

Body Image of Pakistani Consumers

Tariq Jalees*

Ernest C de Run†

Abstract: *This paper examines how media exposure, self esteem, and religiosity influence body image of Pakistan consumers. The underpinning of this study is based on Social Comparison Theory with two additional variables (religiosity and self esteem) for understanding consumer attitude towards body image. A self administered questionnaire was used. 193 persons responded at mall intercepts. The Conceptual framework was empirically tested through SEM. A positive relationship between exposure to media and body image was found while negative influence was found between self esteem and body image. No relationship was found between religiosity and body image. The results showed mixed outcomes as compared to past studies. The scope of this study is limited to one city only and hence the finding could not be generalized. Future researcher may use a larger sample drawn throughout Pakistan, and by examining whether body image perception varies ethnically, age and gender. Media exposure is affecting the traditional norms and values of Pakistan culture and body image. The obsessions of the media and thin body image have to be controlled and this requires policy changes. Corporate sector might take initiative by not selecting ultra thin models. They might also sponsor public service messages showing ill effects of being ultra thin, and showing that the ultra thin models are not real but are results of artworks and camera angles. Social Comparison Theory with two additional variables religiosity and self esteem has been successfully extended/empirically tested in the domain of Pakistan culture.*

Keywords: Social Comparison Theory, Media Exposure, Self Esteem Religiosity and Body Image.

1 Introduction

A limited numbers of TV channels and magazines were available in Pakistan up to the end of 1980s. In the next few years the growth of media was exponential. As a consequence, now hundreds of foreign and local television channels and magazines are available for the local population (Hassan, 2011; "Media Pakistan," 2009). Media exposure has not only revolutionized the culture but has also affected the local population's perception of body image, dressing habits, styles of living and purchasing behavior (Kamran, 2008). Despite its significance insufficient literature on exposure to media and body image is available on consumers of Pakistan, India and Sri Lanka is not sufficiently available (Kapadia, 2009). Thus, it arises a need to understand body image

* Associate Professor and Head of Marketing, College of Management Sciences, Karachi Institute of Economic and Technology, Creek, Karachi 75190, Pakistan.

† Professor and Dean of Graduate Studies Faculty of Economics and Business, University Malaysia Sarawak, Sarawak, Malaysia.

of Pakistani consumers from a theoretical and quantitative purpose.

In order to fill the above gap a conceptual framework has been developed by incorporating religiosity and self esteem as additional variables in the Social Comparison Theory as these have been identified as important variables in the context of Pakistan. Thus this conceptual framework will help in understanding consumer's attitude on body image in a non-Western country namely Pakistan.

2 Literature Review

In early nineties body image concerned (eating disturbance) was not an issue in India (Khandelwal, Sharan, & Saxena, 1995). In a comparative study between Caucasian and Asians girls it was found that on an overall basis the Asian females were found to be more happier and content with their body image as compared to British Caucasians (Wardle, Haase, & Steptoe, 2005). Interestingly in another study in the United Kingdom it was found that despite the same exposure to media in England the white females had a higher level of body dissatisfaction and calories concern as compared to the Indian and Pakistani living in the same country (Ogden & Elder, 1998). Contrarily, others found that both Indian and Pakistani females immigrants living in the United Kingdom were highly dissatisfied with their body images and shapes (Mumford & Choudhry 2000).

Young Chinese, Indian and European females living in Canada are more concerned about their weight. Indians have more positive body image in comparison to the Chinese, and negative body image as compared to European students (Kennedy , Templeton, Gandhi, & Gorzalka, 2004). University students in Delhi are of the opinion that there is a high correlation between negative body image and maladjustment. However, they also feel that self esteem acts as a moderator between negative body image and maladjustment (Kapadia, 2009). In a comparative study on Indian and Caucasian students it was found that both the groups feel that for improving the body image necessary remedies are dieting, self induced vomiting, use of laxative and water tablets (Button, Reveley, & Palmer, 1998). In another cross culture study on Indian, Tibetan, France and American students no correlation was found between socio economics status, media and body image(Rubin, Gluck, Knoll, Lorence, & Geliebter, 2008).

A comparative study found that Australian females have significantly lower body self esteem, and greater body image dissatisfaction than the Pakistani females belonging to Urdu medium and English medium schools (Mahmud & Crittenden, 2007) It may be pointed out that students in Urdu medium schools generally belong to lower status and English medium school to upper status. The above perception about body image could be attributed to the difference in socio-culture and religious upbringing of Australian and Pakistani respondents (Dolan, 1991; Nasser, 1988). Both Australian and Pakistani female were also of the opinion that their ideal body size is smaller than their actual body sizes (Mahmud & Crittenden, 2007).

Media explosion in Pakistan has adversely affected media consumption trend of the local population. On an average they spent three to four hours on media due to which the cultural norms and values are being distorted (Zia, 2007). Moreover, the

incidence of depression and low self esteem has increased quite significantly in young adults especially females in Pakistan. (Qidwai, Ishaque, Shah, & Rahim, 2010). In the similar context, it has been found that the incidents of eating disorder has also increased significantly in the female medical students of Karachi (Memon et al., 2012). Local females obsession to internalized media images has reached such a level that they are highly unsatisfied with their body image and hence has resorted to starving due to which they are suffering with acute eating disorder. (Daily News Paper, 2007).

Traditionally, Pakistani females were more concerned to have an association with their families, and society with little or no concern about their body image. This is not true anymore. Now in view of their inspiration with celebrities and reference groups they are adopting dressing and grooming practices that are not aligned to Pakistan social context (Abideen, Latif, Khan, & Farooq, 2011).

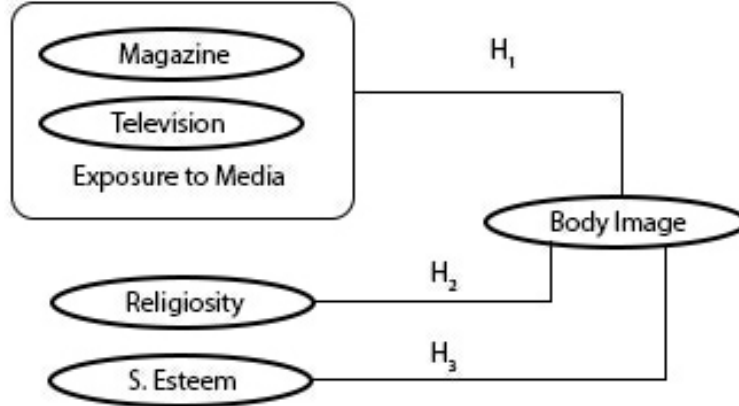
The above discussions contradicts the old perception that the ideal body image of Asian females is influenced by different ideal of body size (Lee, Hsu, & Wing, 1992). In fact preference for thin body image has become international phenomena and is now more or less uniform across all the cultures (Ford, Dolan, & Evans, 1990; Molloy & Herzberger, 1998).

3 Conceptual Framework

The social comparison theory helps in understanding the impact of media and socio cultural factors on body image. It also examines the individual behavior in response to peer groups and other social categories (Milkie & Peltola, 1999). The focal point of the theory is that people compare/internalize themselves with others on the basis of those dimensions that are similar to them (Festinger, 1954; Milkie & Peltola, 1999). The comparison could be either upward or downward. In upward comparison individuals compare themselves with someone who is superior to them which lead to depressed mood. In case of downward comparison people compare themselves with those who are inferior to them on several dimensions, which results in the elevation of mood (Lin & Kulik, 2002; Schooler & Schreiber, 2004; Tiggemann & McGill, 2004). It has also been found that womens exposure to highly attractive models adversely affect their body image and mood (Slater, Henry, Swaim, & Anderson, 2003) as a consequence they resort to buying and shopping for elevating their moods (Gardner & Rook, 1988). An individual can look and compare themselves through various sources but mass media is considered to be the strongest influencer on body image (Field et al., 2001)

Originally, the Social Comparison Theory was applied on opinion and ability evaluation, but now it is being used to measure social comparison effect on self esteem (Richins, 1991). Several studies have demonstrated that there is a link between self esteem and body Image (Martin & Kennedy, 1993) Moreover, it has also been found that high level of religiosity does not affect body image (Boyatzis, 2005). The conceptual frame work developed for this study is depicted in Figure 1, and the final SEM model is depicted in Figure 2.

Figure 1: Conceptual Framework



3.1 Media and Body Image

In view of media exposure conceptual definition of body image has changed considerably. Initially, it was considered as a picture formed by individuals in their mind about their body (T.F. Cash, 2004). Comparatively others were of the opinion that body image is not restricted to visual impact of the body, but is inclusive of collective attitudes and feeling about the body image (Allan, Mayo, & Michel, 1993). Subsequently, body image definition became multidimensional due to inclusion of self attitude towards body image in terms of size, shape and aesthetic. (T.F. Cash, 2004; T. F. Cash & Pruzinsky, 2004). Other additions to the conceptual definition of body image are perceptual and cognitive behaviors (T.F. Cash & Deagle III, 1997).

Media pressure people inclination towards body image has increased significantly, as a results the number and frequency of diet related advertisements in television and magazines have also increased substantially in the United States (Berg, 2001) and world over. Thus both television and magazines are not only sources of internalizing thin models but have completely changed the cultural ideals as well (Berg, 2001; Thompson & Stice, 2001). Circulation and readership of magazines in recent years have increased as readers, especially females want to keep themselves updated on the issues related to beauty, fitness, and grooming products (Tiggemann, 2003).

Television advertisements and magazines are not only source of upward comparison but the images being portrayed are impossible to achieve (Schooler & Schreiber, 2004; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Yelland & Tiggemann, 2003). Since the media images are significantly thinner than most of the individuals in the real world, as a consequence it is one of the major sources of body dissatisfaction (Mason, 2012). These pretty media images have become a benchmark for prettiness and attractiveness to most people in society due to which incidents of body dissatisfaction have increased. Constructs such as internalization, awareness, and perceived pressure to be thin have significant relationship with body image (Cafri, Yamamiya,

Brannick, & Thompson, 2005). Numerous studies have validated the inverse relationship between exposure to media and body image (Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002). This relationship of media exposure and negative effect on body image was again revalidated in an experimental study. In this study one group was exposed to thin media images and the other to neutral images, and it was found that those who were exposed to extra thin model have significantly higher effect on body image dissatisfaction as compared to those who were exposed to neutral images (Folger & Reeb, 2010). Based on the above discussion the following hypothesis has been generated. Thus the following hypothesis has been formulated:

H1: There is positive relationship on media exposure and body image dissatisfaction.

3.2 Self-esteem and Body Image

It has been found that a direct relationship between self esteem and body image exist (Martin & Kennedy, 1993). Self esteem plays a significant role in an individuals social behaviors, physical and mental health (Mann, Hosman, Schaalma, & Nanne, 2004). Rosenberg (1965) defined self esteem as a favorable or unfavorable attitude toward the self (p. 15), while other researchers refer self esteem as favorable or unfavorable self assessment (Cooper & Taylor, 1988).

Individuals with low or negative self esteem are more vulnerable to poor health, and social problems including depression, anxiety and eating disorder (Mann, et al., 2004). Comparatively, highly esteemed persons generally are in good health, and have positive social behavior such as satisfaction, and success. Perception about the physical attractiveness plays a significant role towards self esteem (Kim & Lennon, 2007). Several studies have demonstrated that high self esteem act as a buffer against body dissatisfaction and eating disorder (Geller, Zaitsoff, & Srikameswaran, 2002; Tigge-mann & Williamson, 2000). For example Frost & McKelvie (2004) found a positive correlation between self esteem, and body dissatisfaction for children, adolescent, and adults. Similarly, in an another study it was found that female college students with high perception about their body image, had a high level of self esteem as compared to those who have low perception about their body image (Geller, et al., 2002). Based on the above discussions the following hypothesis has been generated:

H2: There is a negative relationship between those with high self esteem and body image dissatisfaction.

3.3 Religiosity and Body image

Religiosity refers to level of commitment to a religious group, and it plays a significant role in influencing consumer attitude and behavior, whereas attitude is based on consumers belief or religion (Essoo & Dibb, 2004). Religious philosophy provides a frame of reference on how to live, and behave in a society (Weaver & Agle, 2002), therefore, the impact of media exposure on body image should vary with the level of religiosity.

The interest of social scientist in investigating the relationship between religion and health issues has grown significantly in the last few years (Ellison & Levin, 1998). Religiosity and religious involvement have positive influence on several variables including physical health and morality (Hummer, Rogers, Nam, & Ellison, 1999; McCullough,

Hoyt, Larson, Koenig, & Thoresen, 2000; Sherkat & Ellison, 1999; Strawbridge, Cohen, Shema, & Kaplan, 1997).

It has been found that high level of religiosity does not affect body image. In this contest Boyatzis and colleagues carried out a series of research in which they explored the relationship between religiosity, eating disorder and body image. In one such study, it was found that girls belief in God significantly affects her body image perception. Girls with higher level of belief in God, also had higher perception about their body image. ("Body Image and Eating Disorder in Women," 2010). It was found that women with healthier body image were closer to God, prayed more often and consider their body as Holy and Sacred.

Moreover, those women who are open to change in their religious belief had lower perception towards their body image (Boyatzis, 2005). In a similar study, it was found that women who spent more time on reading religious books were less concern about their body image perception ("Body Image and Eating Disorder in Women," 2010). Thus the following hypothesis has been generated.

H3: There is a negative relationship between those with high religiosity and body image dissatisfaction.

4 Methodology

4.1 Sample and sampling technique

An appropriate sample size is critical for any research. However, there is no consensus on this issue. For example a sample of 30 per variable is sufficient in multivariate analysis (Sekaran, 2003), while, 30 samples for Structural Equation Model is certainly not sufficient (Hair Jr., Anderson, Tatham, & Black, 2007). Some are of the opinion that a minimum sample size of 100 to 150 will be sufficient in SEM analysis (Anderson & Gerbing, 1988). On the other extreme some have recommended a sample size of 400 while others are of the opinion that a sample size of 5000 may not be sufficient in some case (Boomsma, 1982, 1983; Hu, Bentler, & Kano, 1992). The sample size used in this study is 193 which are in conformity to what has been suggested by Anderson & Gerbing (2007).

Probability sampling is generally preferred over non-probability sampling when overall generalize ability is critical for the study. However, for probability sampling a pre-requisite is defining sampling frame, which is not possible if the research is consumer oriented and national based (Saunders, Lewis, & Thornhill, 2009). Thus, the researcher has used quota sampling by allocating 225 samples to five high income areas of the city (Karachi, Pakistan). Data was collected through mall intercept method.

4.2 Measure and Scale

Instrument used in this thesis are those which have established reliabilities and have been used in the similar context of the research.

4.2.1 Media Exposure Scale

For this study, exposure to media was measured through the media consumption scale MCS (Stice & Shaw, 1994). The original scale had seven questions. Four were related to TV programs in which the respondents were required to indicate the time they spent watching four named programs. Similarly they were required to indicate the time they spent reading three named magazines. The reported reliability for media as a whole was 0.73, and for TV and magazine were 0.69 and 0.67, respectively (Varnado, 2000).

The same measure was used in this study with a few modifications. Since original questionnaire was recall dependent which generally are not recommended, therefore, they were converted to seven points Likert scale. Seven in the scale indicates very high exposure to media and one very low exposure. Moreover, the TV programs and magazines on which the respondents were asked to give their rating were local TV programs and magazines.

4.2.2 Body Image Dissatisfaction Scale

Body image dissatisfaction scale administered by (French & B.Terrell, 2005) in their study was used in this study. These authors have combined two subscales of Eating Disorder Inventory (Garner, Olmstead, & Polivy, 1983). In all there were 16 items, seven were related to Drive for thinness, and nine items were related to persons negative emotions about different parts of the body. The original scale was on six points Likert scale, with a reported reliability of 0.94 which in this study was converted to seven point Likert scale. Again seven in the scale shows very high body image dissatisfaction and one very low.

4.2.3 Self Esteem Scale

The ten items self esteem questionnaire developed by Rosenberg (1965) has been used in this study. The original scale was based on four points with a reported reliability 0.85(Silber and Tippet, 1965). In this study the same scale was converted to seven point liker scale seven showing high level of agreement and one high level of disagreement.

4.2.4 Religiosity Scale

Religious Commitment Inventory Scale-10, developed by Worthington, et. al (2003) has been used in this study. This questionnaire was based on 5-point Likert scale, with reported reliability of 0.93. In this study the same scale was converted to seven point liker scale seven showing high level of agreement and one high level of disagreement.

4.3 Outliers and Normality

Test of normality of data was carried out in several stages. Initially, Box, Whisker, and Steam Leaf were plotted for identifying outliers. Outliers are those observations which are significantly different than the entire sample data(Hair Jr., et al., 2007).

If outliers are greater than five percent then suggested remedy is to recode them to the nearest upward or lower values (Meyers, Gamst, & Guarino, 2006). On the other hand if it is up to 1% than it is suggested is to carry them for further analysis as their effects would be insignificant (Meyers, et al., 2006). Since, the outliers in this study were less than 1%, therefore they were neither dropped nor recoded.

Normality of data in this study was also ascertained by converting each case to Z-score and removing those cases which exceeded 2.5. Moreover, normality of the data was also ascertained through Skewness and Kurtosis tests. The Skewness and Kurtosis of all constructs were within prescribed range of 1.5 (Leech, Barrett, & Morgan, 2005).

4.4 Research technique

SPSS-v19 has been used for normality of data, EFA, and reliability analyses. AMOS-v18 has been used to test the measurement model and structural model for assessing the derived hypotheses. Structural Equation Model (SEM) has been used because of its efficiency in multivariate approach for assessing theories (Hair Jr, Black, Babin, Anderson, & Tatham, 2010).

A typical six stage procedure for SEM was employed in this study (Hair Jr, et al., 2010). Initially an Exploratory Factor Analysis (EFA) was carried out for all the constructs separately to identify the items to be retained or dropped. Subsequently, reliabilities of each construct were obtained through Cronbach Alpha, which should be at least 0.70 (Leech, et al., 2005). Also Convergent and Discriminant Validity for all the constructs were also measured. Convergent Validity was used to measure the convergent of items on single construct (Steenkamp & Van Trijp, 1991), while Discriminant validity was used to measure the uniqueness and distinctiveness of each measure as compares to others (Hair Jr, et al., 2010). Finally CFA for all the exogenous models and overall model were worked out which are discussed in the subsequent section.

A typical two step approach was used for SEM analysis (Gerbing & Anderson, 1988). In the first stage, measurement items of each construct were subjected to confirmatory analysis (CFA) to ascertain whether measurement variables including body image, self esteem, religiosity, and exposure to media reflects hypothesized latent variables. At the CFA stage three criteria were used for improving the fitness of the model, which are: Standardized Regression Weights (should be at least 0.40 for all the latent variables) (Singh, 1995); Standardized Residual Covariance (should be less than 2.58) (Joreskog & Sorbom, 1988); and Modification Index (should be lesser than 10) (Joreskog & Sorbom, 1988).

Additionally the following statistics were also employed for ascertaining the overall fitness of the model. Chi Square statistic (Bollen, 1989) was used to measure the variance between observed and expected covariance matrices. In case the Chi Square value is close to zero than the probability value must be significant ($p < 0.05$). Chi Square value is generally reported as a tradition, due to its limitations. For example it is sensitive to sample size, and properly fit model might get rejected due to deviation from normality (Bentler & Bonett, 1980; Joreskog & Sorbom, 1988; McIntosh, 2007).

The Comparative Fit Index (CFI) is based on adjusted sample size. CFI index

should be at least 0.90 or greater (Hu & Bentler, 1999). Root Mean Square Error of Approximation (RMSEA) is related to residual in the model. RMSEA value should be of 0.08 or less (Hu & Bentler, 1999). The CFI is an improved version of NFI. CFI should also be at least 0.90 (Gerbing & Anderson, 1988; Hair Jr, et al., 2010). Since AGFI also consider the complexity of the model, therefore, its value is generally lesser than GFI (Hair Jr, et al., 2010).

5 Results

5.1 Normality of Data through Standardized Z-Score

The normality of the data was tested by converting all the 193 cases to standardized Z-score. The summarized results depicted in Table 2 shows that all the cases were within the prescribed limit of 2.5.

| | Min | Max |
|----------------------------|--------|-------|
| Body Image Dissatisfaction | -1.887 | 2.506 |
| Religiosity | -2.511 | 1.739 |
| Self Esteem | -2.481 | 2.313 |
| Exposure to media | -2.45 | 2.065 |

5.2 Descriptive and Reliability of Initial Constructs

The instrument used for this paper comprised of constructs which were earlier used by the researchers and therefore have established validities and reliabilities. However, the reliabilities of the used constructs were again reestablished, and the summarized results are presented in Table-3.

| Construct | Mean | St.Dev | Skewness | Kurtosis | Reliability |
|-------------------|-------|--------|----------|----------|-------------|
| Body Image | 4.233 | 1.024 | 0.781 | -0.414 | 0.751 |
| Self Esteem | 5.121 | 0.994 | -0.616 | -0.494 | 0.813 |
| Exposure to Media | 4.79 | 0.877 | 0.266 | -0.403 | 0.805 |
| Religiosity | 4.36 | 0.926 | 0.062 | -0.251 | 0.902 |

Table-3, shows that the reliability of religiosity was the highest ($=.902$, $M=4.360$, $SD= 0.926$) followed by self esteem ($=.813$, $M= 5.124$, $SD=.994$), exposure to media ($=.805$, $M=4.790$, $SD= 0.877$) and body Image ($=.751$, $M= 4.233$, $SD= 1.024$) which are within the acceptable range indicating that the respective items have reasonable internal consistency and reliability.

Table 3, also shows that since all the constructs in terms of Skewness and Kurtosis are within the range of 1.5, therefore it could be safely assumed that the data has normal tendency.

5.3 Exploratory Factor Analysis

Principal factor analysis with Varimax Rotation was applied on the four constructs. The assumption of independent sampling, linear relationships, and moderate correlations were met, and the final results are summarized in Table 4.

| Construct | Items | KMO | Barley Test | Cumulative Factor loading | Items Retained |
|----------------------------|-------|-------|-------------|---------------------------|----------------|
| Self Esteem | 10 | 0.814 | 1005.283 | 71.07% | 10 |
| Body Image Dissatisfaction | 11 | 0.698 | 508.737 | 62.15% | 8 |
| Religiosity | 10 | 0.895 | 831.107 | 60.11% | 9 |
| Exposure to Media | 11 | 0.861 | 694.615 | 61.739 | 9 |

Table 4 shows that all the items of self esteem were retained as they fulfilled the prescribed criteria. However for the rest of the constructs at least one item had to be dropped as they were not fulfilling the prescribed requirements.

5.4 Validity of the Final Constructs

Since all the factor loadings of all the indicator variables were greater than 0.40 and goodness of fit indexes were within the prescribed limit therefore convergent validity requirement have also been met (Hsieh & Hiang, 2004; Shammout, 2007).

Discriminant validity shows the uniqueness of the variables (Hair et al. 2010). Discriminant validity was established though correlation of the entire final constructs on one to one basis. In order to fulfill the discriminant validity, the correlations on one to one basis must be less than 0.85 (Kline, 2005; Shammout, 2007). The results of discriminant validity show that all the pairs of correlations are within the prescribed limit of 0.85.

| | Body Image | Religiosity | Self Esteem | Media Exposure |
|----------------|------------|-------------|-------------|----------------|
| Body Image | 1 | | | |
| Religiosity | 0.342 | 1 | | |
| Self Esteem | -0.345 | -0.041 | 1 | |
| Media Exposure | 0.336 | 0.292 | -0.049 | 1 |

5.5 Confirmatory Factor Analysis

CFA is a test for measurement theories (Hair et al, 2006, p. 747). In CFA, the specified number of factors and items (indicators) are initially developed on theory than required statistical analyses are carried out. The summarized CFA results of the four constructs are presented in Table 6.

Factor loading for each observed variable is at least 0.40 and hence meeting the minimum requirement of factor loading of 0.40. Moreover, standardized residual were below 2.58 (Hair Jr. et al., 2007). All the Fit indexes for each of the exogenous model are within/close to the prescribed limit (See Table 6). Based on these results the overall model through SEM was tested which is discussed in subsequent section.

| Construct | Self Esteem | Body image | Religiosity | Media Exposure | Criteria |
|-----------|-------------|------------|-------------|----------------|----------|
| χ^2 | 23.636 | 9.858 | 56.5 | 25.15 | Low |
| Prob | 0.005 | 0.007 | 0.000 | 0.000 | <0.05 |
| CMIN/df | 2.626 | 4.929 | 2.828 | 2.794 | <5.0 |
| GF1 | 0.976 | 0.895 | 0.905 | 0.915 | >0.90 |
| AGFI | 0.938 | 0.969 | 0.958 | 0.967 | >0.90 |
| CFI | .976 | 0.958 | 0.955 | 0.966 | >0.90 |
| RMSEA | 0.092 | 0.143 | 0.098 | 0.097 | <0.08 |

5.6 Overall Model

The overall SEM model comprise of four exogenous models namely, exposure to media, self esteem, religiosity and body image. The CFA result of each exogenous model has been discussed in earlier section, the overall final model is depicted in Figure 2.

Figure 2: Final SEM Model

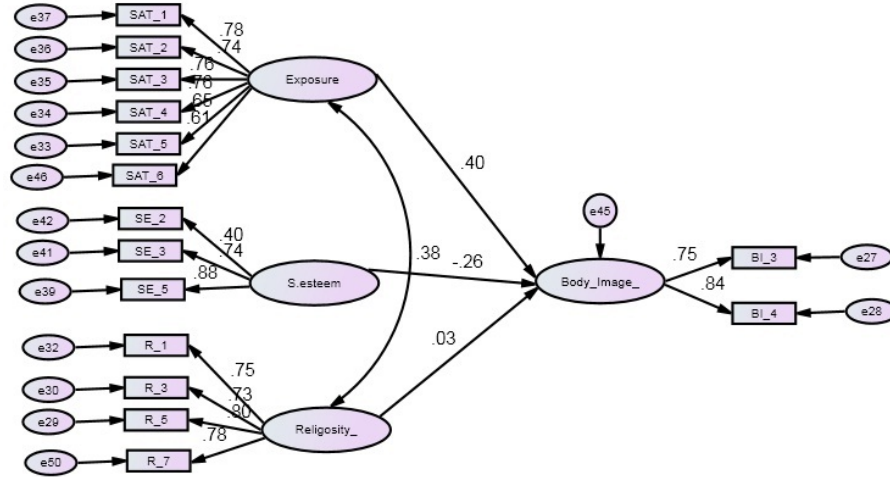


Figure 2 for the overall model shows that factor loading for each observed variable is at least 0.40 and hence meeting the minimum requirement of factor loading of 0.40. Moreover, standardized residual were below 2.58 (Hair Jr., et al., 2007). Goodness of fit indexes is within the prescribed limits which are discussed in the following paragraph.

The Chi Square value (Absolute Fit Indices) was significant ($\chi^2 = 124.971$, $df = 87$, $p = .004 < .05$). The CMIN/df (Relative χ^2/df) was $1.451 < 5$. The Root Mean Square Error of Approximation (RMSEA) = $0.048 < 0.08$ meet both the absolute of goodness-of-fit and badness-of-fit criteria. The Relative Fit Index (RFI) = $0.940 > 0.90$ and the Incremental Fit Index (IFI) = $0.996 > 0.900$ and Adjusted Good of Fitness Index AGFI = $0.978 > 0.90$ meet the Incremental Fit Index Criteria. In sum, the CFA results indicate that the overall exogenous model is a good fit.

5.7 Hypotheses Results

SEM model depicted in Figure 2 above shows that all two developed hypotheses were accepted, and one was rejected. The summarized results are presented in Table 7.

| Hypothesized Path | Standardized Estimates | Critical Ratio | Supported |
|-------------------------------|---------------------------|-------------------|-----------|
| Media exposure and Body Image | 0.401 | 3.94 | Yes |
| Self Esteem and Body Image | -0.257 | -2.543 | Yes |
| Religiosity and Body Image | -0.034 | 0.376 | NO |

The relationship between religiosity and body image was negative, but it was non-significant.

6 Discussions and Conclusion

Body image concerned is an issue which was more severe in Western culture, but non-significant in Eastern Culture such as Pakistan. But media explosion in Pakistan in last one decade has become a major source for changing traditional norms and values. Thin body in Pakistani culture was considered unhealthy and a bit of body heaviness (not excessive weight) was considered as a healthy and symbol of prosperity. But now obsession towards ideal body image has increased significantly in Pakistani culture as well. Hence the local population is facing issues related to body image, which Western Culture faced a few decades ago.

Thus it was felt that there is a need to develop a conceptual framework for understanding consumer attitude towards body image. Therefore a new conceptual framework based on Social Comparison Theory with two additional variables religiosity and self esteem was proposed and empirically tested in understanding consumer behavior in the context of exposure to media, self esteem, and religiosity towards the body image of Pakistani consumers.

Although the results in the context of exposure to media and body image, and exposure to media and self esteem were consistent to some earlier studies and inconsistent to others, but the surprising results was no relationship between religiosity and body image (discussed in detailed in subsequent paragraphs). Pakistan being prominently, a Muslim state, it was expected that people with high level of religiosity will have a significant negative effect on body image (concerned/dissatisfaction). Two possible reasons could be extended for these findings. Influences of media and ethnicity are so in Pakistan, that they have overridden the influence of on body image. The above are discussed in more detail in the following paragraphs.

A positive relationship was found between exposure to media and body image. This in essence means that higher exposure to media would lead to more concerned about body image. This result substantiates the findings of Stice & Shaw (1994) who also found that two predictors magazine and television exposure have relationship with the depended variable body image. Stice and Shaw(1994), also found that exposure to media adversely affects body image (especially women), which leads to increase in depression feeling, unhappiness, shame, guilt, and decreased confidence (Stice, Schupak-Neuberg, Shaw, & Stein, 1994). On the other hand the finding of the

others are contradictory to the finding of this paper, and of Stice and Shaw(1994), who found no significant relationship between exposure to media and body dissatisfaction exists (Mizes et al., 2000).

A negative relationship was found between self esteem and body image, this in essence means that consumers with higher self esteem would be lesser concerned about body image. This finding is consistent several earlier studies. For example Martin & Kennedy (1993) found a direct relationship between self esteem and body image. Similarly, others in their studies have demonstrated that high self esteem act as a buffer against body dissatisfaction and eating disorder (Geller, et al., 2002; Tiggemann & Williamson, 2000). Moreover, Frost & McKelvie (2004) found positive correlation between self esteem, and body dissatisfaction for children, adolescent, and adults. In an another study it was found that college students with high perception about their body image, also have high level of self esteem as compared to those who have low perception about their body image (Geller, et al., 2002).

No relationship was found between religiosity and body image concerned. This finding is inconsistent with earlier studies. For example in a study it was found that the religious philosophy provides frame of reference on how to live, and behave in a society (Weaver & Agle, 2002), therefore, the impact of media exposure on body image would vary with the level of religiosity. Similarly, Boyatzis and colleagues carried out a series of research in which they explored the relationship between religiosity, eating disorder and body image. In this study it was found that girls belief in God has helped her to have a positive body image perception("Body Image and Eating Disorder in Women," 2010).

Islamic religion prohibits taking pride in physical attributes and comparing others on the basis of color and physical attributes therefore it should results in lower body dissatisfaction (Ahmad, Waller, & Verduyn, 1994). Although, there was non-significant relationship between religiosity, and the body image, but still it could be used for discouraging body-image dissatisfaction, as the relationship was negative. Since the influence of the media is stronger therefore, legislations could be developed which discourage displaying very thing model images. Public service messages could also be displayed on the ill effects of being thin and communicating to the audience that the image being displayed are not real but the results of artworks and using different camera angles. Moreover, it has also been found that due to the recent availability of media the youth in Pakistan have become so obsessed with it that they are watching television very extensively four hours daily. Thus the parents and teachers should encourage youth to get involved in constructive physical activities and hobbies.

7 Limitation and Future Research

The scope of this study is limited to one city only and hence the finding could not be generalized as being overall perception of Pakistans consumers. Since Karachi has diversified ethnicity, therefore, the sample should have been drawn in such a manner that it would have reflected the perception of all the ethnical population living in Karachi. Future researcher may use a larger sample drawn on all Pakistan bases. They could explore whether the body image perception varies ethnically, by age and

gender.

References

- Abideen, Z. U., Latif, A., Khan, S., & Farooq, W. (2011). Impact of media on development of eating disorders in young females of Pakistan. *"International Journal of Psychological Studies"*, 3(1), p122.
- Ahmad, S., Waller, G., & Verduyn, C. (1994). Eating attitudes and body satisfaction among Asian and Caucasian adolescents. *"Journal of adolescence"*.
- Allan, J. D., Mayo, K., & Michel, Y. (1993). Body size values of white and black women. *"Research in nursing & health"*, 16(5), 323-333.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *"Psychological Bulletin"*, 103(3), 411.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *"Psychological Bulletin"*, 88(3), 588.
- Berg, F. M. (2001). Children and Teens Afraid to Eat: Helping youth in today's weight-obsessed world. *"Healthy Weight Publishing Network"*.
- Body Image and Eating Disorder in Women.(2010).Retrieved september 22, 2011, from http://exhumator.com/00-031-01_esoteric-religious-spiritual-body-image-and-eating-disorders-women.html
- Bollen, K. A. (1989). Structural equations with latent variables. New York: Wiley.
- Boomsma, A. (1982). The robustness of LISREL against small sample sizes in factor analysis models. Systems under indirect observation: Causality, structure, prediction, 1, 149-173.
- Boomsma, A. (1983). On the robustness of LISREL (maximum likelihood estimation) against small sample size and non-normality. Rijksuniversiteit Groningen.
- Boyatzis, C. J. (2005). Religious and spiritual development in childhood. *"Handbook of the psychology of religion and spirituality"*, 123-143.
- Button, E., Reveley, C., & Palmer, R. (1998). An ethnic comparison of eating attitudes and associated psychological problems in young British women. *"International Journal of Eating Disorders"*, 23(3), 317-323.
- Cafri, G., Yamamiya, Y., Brannick, M., & Thompson, J. K. (2005). The Influence of Sociocultural Factors on Body Image: A MetaAnalysis. *Clinical Psychology: Science and Practice*, 12(4), 421-433.
- Cash, T. F. (2004). Body image: Past, present, and future. *Body Image*, 1(1), 1-5.
- Cash, T. F., & Deagle III, E. A. (1997). The nature and extent of body image disturbances in anorexia nervosa and bulimia nervosa: A metaanalysis. *"International Journal of Eating Disorders"*, 22(2), 107-126.
- Cash, T. F., & Pruzinsky, T. (2004). Body image *"A handbook of theory, research, and clinical practice: The Guilford Press"*.

- Cooper, P. J., & Taylor, M. J. (1988). Body image disturbance in bulimia nervosa. *"British Journal of Psychiatry"*.
- Daily News Paper. (2007). Study reveals high occurrence of eating disorders in Pakistan. Karachi. Retrieved from <http://dailytimes.com.pk/default.asp?date=5/20/2007%209:48:01%20PM>
- Dolan, B. (1991). Cross-cultural aspects of anorexia nervosa and bulimia: A review. *"International Journal of Eating Disorders"*.
- Ellison, C. G., & Levin, J. S. (1998). The religion-health connection: Evidence, theory, and future directions. *"Health Education & Behavior"*, 25(6), 700.
- Essoo, N., & Dibb, S. (2004). Religious influences on shopping behaviour: An exploratory study. *"Journal of Marketing Management"*, 20, 7(8), 683-712.
- Festinger, L. (1954). A theory of social comparison processes. *"Human relations"*, 7(2), 117-140.
- Field, A. E., Camargo, C. A., Taylor, C. B., Berkey, C. S., Roberts, S. B., & Colditz, G. A. (2001). Peer, parent, and media influences on the development of weight concerns and frequent dieting among preadolescent and adolescent girls and boys. *"Pediatrics"*, 107(1), 54.
- Folger, S. F., & Reeb, R. N. (2010). Variables moderating effects of thin-ideal media on body image. Paper presented at the Midwestern Psychological Association.
- Ford, K. A., Dolan, B. M., & Evans, C. (1990). Cultural factors in the eating disorders: A study of body shape preferences of Arab students. *"Journal of psychosomatic research"*, 34(5), 501-507.
- French, A. D., & B. Terrell, H. (2005). Terrell Effect of Exposure to Media Images on Perceptual Body Image Distortion and Affective Dissatisfaction. Retrieved from psych.hanover.edu/departments/youngst/IS/Terrell%20&%20
- Gardner, M. P., & Rook, D. W. (1988). Effects of impulse purchases on consumers affective states. *"Advances in consumer research"*, 15(1), 127-130.
- Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *"International Journal of Eating Disorders"*.
- Geller, J., Zaitsoff, S. L., & Srikameswaran, S. (2002). Beyond shape and weight: Exploring the relationship between nonbody determinants of self esteem and eating disorder symptoms in adolescent females. *"International Journal of Eating Disorders"*, 32(3), 344-351.
- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *"Journal of marketing research"*, 186-192.
- Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: a meta-analysis of experimental and correlational studies. *"Psychological Bulletin"*, 134(3), 460.
- Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A metaanalytic review. *"International Journal of Eating Disorders"*, 31(1), 1-16.

- Hair Jr, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2010). Multi-variate data analysis New Jersey: Pearson Education.
- Hair Jr., J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2007). Multi-variate data Analysis (6th Ed.). . New Jersey: Prentice Hall International, Inc.
- Hassan, R. U. (2011). Media boom: 90 channels, 106 FM stations in 10 years. ViewPoint, (16). Retrieved from <http://www.viewpointonline.net/media-boom-90-channels-106-fm-stations-in-10-years.html>
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: guidelines for determining model fit. *"Electronic Journal of Business Research Methods"*, 6(1), 53-60.
- Hsieh, Y. C., & Hsiang, S. T. (2004). A study of the impacts of service quality on relationship quality in search-experience-credence services. *Total Quality Management and Business Excellence*, 15(1), 43-58.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *"Structural Equation Modeling: A Multidisciplinary Journal"*, 6(1),1-55.
- Hu, L., Bentler, P. M., & Kano, Y. (1992). Can test statistics in covariance structure analysis be trusted? *"Psychological Bulletin"*, 112(2), 351.
- Hummer, R. A., Rogers, R. G., Nam, C. B., & Ellison, C. G. (1999). Religious involvement and US adult mortality. *"Demography"*, 36(2), 273-285.
- Joreskog, K. G., & Sorbom, D. (1988). Prelis. A Program for Multivariate Data Screening and Data Summarization. User's Guide. *"Chicago, Scientific Software International"*.
- Kamran, R. (2008). Pakistan Television Retrieved November 12, 2010, from <http://www.scribd.com/doc/18271317/Mass-Media-in-Pakistan-by-Raja-Kamran>
- Kapadia, M. K. (2009). Body Image in Indian Women as Influenced by the Indian Media Unpublished Phd Dissertation, Texas Women University, Denton.
- Kennedy , M. A., Templeton, I., Gandhi, A., & Gorzalka, B., B. (2004). Asian Body Image Satisfaction: Ethnic and Gender Differences Across Chinese, Indo-Asian and European Decedent Students Eating Disorder, 12, 321-326.
- Khandelwal, S. K., Sharan, P., & Saxena, S. (1995). Eating disorders: an Indian perspective. *"International Journal of Social Psychiatry"*, 41(2), 132-146.
- Kim, J. H., & Lennon, S. J. (2007). Mass media and self-esteem, body image, and eating disorder tendencies. *"Clothing and Textiles Research Journal"*, 25(1), 3.
- Kline, T. (2005). B. Sulsky, LM, & Rever-Moriyama, SD (2000). Common method variance and specification errors: A practical approach to detection. *"Journal of Psychology"*, 134, 401-421.
- Lee, S., Hsu, L., & Wing, Y. (1992). Bulimia nervosa in Hong Kong Chinese patients. *The British "Journal of Psychiatry"*, 161(4), 545-551.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2005). SPSS for intermediate statistics: Use and interpretation: Lawrence Erlbaum Assoc Inc.

- Lin, L. F., & Kulik, J. A. (2002). Social comparison and women's body satisfaction. *"Basic and Applied Social Psychology"*, 24(2), 115-123.
- Mahmud, N., & Crittenden, N. (2007). A comparative study of body image of Australian and Pakistani young females. *"British Journal of Psychology"*, 98(2), 187-197.
- Mann, M., Hosman, C. M. H., Schaalma, H., & Nanne, K. (2004). de Vries (2004)," Self-Esteem in a Broad-Spectrum Approach for Mental Health Promotion,". *"Health Education Research"*, 19(4), 357-372.
- Martin, M. C., & Kennedy, P. F. (1993). Advertising and social comparison: Consequences for female preadolescents and adolescents. *"Psychology and marketing"*, 10(6), 513-530.
- Mason, S. E. (2012). The Effect of Thin-Ideal Media On Body Image:An Experiment Using the Solomon Four-Group Design. Unpublished Master Thesis University of Dayton, Dayton.
- McCullough, M. E., Hoyt, W. T., Larson, D. B., Koenig, H. G., & Thoresen, C. (2000). Religious involvement and mortality: A meta-analytic review. *"Health Psychology"*, 19(3), 211.
- McIntosh, C. N. (2007). Rethinking fit assessment in structural equation modelling: A commentary and elaboration on Barrett (2007). *"Personality and Individual Differences"*, 42(5), 859-867.
- Media Pakistan. (2009). Retrieved November, 12, 2010, from http://mediapakistan.com/index.php?option=com_frontpage&Itemid=1
- Memon, A. A., Adil, S. E. R., Siddiqui, E. U., Naeem, S. S., Ali, S. A., & Mehmood, K. (2012). Eating disorders in medical students of Karachi, Pakistan-a cross-sectional study. *BMC Research Notes*, 5(1), 84.
- Meyers, L. S., Gamst, G., & Guarino, A. (2006). Applied multivariate research: Design and interpretation: Sage Publications, Inc.
- Milkie, M. A., & Peltola, P. (1999). Playing all the roles: Gender and the work-family balancing act. *"Journal of Marriage and the Family"*, 476-490.
- Mizes, J. S., Christiano, B., Madison, J., Post, G., Seime, R., & Varnado, P. (2000). Development of the Mizes Anorectic Cognitions questionnaire revised: Psychometric properties and factor structure in a large sample of eating disorder patients. *"International Journal of Eating Disorders"*, 28(4), 415-421.
- Molloy, B. L., & Herzberger, S. D. (1998). Body image and self-esteem: A comparison of African-American and Caucasian women. *"Sex Roles"*, 38(7), 631-643.
- Mumford, D. B., & Choudhry, I. Y. (2000). Body Disatisfaction and Eathing Attitudes in Slimming and Fitness Gyms in London and Lahore: A Cross Cultural Study. *"European Eating Disorders Review"*, 8(2), 217-224.
- Nasser, M. (1988). Eating disorders: the cultural dimension. *"Social Psychiatry and Psychiatric Epidemiology"*, 23(3), 184-187.
- Ogden, J., & Elder, C. (1998). The role of family status and ethnic group on body image and eating behavior. *"International Journal of Eating Disorders"*, 23(3), 309-315.

- Qidwai, W., Ishaque, S., Shah, S., & Rahim, M. (2010). Adolescent lifestyle and behaviour: A survey from a developing country. *"PloS one"*, 5(9), e12914.
- Richins, M. L. (1991). Social comparison and the idealized images of advertising. *"Journal of Consumer research"*, 71-83.
- Rubin, B., Gluck, M., Knoll, C., Lorence, M., & Geliebter, A. (2008). Comparison of eating disorders and body image disturbances between Eastern and Western countries. *"Eating and Weight Disorders"*, 13(2), 73-80.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students: Prentice Hall.
- Schooler, J., & Schreiber, C. A. (2004). Experience, meta-consciousness, and the paradox of introspection. *"Journal of Consciousness Studies"*, 11, 7(8), 17-39.
- Sekaran, U. (2003). Research methodology for business: New York: John Wiley & Sons, Inc.
- Shammout, A. B. (2007). Evaluating an Extended Relationship Marketing Model for Arab Guests of Five-Star Hotels. Unpublished PhD Dissertation, University Melbourne, Victoria
- Sherkat, D. E., & Ellison, C. G. (1999). Recent developments and current controversies in the sociology of religion. *"Annual Review of Sociology"*, 363-394.
- Singh, D. (1995). Female judgment of male attractiveness and desirability for relationships: Role of waist-to-hip ratio and financial status. *"Journal of personality and social psychology"*, 69(6), 1089.
- Slater, M. D., Henry, K. L., Swaim, R. C., & Anderson, L. L. (2003). Violent media content and aggressiveness in adolescents. *Communication Research*, 30(6), 713.
- Steenkamp, J. B. E. M., & Van Trijp, H. (1991). The use of LISREL in validating marketing constructs. *"International Journal of Research in marketing"*, 8(4), 283-299.
- Stice, E., Schupak-Neuberg, E., Shaw, H. E., & Stein, R. I. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. *"Journal of Abnormal Psychology"*, 103(4), 836.
- Stice, E., & Shaw, H. E. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology. *"Journal of Social and Clinical Psychology"*, 13(3), 288-308.
- Strawbridge, W. J., Cohen, R. D., Shema, S. J., & Kaplan, G. A. (1997). Frequent attendance at religious services and mortality over 28 years. *"American Journal of Public Health"*, 87(6), 957.
- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*: American Psychological Association.
- Thompson, J. K., & Stice, E. (2001). Thin-ideal internalization: Mounting evidence for a new risk factor for body-image disturbance and eating pathology. *"Current Directions in Psychological Science"*, 10(5), 181.
- Tiggemann, M. (2003). Media exposure, body dissatisfaction and disordered eating: television and magazines are not the same! *"European Eating Disorders Review"*, 11(5), 418-430.

- Tiggemann, M., & McGill, B. (2004). The role of social comparison in the effect of magazine advertisements on women's mood and body dissatisfaction. *"Journal of Social and Clinical Psychology"*, 23(1), 23-44.
- Tiggemann, M., & Williamson, S. (2000). The effect of exercise on body satisfaction and self-esteem as a function of gender and age. *"Sex roles"*, 43(1), 119-127.
- Varnado, J. L. (2000). The Effects of Media Exposure on Body Satisfaction, Beliefs about Attractiveness, Mood and Bulimic Symptomatology Among College Women. Unpublished Phd Dissertation, University of North Texas.
- Wardle, J., Haase, A., & Steptoe, A. (2005). Body image and weight control in young adults: international comparisons in university students from 22 countries. *"International Journal of Obesity"*, 30(4), 644-651.
- Weaver, G. R., & Agle, B. R. (2002). Religiosity and ethical behavior in organizations: A symbolic interactionist perspective. *"Academy of Management Review"*, 77-97.
- Yelland, C., & Tiggemann, M. (2003). Muscularity and the gay ideal: Body dissatisfaction and disordered eating in homosexual men. *"Eating Behaviors"*, 4(2), 107-116.
- Zia, A. (2007). Effects of cable television on women in Pakistan: A comparative study of heavy and light viewers in Lahore. Retrieved from <http://pr.hec.gov.pk/thesis/35s.pdf>.