# Body dissatisfaction and eating disorder



#### Abstract

The current study empirically tests the relationship between television (TV) and a magazine exposure on the development of eating disorder and body dissatisfaction. In addition, the affect of body dissatisfaction on the self-esteem has also been analyzed. Sampling frame of the study consists of fifteen universities of Lahore, and a total sample size of 283 was drawn by using simple random sampling technique. A verified structured questionnaire was used to collect the data. Structural equation modeling (SEM) technique was used for analysis. The analysis of the results reveals that magazines are significantly contributing to information about fashion than TV, and it is indirectly helping in the development of eating disorder. Whereas body dissatisfaction simultaneously creating eating disorder and lowering self-esteem to young girls. Findings of the study have practical implications for personnel in medical profession, policy makers and marketers.

#### Introduction

Almost each and every one grows up in the world which is flooded with the mass media e. g. television, films, videos, billboards, magazines, movies, music, newspapers, and internet. There are a lot of discussions, describing the impact of media on the development of body dissatisfaction in females. But it is important to understand how different types of media exposure are processed by the females, and most importantly how they absorb message and react there on?

Television, due to its mass reach, has become one of the strongest medium to influence masses. It can influence not only the individual's attitude,

behavior, life style, thinking pattern, but also it has the potential to influence the culture of the country. Nowadays, media places a lot of importance to thin, smart and ideal body figure which might be responsible for body size overestimations that females feel and make.

Over the past several years, many articles (Groesz, Levine and Murnen, 2002; Harrison and Cantor, 1997; Morris and Katzman, 2003; Tiggemann, 2003; Tiggemann and Pickering, 1996) have proposed a link between the thin female beauty ideal portrayed in the media with a range of psychological symptoms including body dissatisfaction and eating disorders. Morris and Katzman, (2003) have reported significant change in weight and size of female models, shown throughout the media in western society and the concept of ideal or perfect body. Over time the cultural ideal for women's body shape and size has considerably changed towards thinner and leaner, they add.

The present research study measures the influence of television and magazine on the development of young females' information about fashion, self esteem, desired body image and eating disorder. In addition to this, it will also be measured the Body Mass Index (BMI) affect on the development of body dissatisfaction so that a clearer and comprehensive picture of how eating disorder develops in young females can be displayed.

The study is of major interest to medical professionals, marketers and public policy officials. From this study medical professionals can understand which factors are influencing females towards body dissatisfaction and eating disorder, as these two symptoms leads to many diseases. Media related

professionals are keen to know whether information about fashion and advertising is effective or not, while policy makers are concerned with protecting the interests of the common customer. This study is particularly important as there is lack of empirical evidence on the topic within the context of young females, with special reference to television and magazines in Pakistan.

The study has five sections. Section one discusses introduction; section two discusses literature review; section three discusses objective research questions and hypothesis; section four discusses research methodology; section five discusses results; section six, the last section discusses findings, conclusions, policy implications, and limitations of the study.

#### Literature Review

During the past few decades, scholars and medical professionals, who were initially interested in the study of electronic media effects on mental health have focused their attention to the link between exposure to thin ideal media image and eating disorders (Stice, 1998; Harrison and Cantor, 1997; Tiggemann and Pickering, 1996). Heinberg (1996) reported, vast majority of female television characters are thinner than the average American woman, with less than 10% of women appearing on television being overweight. Harrison and Cantor (1997) found that exposure to thinness portraying and promoting media, especially magazines, wish for thinness, dissatisfaction with the body, and ineffectiveness in females is rising. They also suggested that exposure to television programs with noticeably fat, main characters predicted dissatisfaction with body.

The research studies that have focused mainly on adolescent, media and body image (Tiggemann and Pickering, 1996; Tiggemann, 2003; Harrison and Cantor, 1997) examined the problematic effects of exposure to thin ideal media image on young women. So there is enough evidence to establish a link between thin ideal image portrayed in media and the development of eating disorder in adolescent females. Furthermore, it is to be noted that certain types of TV programs create more body dissatisfaction, like watching soaps, music videos and movies (Tiggemann and Pickering, 1996; Tiggemann, 2003). As, these programs portray latest fashion trends thus promoting the ideal thin body image.

Desirability of the thinness is explained by the socio cultural model. The socio cultural model has been tested by many researchers (Vander Wal, Gibbons and Pilar Grazioso, 2008; Stice, 1998; Tiggemann, 2003; Harrison and Cantor, 1997) and proved that the desirability of thinness is explained by the model. According to the socio cultural theory of eating disorder development, internalization of the thin ideal leads to body dissatisfaction and negative effect, which in turn lead to eating disorder development.

A number of studies (Tiggemann, 2003; Shea and Pritchard, 2007; Harrison and Cantor, 1997; Groesz, Levine and Murnen, 2002; Gilbert and Meyer, 2005) have shown that self esteem is associated with eating disorder and how one feels about his/her body image. Research has found that low self-esteem is associated with body dissatisfaction (Shea and Pritchard, 2007). Van-den-Berg et al., (2010) provides an in detail analysis about the relationship between body dissatisfaction and self-esteem and found strong and significant relationship between them. They found that the relationship https://assignbuster.com/body-dissatisfaction-and-eating-disorder/

between body dissatisfaction and self-esteem vary across weight status, race/ethnicity, and Socio economic status. They also found that body dissatisfaction association with self-esteem was not significant in girls who are under weight but significant with rest of the categories i. e. normal weight, over weight and obese. Van-den-Berg et al., (2010) also mentioned that children who have low self-esteem and body dissatisfaction predicts a range of adverse health outcomes later in their life, which may include unhealthy weight-control behaviors, general psychological distress, eating-disordered behaviors and many have the potential to cause many other negative outcomes.

From the above discussion, it is concluded that self-esteem is a dynamic construct, which is influenced by a variety of factors such as childhood & adolescent experiences, personality and body image. Bachman and O'Malley (1977) used self esteem as a term which defines individual self-evaluation or judgment of her own worth. From this it can be logically concluded that any effect or negative thinking may influence on body image that ultimately affect self-esteem, thus promoting the risk of developing an eating disorder as the females try to control their bodyweight in order to feel acceptable in the society.

According to Gilbert and Meyer (2005), low self-esteem predicts an increase in body dissatisfaction, negative fears and increase in depression. Blaase and Elklit (2001), indicated that women suffering from an eating disorder had lower self-esteem and are exposed to more stress, than those who were not struggling with disordered eating. The results of Jade (2002) show that the media may contribute to low self-esteem in the young females by promoting https://assignbuster.com/body-dissatisfaction-and-eating-disorder/

thin ideal body images as a way to gain respect, acceptance and love. In order to check how different media (TV and Magazine) affects the self-esteem, body image and eating disorder, Kim and Lennon (2007) found that eating disorder is associated with self-esteem, body dissatisfaction and with overall appearance.

BMI has also been found to predict the increase in body image concerns among college-aged females (Frederick et al., 2007). Research shows that even though adolescent who's BMI are in normal range still feel dissatisfied with their body and want to become thinner. In order to check the BMI contribution towards body dissatisfaction, Tiggemann (2003) took BMI as a moderator variable between internalization of thin ideals and body dissatisfaction or eating disorder and found significant relationship between the variables.

## **Objective of the Study**

The main purpose of this study is to test empirically the relationship between ideal image portrayed in media and its effects on the development of eating disorder and body dissatisfaction in adolescent females with special reference to young females of Lahore.

## **Research Questions**

In order to measure the objective of the study following questions have been developed:

1. Do media help in the development of eating disorder?

- 2. Does information gathered through media creates body dissatisfaction?
- 3. Does body dissatisfaction lead to development in eating disorder?
- 4. Does BMI act as a moderator between Eating disorder and body dissatisfaction?
- 5. Does body dissatisfaction affect the self-esteem?

# **Research Hypotheses**

The aforesaid research questions will be answered by hypotheses. To answer the first research question HA1, HA2 and HA3 alternate hypotheses have been developed. Second and third research question will be answered by HA4 and HA5 alternate hypotheses respectively. Fourth research question will be answered by HA6 and HA7 alternate hypothesis. Finally the last research question will be answered by HA8 alternate hypotheses.

HA1 : TV viewing has positive relationship with the information gathered about fashion by the females.

HA2 : Magazine exposure has positive relationship with the information gathered about fashion by the females.

HA3 : Information about fashion has positive relationship with the eating attitude

HA4 : Information about fashion has positive relationship with development of body dissatisfaction

HA5: Body dissatisfaction has positive relationship with eating attitude

HA6: Eating attitude has negative relationship with BMI

HA7: BMI has positive relationship with Body dissatisfaction

HA8: Body dissatisfaction has negative relationship with self-esteem.

In addition to answering the research questions, hypothesis will also help in discussing the individual relationship between different variables and most importantly how the developed model works when different significant relationships works simultaneously.

# Research Methodology

# **Conceptual Framework**

Tiggemann (2003) conceptual frame work has been modified in the light of the literature review and additional variables have been added in the framework. In this framework, media exposure has direct influence on the development of information about fashion. Information about fashion has relationships with eating attitude and body dissatisfaction. BMI act as a moderating variable between eating disorder and body dissatisfaction (Tiggemann, 2003). Body dissatisfaction has relationships with eating attitude and self-esteem (Gilbert and Meyer, 2005). Diagrammatically framework can be seen in figure 1.

The current study's framework will provide a more comprehensive picture and new understanding can be developed about how different factors simultaneously help in the development of eating disorder and body dissatisfaction. Affects of body dissatisfaction can also be measured.

#### **Research Instrument**

A verified structured questionnaire was used to collect the data. The Questionnaire consists of the following parts; body dissatisfaction, eating attitude, self-esteem, social attitude towards appearance to measure the information about fashion, magazine and television exposure.

Body dissatisfaction was assessed by the discrepancy between the figure one feels one has and the figure, one wants to have. The figure ranking scale was replicated from Stunkard et al., (1983). BMI and Eating attitude questionnaire 26 (EAT-26) were measured by using questionnaire developed by Garner et al., (1983) since this scale is the standardized measure to check the symptoms and concerns of eating disorder.

Information about fashion is measured by "Socio cultural Attitudes towards Appearance scale - 3" (SATAQ-3). The SATAQ-3 is a revision of the first two scales (Heinberg & Thompson, 1995; Thompson et al., 1999). It has subscales that assess internalization (general, athlete) pressures and information. Self esteem was measured by 10 items revised self-esteem scale developed by Rosenburg (1989), as this scale was developed to measure the self-esteem of students.

Magazine exposure was measured by creating a list of fashion magazine available at leading book shops in Lahore. Total of thirteen magazines were mentioned in the questionnaire including other option. For each magazine, respondents were asked to indicate which magazine they have recently purchased, read, skipped through or looked at someone else's copy and time

spent on it. Television exposure was measured by asking which type of programs respondents like to watch and total time spent watching TV daily.

#### **Data Collection**

Data was collected from only female students who are studying in higher education commission (HEC) recognized universities, located in Lahore. Total of 15 universities were short listed as those universities are offering Bachelor of business administration (BBA). The bachelor level program consists of age group of 16-22 years old. Females in this age group are exposed to the risk of developing body dissatisfaction and eating disorder (Harrison and Cantor, 1997).

# Sample

The sampling frame consists of 1064 female students. Two hundred and eighty three sample size was drawn by using simple random sampling technique. While collecting data, emphasis was placed on giving equal representation to the universities in the sample. Total of 178 questionnaires were received and 173 were finally selected for analysis.

The minimum and maximum reported age of respondents in the survey is 17 and 24 years respectively, and means age is 19. 73 years. Types of programs watched by the respondents and their relative frequency are shown in the figure 2. Time spent by respondents while watching TV daily and their relative frequency are shown in the figure 3. Time spent by respondents while reading different fashion magazines and their relative frequency are shown in the figure 4. When the BMI of the respondents were calculated, almost one third (56) of the respondents were under weight, 8 %

(15) were overweight or obese; and 58. 96% (102) number of respondents belonged to normal weight category. Complete results are shown in table 1.

#### **Results Discussion**

# **Analysis methods**

Data was analyzed using SPSS version 15, Amos version 16 and Microsoft excel version 2007. Cronbach's alpha was run to check the internal consistency. Correlation was run to test whether the variables have relation with each other and does any observed variable have perfect covariance with any other variables which are observed. Mean was run to find the discrepancy between how females feel about their figure and their desired body figure. Structural/simultaneous equation modeling (SEM) was run to check the validity of the conceptual framework of the study, as SEM is used for non-recursive models.

#### Cronbach's Alpha

To check the internal reliability of the variables, Cronbach's Alpha was run. The reliability values of the variables are EAT-26, a= 0. 723; self-esteem, a= 0. 843; information about fashion, a= 0. 726 and the overall value of SATAQ-3, a= 0. 869. All scales have acceptable reliabilities, with the alpha value near or above the 0. 70 criterions (Nummally, 1978).

#### **Correlation results**

Pearson correlation was run to check the relationship of variables with each other and whether any observed variable has perfect covariance with any other variables, which are observed in the study. Results of the correlation

analysis, mean and standard deviation are shown in table 2. Limited number of relationships was found significant at p <00. 1. The correlations which are showing significant relationship are BMI with body dissatisfaction(r < 0.46), Eating attitude with body dissatisfaction (r < 0.296) and TV and magazine reading information with magazine reading (r < 0.199). Marginally significant (p < .10) negative correlation (r < -0.131) was observed between selfesteem and body dissatisfaction. Significance of the relationships among required endogenous and exogenous variables provides the bases that the current established model can be measured using SEM. Since none of the variable shows perfect relationship with any other variable SEM can be applied with confidence.

# **Body Dissatisfaction**

In order to measure the body dissatisfaction of respondents, discrepancy between the body image think and body image want was analyzed. When the mean of the body image "feel" and "want" are compared as shown in the table 3. The conclusion can be drawn that females want their body figure to be thinner. As the difference between the body image think and body image want is almost one. Diagrammatically the difference can be seen in the figure 2.

# **Structural Equation Modeling (SEM)**

Developed conceptual frame work was checked through SEM. SEM is suitable for this type of analysis as it is multivariate (multi equation) regression model. In SEM analysis, unlike traditional linear model, the dependent variable may become an independent variable for another equation, and in

SEM variables may influence one another reciprocally, directly or through other variables intermediaries (Fox, 2002).

By using SEM the developed model was found appropriate and valid as the Chi square value is 6. 387 with p > 0. 05. The insignificance of the P-value indicates the appropriateness of the model. In order to check the model goodness of fit, following goodness of fit indices were consider, goodness of fit index (GFI) whose value is 0. 990 and comparative fit index (CFI) whose value is 0. 99. As the values of these two fit indices ranges from 0 to 1. For GFI = 0. 95 indicates good fit (Miles and Shevlin, 1998), and for CFI = 0. 95 indicates good fit (Hu and Bentler, 1999) from this it is concluded that the developed model is fulfilling the requirements of goodness of fit. Since the model is appropriate and full fills the requirements of fit indices. The hypothesis testing and interpretation of the results can be done with confidence. The complete results of the model can be seen diagrammatically in figure 6 and individual relationship's significance level and their respective estimated standard error can be seen in table 4.

In figure 6 the significant relationships are indicated by parallel lines on the relationship line with their respective regression weights and significance level derived through SEM analysis. From the figure 6 it is interpreted that magazine is significantly contributing towards information about fashion. Information about fashion is not creating body dissatisfaction but affecting the eating attitude of the females. Eating attitude is affecting the BMI and BMI is affecting the body dissatisfaction of young females. Lastly, body dissatisfaction is acting as double edged sword and influencing both eating attitude and self-esteem. From aforesaid it can be concluded that media https://assignbuster.com/body-dissatisfaction-and-eating-disorder/

especially magazine is indirectly helping in the development of eating disorder and creating body dissatisfaction.

## **Hypothesis Testing and Discussion**

HA1 : TV viewing has positive relationship with the information gathered about fashion by the females.

The hypothesis HA1 is rejected on the bases of insignificant p-value (p> 0.

10) between information about fashion and TV. The analysis shows that
there is no such significance relationship between the information gathered
about fashion by females and television watching.

The results obtain in current study are in accordance with Kim and Lennon (2009) who also try to find the relationship between TV viewing and information. The reason provided by Kim and Lennon (2009) about the insignificant relationship between television and information is that the programs do not focus on how women look.

Other possible reason, for the rejection of this hypothesis can be, the sampling frame consist of educated urban females and the type of programs viewed by the respondents indicates that majority of the females watch multiple programs. Since majority of females watch different sets of programs, they can differentiate which programs are promoting unrealistic fashion and which are not, therefore the TV do not affect the mental model of the females about fashion.

HA2 : Magazine exposure has positive relationship with the information gathered about fashion by the females

The hypothesis HA2 is accepted on the bases of significant p-value (p <0. 05) and positive regression weight (0. 079) between information about fashion and magazine. The analysis shows that there is a positive relationship between magazine exposure and information about fashion. The regression weight shows that magazine and information about fashion are directly proportional to each other, and one point increase in magazine exposure leads to 0. 079 points increase in information about fashion.

This significance of this relationship is in accordance with the previous studies of Tiggemann, (2003) and Kim and Lennon (2009). As in both the studies of Tiggemann, (2003) and Kim and Lennon, (2009) shows that magazines produce more significant results than exposure to television, as the content of fashion or beauty magazines consists of pictures, and females can compare themselves with the images in the magazines. It is also to note here that information acquired through magazine is considered more creditable. The possible reason can be the control over the media, frequency of exposure, high shelf life of magazine and it can also be stored for quoting for reference.

HA3 : Information about fashion has positive relationship with the eating attitude

The hypothesis HA3 is accepted on the bases of positive regression weight  $(2.\ 175)$  although marginal significant p-value (p <0.\ 054) between information about fashion and eating attitude is observed. The analysis shows that there is a relationship between information about fashion and eating attitude and they are directly proportional to each other, and results

indicates that one point increase in information about fashion leads to 2. 12 points increase in eating attitude.

HA4 : Information about fashion has positive relationship with development of body dissatisfaction

The hypothesis HA4 is rejected on the bases of insignificant p-value (p> 0. 10) between information about fashion and body dissatisfaction. The analysis shows that there is no such relationship between information about fashion and body dissatisfaction. This is in contrast with studies (Tiggemann, 2003; Heinberg, Thompson and Stormer, 1995; Tiggemann and Pickering, 1996; Kim and Lennon (2009) which have shown association between these two variables.

HA5: Body dissatisfaction has positive relationship with eating attitude

The hypothesis HA5 is accepted on the bases of significant p-value (p <0. 00) and positive regression weight (2. 721) between body dissatisfaction and eating attitude. The analysis shows that the relationship between body dissatisfaction and eating attitude are directly proportional to each other and one point increase in body dissatisfaction leads to 2. 721 points increase in eating attitude or leads towards eating disorder. The results of current study are in accordance with the previous research as Green et al., (2009) who found that eating disorder behaviors are explained by depression which creates body dissatisfaction, and self-esteem.

HA6: Eating attitude has negative relationship with BMI

The hypothesis HA6 is accepted on the bases of negative regression weight (-0.057) and marginally significant p-value (p < 0.083) between eating attitude and BMI. The analysis shows that the relationship between eating attitude and BMI are inversely proportional to each other and one point increase in eating attitude leads to -0.057 points decrease in BMI.

The reason for the negative relationship is that normally females indulge in dieting or eating disorder behavior in order to reduce weight, as BMI consists of weight and height. So increase in eating attitude means female is indulging in eating disorder/dieting behavior in order to reduce BMI to get the desired body figure.

HA7: BMI has positive relationship with Body dissatisfaction

The hypothesis HA7 is accepted on the bases of significant p-value (p <0. 00) and positive regression weight (0. 205) between BMI and body dissatisfaction. The analysis shows that the relationship between BMI and body dissatisfaction and are directly proportional to each other, and one point increase in BMI leads to 0. 205 points increase in body dissatisfaction.

The results support previous studies of Tiggemann (2003) and Gilbert and Meyer (2005) who also found that BMI and body dissatisfaction are positively related with each other.

HA8: Body dissatisfaction has negative relationship with self-esteem.

The hypothesis HA8 is accepted on the bases of significant p-value (p < 0. 10) and negative regression weight (-0. 382) between body dissatisfaction and self-esteem. The analysis shows that the relationship between body https://assignbuster.com/body-dissatisfaction-and-eating-disorder/

dissatisfaction and self-esteem are inversely proportional to each other, one point increase in body dissatisfaction leads to 0. 382 points decrease in self-esteem. Similar results were also observed by the Van-den-Berg et al., (2010) they found that body dissatisfaction is strongly associated with self-esteem.

# Findings, Conclusions, policy Implications, and limitations of the study

# **Findings**

Based on results obtained from hypothesis, research questions can be answered. Since question one is associated with the results of HA1, HA2 and HA3 hypothesis, it can be concluded that media is indirectly helping in the development of eating disorder. Furthermore it is to be noted that magazine has more influence on the young females than TV, as magazine is significantly contributing towards information about fashion.

From the analysis of HA4 hypothesis which is associated with research question two, following answer can be conclude that information from media about fashion is not creating body dissatisfaction. In order to answer research question three hypothesis HA5 is to be considered, from this it is concluded that body dissatisfaction has relationship with eating disorder, and females who have body dissatisfaction are at risk of developing eating disorder.

Hypothesis HA6 and HA7 are associated with research question four. Results of these two hypotheses indicate that BMI significantly act as a moderator between eating disorder and body dissatisfaction. Lastly HA8 hypothesis which is associated with the fifth research question provides that any https://assignbuster.com/body-dissatisfaction-and-eating-disorder/

increase in body dissatisfaction will affect the self esteem of young females negatively.

## **Conclusions and Policy Implications**

The present study empirically examined the significance of the relationships between TV, Magazine, information about fashion, BMI, body dissatisfaction, self-esteem and how these variables affects in the development of eating disorder directly or indirectly. From the analysis, it has been concluded that magazines indirectly plays an important role in the development of eating disorder. Whereas BMI has affects on body dissatisfaction, and body dissatisfaction plays a two sided sword effect, at one side it helps in the development of eating disorder and on other side it decreases the self-esteem of the young girls of Lahore. Therefore greater importance should be placed on educating young females, how body dissatisfaction affects them and how they can avoid body dissatisfaction, so that eating disorder and affect on ones self-esteem remains minimum.

The practical implications of this study would help medical professionals, policy makers and marketers. Medical professionals can address many key issues, like which factors are contributing in the development of body dissatisfaction and eating disorder. According to an expert on eating disorder David M. Garner, eating disorder is the root cause of many diseases, and early identification of eating disorder and factors contributing to eating disorder can lead to earlier treatment and therefore reducing the physical and psychological complications or even death.

Implications for media professionals from this study can be, how information they provide about fashion through different programs and advertisement are processed by the females. Most importantly, they can determine how the information provided is affecting the life of their audiences; how they can improve the quality of their information so that they can become socially responsible personnel and contribute to the society and culture positively. Policy makers are concerned with protecting the interests of the common customer/audience. This study can help determine, how they may influence the media companies, whereas right information should be provided to the audience so that "zero size" should not be promoted especially among the young females as according to (Harrison and Cantor, 1997) young females prevails the risk of developing body dissatisfaction and eating disorder.

# **Limitations and Generalizeability of the Study**

Different limitations were faced during the course of this study, but the major two are limited time and financial resources to conduct the study. Due to these, sampling frame was limited to the city of Lahore.

Generalize ability of current study is significant as number of private and public universities were included in the sampling frame. In contrast, majority of the previous studies (Harrison and Cantor, 1997; Groesz, Levine and Murnen, 2002; Tiggemann, 2003; Tiggemann and Pickering, 1996; Vander Wal, Gibbons et., 2008; Green et al., 2009; Kim and Lennon, 2009) sampling frame was limited to only one university or to only one department of the university. Another point which supports the generalizeability is that all selected fashion magazines for this study are circulated in all major cities of Pakistan.

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# **Direction for Future research**

For Future research, a model should be developed in which, in addition of current variables that are measured to check how they help in the development of eating disorder. Other variables like peer pressure, family pressure, cultural pressure etc should be included. So that more comprehensive picture can be portrayed.