career opportunities than those with low academic achievement.

Unfortunately, about 500,000 graduates are unemployed in Pakistan. About 3,09,874, i.e., 62% of whole unemployed students belongs to Punjab Province, Pakistan. More alarming, 2,10,000 nearly 67.74 % of employment students are female (Shahid, 2018). Because Graduate Employment Survey (2018) revealed that about 78 % of employers were not satisfied with fresh graduates' skills, quality and competency, they are unhappy due to their poor written and verbal communication skills and demanding others, despite having better grades (Shahbaz, 2018). These skills prompt students are learning outcomes and academic achievement during and after completion of degree and career growth. Employees required sector-specific skills, soft skills and better personal presentation for recruitment (Zanaton et al., 2012). Students' academic success depends upon their interpersonal interactions and communication skills. However, people present themselves better remained self-confident rather than remained worried about what they think is successful (SkillsYouNeed, 2017). The study examined that females are more concerned about their personal presentation having less self-confidence affecting their body image (Nadia, Veldhuis & Konijn, 2019). Another study revealed that individuals with body image disturbance could not endure self-confidence and have an adverse effect on their social and communication skills (MindShift, 2020). Students those experience body image issues have worse self-confidence (Granatino & Haytko, 2013).

Students have to learn communication skills, sector-specific skills & knowledge, soft skills, and personal presentation to learn at university by students, helping them successfully participate in professional life. Hence, students' academic achievement depends upon their practical and reliable communication skills (CSC, 2019; Alamgir et al., 2017; David, 2015).

Therefore, previous studies examine that body image disturbance affects students' academic achievement at the university level (Itani, 2011; Tallat et al., 2017; Araujo, 2019). Specifically, the academic achievement of university females students (Fortman, 2006; Miles, 2009). Moreover, it has been argued that body image concerns developed due to greater media exposure (Van den Berg et al., 2002; Franchina & Lo Coco, 2018; Lee & Lee, 2019; Hoque & Mills, 2019) and indirectly have a negative influence on Academic achievement (DeLaMater, 2002). Ultimately, it is indispensable to investigate the predictive factors that affect female university students' academic achievement. Previous studies examined that media exposure effect appearance-related social comparison, thin-ideal internalization and body image disturbance and indirectly affect the academic achievement of students (Vartanian & Dey 2013; Vartanian et al., 2016; Fardouly et al., 2015; Saadat et al., 2017; Tallat et al., 2017; Cepeda-Benito et al., 2018; Lee & Lee, 2019; Araujo, 2019; Willis, 2020). Due to the emergence of media contents and globalization of the Western approach of media for promoting thinness and media articulated beauty (Swami et al., 2010). The gap prevails in media, body image, and academic achievement literature in Pakistan's university education context. This study investigates the relationship between media exposure and academic achievement of female university students mediate by appearance-related social comparison, thin-ideal internalization, and body image disturbance sequentially.

Hypotheses and Theoretical Framework Development

Media Exposure & Appearance-Related Social Comparison

Fardouly (2015) revealed that social media (Facebook usage) consumption significantly influences the appearance comparison of people in general, with close and distant peer and appearance comparison with celebrities. However, young females spend more time on social media (Facebook) and face more appearance comparison. Hendrickse et al. (2017) revealed that a similar effect had been found with mass media (i.e., advertisement, newspaper, magazines and reality shows). This study also revealed that using social media (Instagram) may harm individuals who frequently engage in comparison with others. Another study found that social comparison on social media (Facebook) depends upon a person's comparison orientation (Park & Baek, 2018). Tiggemann, Brown & Thomas (2019) conducted a study to measure the visual attention to fashion magazine advertisement and appearance comparison. It has been revealed that visual attention is significantly linked with appearance comparison in general. It has been revealed from the literature that both mass and social media content significantly influence appearance-related social comparison. It has been hypothesized that;
H₁: There is a significant positive effect of media exposure on appearance-related social comparison.

Media Exposure & Thin-Ideal Internalization

Mask and Blanchard (2011) conducted an experimental study, asked a female to view "thin ideal" media videos and neutral videos; exposure to thin-ideal media videos significantly affects the psychological mindset. Davis (2015) revealed that media exposure significantly induced the thin-ideal internalization behavior in an

individual. Eyal and Keren (2016) examined that celebrities' presence on SNS provides a platform for young people's connectedness. Exposure of SNS content based on thin-ideal images may affect the risk behavior. Cohen et al. (2017) evaluated that content on Instagram appearance-focused exposure was significantly associated with thin-ideal internalization. Saito (2016) examined that fashion magazines reading based on thinner picture image increase the risk of thin-ideal internalization. The usage of average weight and overweight female models working in advertisements reduced the risk of thin-ideal internalization since over-thin females are recognized as symbolic social beauty in media (Cepeda-Benito et al., 2018). Moreover, Lee and Lee (2019) examined that media pressure was significantly linked with the thin-ideal internalization of media beauty. Hence it is hypothesized that;

H₂: There is a significant positive effect of media exposure on Thin-ideal internalization.

Appearance-Related Social Comparison & Body Image Disturbance

Fardouly (2015) conducted a study with three comparisons based on celebrities, close friends, and distant peers. It has been revealed that this significant comparison predictor of body image among females. Behm-Morawitz (2016) examined that females with a higher rank of appearance-related social comparison or ideal-level female-based physical comparison influence female students' body image. Cohen et al. (2017) revealed that appearance focus comparison is strongly associated with body image rather than general comparison on SNS usage. Park and Baek (2018) examined that social comparison orientation is linked with body image and personal psychological mindset. Lee and Lee (2019) examined that subjective and objective comparisons. It has been revealed that subjective comparison of a female body is significantly linked with body image. Moreover, Rehman et al. (2020) found that appearance-related social comparison significantly affects body image disturbance. Hence, it is hypothesized that;

H₃: There is a significant effect positive of appearance-related social comparison on body image disturbance.

Thin-Ideal Internalization & Body Image Disturbance

The study evaluated that exposure to thin-ideal beauty on media increases the risk of body image dissatisfaction (Davis, 2015). Ura and Preston (2015) revealed that thin-ideal internalization was significantly linked with body image via social activities. Watson et al. (2015) examined that exposure to thin-ideal media images internalization affects the body image concerns of black females. Whereas Shima, Pakdaman and Shokri (2015) revealed that thin-ideal internalization significantly correlated with body image dissatisfaction. Moreover, video with thin-ideal females significantly affects females' body image and feel dissatisfied with their physical appearance (Mask & Blanchard, 2011). Lastly, Cepeda-Benito et al. (2018) found that exposure to thin-ideal media females deteriorated the body image concerns. Based on previous studies, it has been hypothesized that;

H₄: There is a significant positive effect of Thin-ideal internalization on body image disturbance.

Body Image Disturbance & Academic Achievement

Gupta (2012) examined that body image was significantly linked with academic achievement. Dissatisfaction with their physical appearance affects self-confidence and ultimately affects their academic achievement and success. Tallat et al. (2017) revealed that body image affects university students' academic achievement and is concerned with their self-image. Araujo (2019) found that positive body image improves students' academic achievement. Hoffer (2019) argued that body image is a multi-facet phenomenon and it has been proven that body image affects students' academic achievement. Hence it has been hypothesized that;

H₅: There is a significant negative effect of body image disturbance on academic achievement.

Conceptual Framework

Based on the above-developed hypotheses guided by previous studies, this study aims to measure female university students' academic achievement predictors. Hence to measure the hypothesized among constructs, Figure 1 presents the conceptual framework developed for this study.

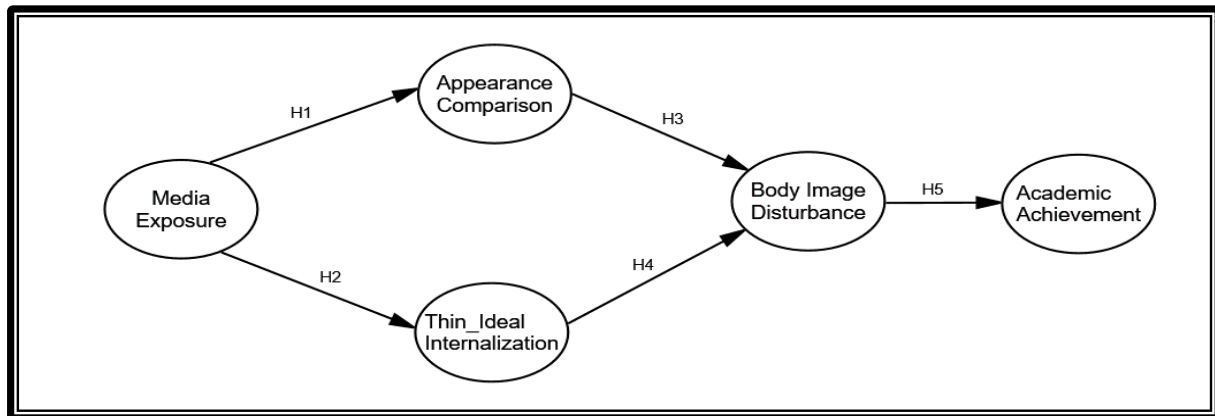


Fig.1:Conceptual Framework

METHODOLOGY

A pilot study was conducted among 150 female university students enrolled in Lahore, Pakistan, to strengthen the methodology. The aim was to ascertain any language issue and difficulty understanding the terminologies used in questionnaire statements while responding to the questionnaire. Furthermore, before collecting final survey data, it discloses the potential ethical and partial concerns that may obstruct the main Study (Doody & Doody, 2015). Finally, factor analysis was conducted to validate the research instrument of each construct of this study because it helps to mitigate the potential risk associated with the research design and survey questionnaire of study along with sample size, sample selection & sampling process, data collection and potential data analysis (Jairath et al., 2000; Moore et al., 2011).

After completing the pilot test, the final survey measured media exposure construct based on two components: “mass media” & “social media” with 13 loaded items. An appearance-related social comparison was measured with 5 items. Thin-ideal internalization was measured with three components with 9 loaded items. Body image disturbance was measured with three components and 7 loaded items. Lastly, the academic achievement of female university students was measured with 4 items. Each construct achieved > 0.70 value of Cronbach alpha during exploratory factor and considered appropriate and valid to conduct final stage survey (Hair et al., 2014). Each statement of the survey questionnaire was examined with how strongly respondents agree or strongly disagree with the statement based on a 10-point interval scale. Here “1” is the starting point of strongly disagree and “10” is the ending point of strongly agree. (Awang et al., 2015).

Before, final survey data collection, the pilot test sample was excluded from the main sample to remove the biases of sample selection and sampling process suggested by researchers (Hair et al., 2014). A cross-sectional survey design was employed to collect data from female university students of Punjab, Pakistan. Multistage cluster random sampling technique used to reach an ultimate sample of female university students of Punjab, Pakistan. “Multistage sampling is a process of moving from abroad to a narrow Sample, using a step-by-step process” (Taherdoost, 2016). Punjab’s province was divided into three zones: north, south, and central zone considered as first-stage clusters. Each zone-based of three division and representative districts those are recognized as second and third stage cluster. Punjab has nine divisions, three in each zone; one district is randomly selected from each division. Moreover, from each district, two universities were randomly selected for data collection from female university students.

A total of 1452 questionnaires were distributed and 1322 were returned during the face-to-face survey questionnaire. These 1452 questionnaires were distributed to the developed sampling framework of this study as the population size was unknown since no data is available based on gender based information related to the number of admissions in 2019 (HEC, 2020). As study unable to get accurate information about the size of the population. The study designs its sampling frame to mitigate the sampling biases suggested (Burns & Bush, 2014). Furthermore, the sample size was determine based on criteria given by (Hair et al., 2014). It is suggested the various aspects have to be considered during determining sample size, particularly when deploying Structural Equation Modeling (SEM), Such as assessing multivariate normality of data, model complexity, missing value and average error of variance among the reflective factors (Hair et al., 2010).

As this study is based on five constructs and thirty-eight items, based on Hair et al. (2014) the sample size can be generated by multiply items of the survey questionnaire with 10. So the appropriate sample was 420 for this study, but 20 percent increase in sample size to deal with missing value, outliers, incomplete questionnaire and other sampling errors. (Hair et al., 2014). Hence study considered 504 female university students’ questionnaires as the final sample of this study. These questionnaires were randomly extracted from the 1322 questionnaire collected for sampling frame using SPSS simple random case selection.

Structural Equation Modeling (SEM) was used for multivariate data analysis (Awang, 2014) as SEM is based on two main models for the analysis process. The measurement model validated each construct and research instrument's scale by measuring construct, convergent and discriminant validity, and measuring the reliability (composite reliability) of each latent construct and using confirmatory factor analysis (CFA). Once the validity and reliability of each latent construct measurement model are achieved, the structural equation modeling is applied to measure the causal relationship and test hypotheses. The SEM was conducted with the SPSS-AMOS-25 version.

Measure

As this study was based on five constructs and already established scales were used to measure each construct. A 10 point-interval rating scale was used for the measurement of each construct. The measure of media exposure was based on two sub-constructs, namely mass media and social media. The scale was adapted from the Study of (McCabe & Ricciardelli, 2001). This study only adapted to measure mass media perceived influence (magazines, TV and advertisement) with 6 items to measure the mass media. The social media sub-construct was measured with a social networking usage scale adapted from (Savita Gupta & Bashir, 2018), with 7 items measuring academic and entertainment-related views of respondents. These items have a Cronbach Alpha value of 0.830. The thin-ideal internalization construct was measured with social attitude towards appearance scale (SATAQ-R), which is the extended version of (SATAQ-4) developed by (Schaefer et al., 2015, 2016; Schaefer, 2017). Initially, the scale is based on seven subscales with 31 items. For this study, internalization thin, internalization general attractiveness and pressure media sub-scale was adapted and measured with 9 items loaded 3 items on each component. The composite internal consistency of three subscales was measured via Cronbach's alpha value of 0.92.

An appearance-related social comparison was measured with five items adapted from the Physical Appearance Scale (PACS) developed by (Thompson et al., 1991). The Cronbach alpha value was 0.90 for females, which measured PACS's internal consistency (Maria Calado et al., 2011). The body image disturbance was measured with Body Shape Questionnaire shorter version (BSQ-8C) with 8 items adapted from (Elisabeth Welch et al., 2012)

. These 8 items were loaded on 3 components during factor analysis. The internal consistency was measured based on the Cronbach Alpha value, which was 0.92 and the scale was considered reliable for data collection. Finally, 4 items scale was adapted to measure female university students' communication skills and academic writing-based academic achievement. This scale was an exhibit in the study of (Li, 2012).

Common Method Biases

The data collected for each construct was from the same respondent. The study employed common method bias assessment via the Harman single factor test (Podsakoff et al., 2003). So, the principal component analysis was performed for all the measuring items of this study. The analysis extracted ten factors with eigenvalue > 1 accounted for 69.49 of the variance. In contrast, the first factor accounted for 31.21 % of the variance that eliminated the risk of the common method bias problem.

Data Analysis and Results

Table I assessed the demographics information of female students. Out of 504 questionnaires, 20 were deleted because of missing values and outliers. 94.6 % of female students were aging between 18 to 27 years. Whereas 89.9 % of female students are striving for their graduation or master's degree. 24.2 % of students have their Facebook account and 40.1 % having more than one social media account. 75.2% of students spend more than 1 hour daily with social media activities. However, 80.5 % of students spend more 30 minutes on mass media. Furthermore, students are not satisfied with actual weight and height and they are expected to have less weight and more height. 83.1 % of female student's grades are greater than 60 % and they are expected to have greater scores in their upcoming semesters.

Table I: Demographics Profile Summary of Respondents

Respondent Profile	Frequency (N=484)	Percentage
Age of Respondents		
18-----22 Years	211	43.6%
23-----27 Years	247	51%
28-----32 Years	15	3.1%
33-----37 Years	11	2.3%
Total	484	100%
Department of Respondents		
Management Sciences	125	25.8%

Asad Ur Rehman et al/ Modeling Media Exposure, Appearance-Related Social Comparison, Thin-Ideal Internalization, Body Image Disturbance And Academic Achievement Of Female University Students

Social Sciences	72	14.9%
Pure Sciences	106	21.9%
Computer Sciences	184	37.4%
Total	484	100%
Discipline of Respondents		
Graduation	222	45.9%
Master	213	44%
M.Phil.	38	7.9%
PhD	11	2.3%
Total	484	100%
Social Media Account of Respondents		
Facebook	117	24.2%
Twitter	25	5.2%
Snap-Chat	54	11.2%
Instagram	35	7.2%
Tiktok	59	12.2%
More Than one Social Media Account	194	40.1%
Total	484	100%
Time Spent on Social Media exposure By Respondents		
0---30 Minutes	41	8.5%
31---60 Minutes	79	16.3%
1-----2 Hours	262	54.1%
More than 2 hours daily	102	21.1%
Total	484	100%
Time Spent on Mass media Exposure By Respondents		
0---30 Minutes	46	9.5%
31---60 Minutes	236	48.8%
1-----2 Hours	170	35.1%
More than 2 hours daily	32	6.6%
Total	484	100%
Actual Weight of Respondents		
40-----43 KG	0	0%
44-----47 KG	70	14.5%
48-----51 KG	93	19.2%
52-----55 KG	113	23.3%
56-----59 KG	100	20.7%
60-----63 KG	64	13.2%
64-----67 KG	36	7.4%
68 or more KG	8	1.7%
Total	484	100%
Desired Weight of Respondents		
40-----43 KG	32	6.6%
44-----47 KG	74	15.3%
48-----51 KG	213	44%
52-----55 KG	154	31.8%
56-----59 KG	11	2.3%
60-----63 KG	0	0%
64-----67 KG	0	0%
68 or more KG	0	0%
Total	484	100%
Actual Height of Respondents		
5-----5.2 feet	211	43.6%
5.3---5.5 feet	241	49.8%
5.6---5.8 feet	32	6.6%
5.9---5.11 feet	0	0
6 feet or more	0	0
Total	484	100%
Desired Height of Respondents		

5-----5.2 feet	0	0%
5.3---5.5 feet	358	74%
5.6---5.8 feet	126	26%
5.9---5.11 feet	0	0%
6 feet or more	0	0%
Total	484	100%
Previous Grades of Respondents		
80% or Above	40	8.3%
70%-----79%	204	42.1%
60%-----69%	208	43%
50%-----59%	32	6.6%
Total	484	100%
Expected Grade of Respondents		
80% or Above	150	31%
70%-----79%	390	63.8%
60%-----69%	14	2.9%
50%-----59%	11	2.3%
Total	484	100%

The study used SEM to measure the proposed hypotheses. The two-stage model building process for SEM application was followed as suggested by (Hair et al., 2014). In the first stage, CFA was performed to test the measurement model. Reliability was assessed with composite reliability. Also, unidimensionality, construct validity, convergent validity and discriminant validity were assessed. It appropriate to validate the research instrument via assessment of unidimensionality, validity and reliability (Kline, 2010; Awang, 2015). This study comprised of endogenous and one exogenous construct, media exposure, thin-ideal internalization and body image disturbance was second-order constructs. In contrast, appearance-related social comparison and academic achievement were first-order constructs. Therefore, the study validates the second-order constructs individually and converts them to the first-order construct using the item parceling technique (Awang et al., 2015).

Table II: Validity & Reliability of Media Exposure, Thin-Ideal Internalization, Appearance-Related Social Comparison, Body Image Disturbance and Academic achievement

Construct	Items	Factor Loading	Average Variance Extracted (AVE)	Composite Reliability (CR)
Media Exposure	MTM	0.86	0.973	0.884
	MSM	0.92		
Thin-Ideal Internalization	TIIM1	0.81	0.696	0.872
	TIIM2	0.88		
	TIIM3	0.81		
Appearance-Related Social Comparison	SC1	0.67	0.555	0.861
	SC2	0.82		
	SC3	0.83		
	SC4	0.68		
	SC5	0.71		
Body Image Disturbance	BD1	0.84	0.685	0.866
	BD2	0.92		
	BD3	0.71		
Academic Achievement	AA1	0.77	0.708	0.906
	AA2	0.82		
	AA3	0.88		
	AA4	0.89		

Table II showed that all the items achieved factor loading > 0.6, which assessed that unidimensionality was achieved. All the constructs have AVE > 0.5 hence achieved convergent validity. The value of composite reliability for each construct was > 0.6, which measures each latent construct's internal consistency. The measurement model constructs validity also achieved since the value of RMSEA is 0.054, which is less than < 0.08, CFI, TLI and NFI value at a value of 0.971, 0.964 and 0.938 greater than 0.9 cut-off value. The value of Chi/Sq./df is 1.824/0.000. Hence all the fitness indexes that achieved the required value also achieved construct validity.

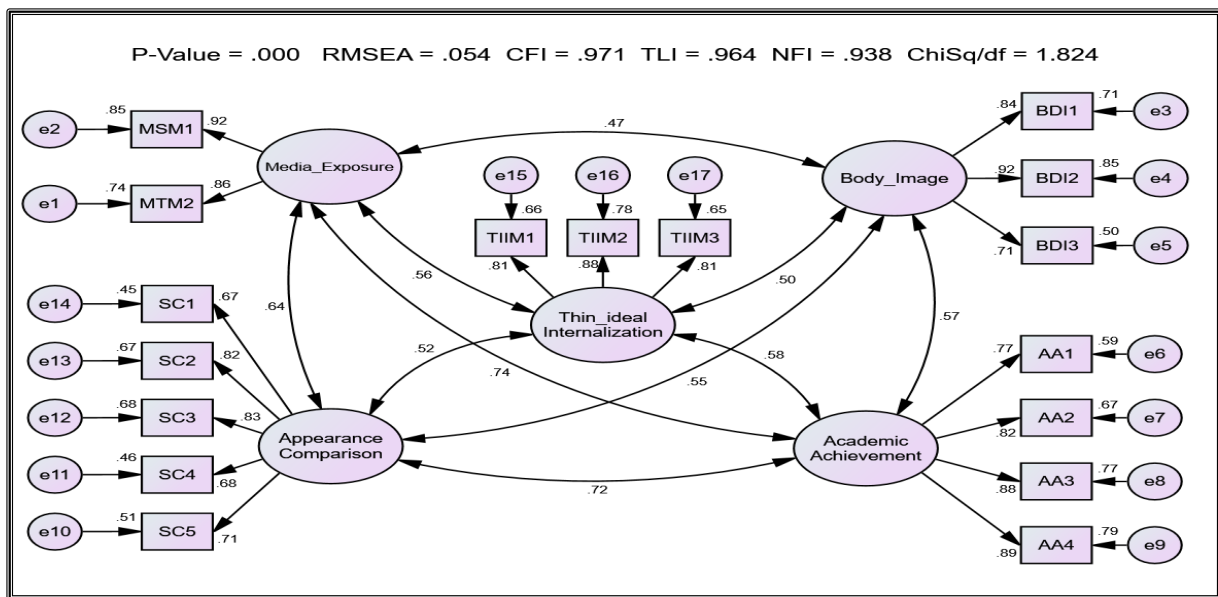


Fig.2: Pooled Confirmatory Factor Analysis

The square root of AVE (diagonal value) values was mentioned in Table III to achieve discriminant validity. All the required diagonal values were reported in rows and columns. It was contingent that discriminant validity achieved if bold diagonal values are greater than values in rows and columns in the discriminant validity construction table (Awang, 2015). All the diagonal values are greater than other values in rows and columns hence achieved discriminant validity.

Table III: Summary of Discriminant Validity

Construct	Media Exposure	Thin-Ideal Internalization	Appearance-Related Social Comparison	Body Image Disturbance	Academic Achievement
Media Exposure	0.98				
Thin-Ideal Internalization	0.56	0.83			
Appearance-Related Social Comparison	0.64	0.52	0.74		
Body Image Disturbance	0.47	0.50	0.58	0.82	
Academic Achievement	0.74	0.58	0.72	0.57	0.84

Hypotheses Testing

In the second stage structural model was analyzed for causal relationships among constructs. The fitness indexes for structural model showed adequate fit, the ChiSq/df 1.824; p-value 0.000; CFI .971; TLI .938; NFI .938 and RMSEA 0.054 < 0.08. The Hypotheses (H1-H6) of the proposed model were tested, presented in Figure 3 and Table IV. Media exposure (β 0.506, $p < 0.000$) had significant positive effect on appearance-related social comparison. Media exposure (β 0.369, $p < 0.000$) had significant positive effect on thin-ideal internalization. Appearance-related social comparison (β 0.539, $p < 0.000$) had significant positive effect on body image disturbance. Thin-ideal internalization (β 0.335, $p < 0.000$) had significant positive effect on body image disturbance. Body image Disturbance (β 0.118, $p < 0.003$) had a significant negative effect on academic achievement.

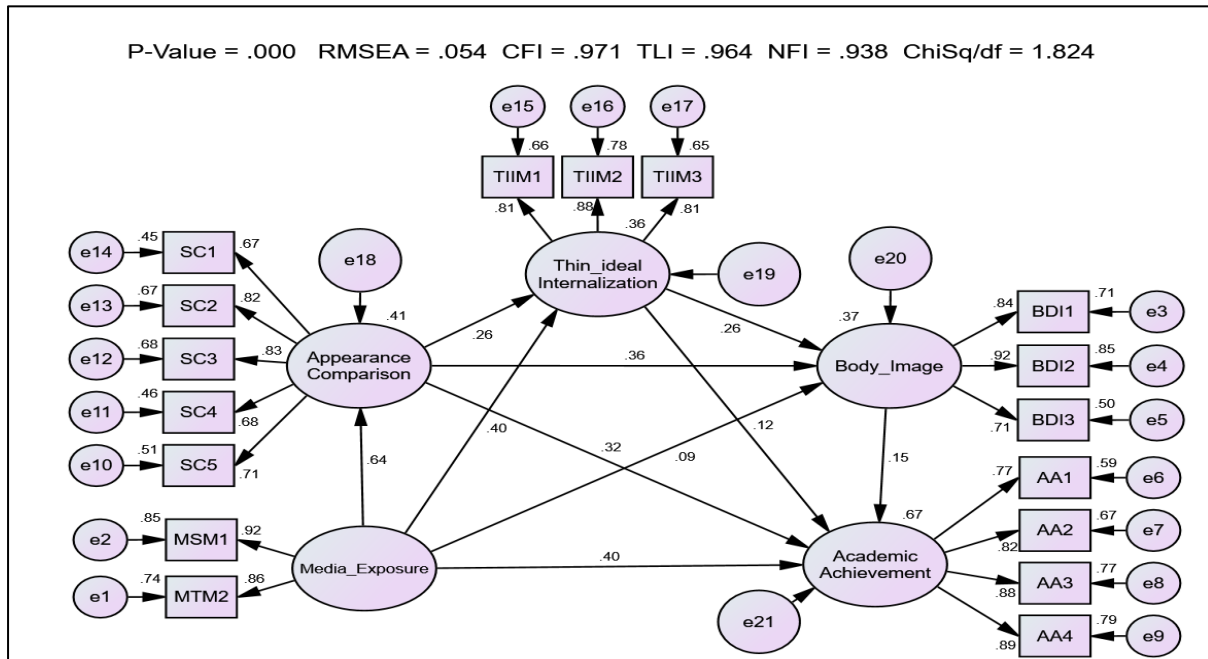


Fig.3:Structural Model

Mediation Effect

The structural model has four hypotheses that measure the mediational relationship. The Maximum Likelihood Estimation (MLE) method was used for bootstrapping. The mediation test results were verified with the resampling bootstrapping process (Awang, 2014, 2015). The application of mediation helps to determine the significance and type of mediation that occurred. However, MLE with 500 to 1000 bootstrap sample was used with 95 % confidence interval and 95% bias-corrected confidence interval. Hypothesis H6 tested that appearance-related social comparison fully mediates the relationship between media exposure and body image disturbance since the direct effect is insignificant. Hypothesis H7 tested that thin-ideal internalization fully mediates the relationship between media exposure and body image disturbance. Hypothesis H8 tested that body image disturbance partially mediates the relationship between appearance-related social comparison and academic achievement. Finally, hypothesis H9 tested that body image disturbance partially mediates the relationship between thin-ideal internalization and academic achievement. Below Table V represents the statistical significance of mediational effects.

Table V: Summary of Mediational Effect

Mediation	Indirect path 1 “a”	Indirect path 2 “b”	Direct path 3 “c”	Mediation Type
ME ← ARSC ← BDI	0.506 (P= 0.000)	0.589 (P = 0.000)	0.109 (P= 0.274)	Full mediation
ME ← ITIIM ← BDI	0.369 (P = 0.000)	0.335 (P = 0.000)	0.109 (P = 0.274)	Full mediation
ARSC ← BDI ← AA	0.589 (P = 0.000)	0.118 (P = 0.036)	0.364 (P = 0.000)	Partial mediation
ITIIM ← BDI ← AA	0.335 (P = 0.000)	0.118 (P = 0.036)	0.114 (P = 0.048)	Partial mediation

DISCUSSION

The study intends to measure the effect of media exposure on academic achievement of female university study. However, this study is based on a sequential mediation model, so media exposure indirectly affects female university students’ academic achievement via appearance-related social comparison, thin-ideal internalization, and body image disturbance. The results indicate that greater exposure of media contents, either mass media (TV, advertisement, magazines) (Tiggemann, Brown & Thomas, 2019) and social media, increase their appearance comparison (Fardouly, 2015; Hendrickse et al., 2017; Park & Baek, 2018). There are various reasons that results are similar and aligned with previous studies. The female university students are young individuals who spend more time with media content and have more chances to compare themselves with celebrities over media or with their close peers in university, distant peers over social media platforms. Secondly, the greater exposure of media contents on social media or mass media induces female university students to idealize and thin-ideal internalization of media articulated beauty. Findings are consistent with previous studies by (Mask & Blanchard, 2011; Davis (2015; Eyal & Keren, 2016; Cohen et al., 2017; Cepeda-Benito et al., 2018; Lee & Lee, 2019). The results are similar to previous studies because, based on mass media,

social media or mass media content, overall social media-induced the media to articulate thinner beauty and culture. So this perspective induction via articulated thinness as beauty contents affect their self-image and eventually, these female university students internalized the thin-ideal beauty induced by media.

Thirdly, Female students with greater appearance-related social comparison have a greater level of disturbance with their body image. Findings are similar to previous studies that appear to affect female bodies (Fardouly, 2015; Behm-Morawitz (2016; Cohen et al., 2017; Park and Baek, 2018; Rehman et al. (2020). The results are similar to previous studies based on the reason that when female university students have a comparison with celebrities over social media, they are unable to achieve the media articulated beauty since they have no resources to bear the cost of this artificial beauty since female university students depend upon their parents in Pakistan. It isn't easy to achieve this media-defined beauty, so their appearance compared with celebrities, peers, and distant peers affect their body image. They are not feeling well and satisfied with their physical appearance. Fourthly, once female university students internalized the articulated but thinner beauty promoted by media via mass media or social media contents, female dissatisfaction with their own physical appearance and body eventually disturbed. Body image is one psychological state of mind and satisfaction with own physical appearance. Our findings are significant and similar to previous studies that thin-ideal internalization of media defined beauty affect the body image perception of female university students (Davis, 2015; Ura & Preston, 2015; Watson et al., 2015; Shima, Pakdaman & Shokri, 2015; Cepeda-Benito et al., 2018).

Fifthly, body image disturbance affects the student focus towards their studies since they are not clear sense of their own physical appearance and continuously strive to achieve articulated media-induced beauty and thinner physic. At the university level, academic achievement leads students to a better hunt of career opportunities if they have performed better during university academic tenure. Because their perception has been affected and cannot emphasize learning subject-related skills, better occupational communication and personal present skills eventually affect their academic achievement. So findings are similar to previous studies that with greater body image disturbance, students have low academic achievement as they are internal fighting with their physical appearance perception (Gupta, 2012; Tallat et al., 2017; Araujo, 2019; Hoffer, 2019).

Moreover, the study also measures four mediational effects between media exposure and academic achievement since the mediational constructs are measured based on sequential mediation analysis. This study examined that appearance-related social comparison mediates the relationship between media exposure and body image disturbance among female university students (Fardouly, 2015; Park & Baek, 2018; Lee & Lee, 2019). Thin-ideal internalization also mediates the relationship between media exposure and body image disturbance among female students (Yamamiya et al., 2005; Sharp et al., 2014; Schmuck, 2017; Lee & Lee, 2019). Furthermore, Body image disturbance partially mediates the relationship between appearances-related social comparison and female students' academic achievement. Findings are a new addition to the body image literature since no previous study examined the mediational relationship of body image disturbance between appearance-related social comparison and academic achievement. Previous studies only measure appearance-related social comparison on body image and body image effect on academic achievement (Paolini, 2016; Tallat et al., 2017; Araujo, 2019; Willis, 2020). Lastly, body image disturbance partially mediates the relationship between thin-ideal internalization and academic achievement of female students. Mediation of body image has been a new addition to body image literature since no previous studies investigate the mediational relationship of body image disturbance between thin-ideal internalization and academic achievement. Only body image was measured as the antecedent of academic achievement and consequence of thin-ideal internalization in previous studies (Rodgers, 2016; Morin et al., 2017; Cepeda-Benito et al., 2018; Lee & Lee, 2019; Osborne-Bias, 2019; Willis, 2020).

CONCLUSION

This study investigates that greater media exposure increases appearance-related social comparison and increases the internalization of thin-ideal media, which articulated beauty that eventually affects their self-image and disturbance in perception. Greater appearance-related social comparison and internalized the media define beauty as having a greater disturbance in female university students' body image since they did not remain satisfied with their self-image and psychical appearance. Disturbance of body image affects the self-perception of physical satisfaction with own body and facial beauty. These female students cannot emphasize their studies with affected self-perception, which ultimately affects their academic achievement. Since academic achievement in the short term helps individuals hunt better grades, subject-specific skills, communication skills, and personal presentation and hunt for better career opportunities in the long term. Academic achievement at the university level is very important because students are at their last stage of education to participate in professional life. If they are unable to perform better in their academics, they cannot hunt for better opportunities.

Practical Contribution

This study provides university management recommendations to develop a health curriculum and course curriculum to mitigate the psychological disturbance caused by media exposure on female university students. Universities may add a group or individual coaching programs for female students to improve their psychological and media literacy programs. They may help to aware female students of the negative effect of greater media exposure. Because female students' socio-psychological rehabilitation helps them overcome the media negative pressure and become able to focus more on their academic goals at university level, it leads them to better career success.

Theoretical Contribution

This study adds to the literature on body image and academic achievement at the university level, particularly in Punjab, Pakistan. It also enriches the marketing literature to extra usage of seductive and persuasive appeal by media content may affect female students' psychological. Since greater media content exposure de-tracked female students' focus towards self-image, they must be towards their academic goals, particularly at the university level. Because from here, they have to strive for their career opportunity with better academic achievement. Furthermore, the development of body image concerns in Pakistan females has substantially contributed to the existing literature, majorly based in developed countries.

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