

## **Effects of Instagram False Reality on Body Image among University Students of Pakistan**

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### **Abstract**

Internet, especially the advent to social media has truly revolutionized the globe, making human beings more aware and more addicted at the same time. Social networking sites have been adopted by its users with immense speed, creating borderless social communities and spreading global trends with viral effects. It has also been observed that youth, being digital natives, is more active, persistent and creative user of such platforms. Hence, they are more into tendencies of freely sharing their thoughts, acts and ideals as well as adopting what matches their opinion and feelings. Female users, according to research, have been found more effected by the social media, especially regarding body image, intra-sexual competition, body dissatisfaction and drive for thinness etc. It has been observed that body ideals cultivate distress and dissatisfaction among female users of social media. The apps and tools of photo editing and makeup filters further aggravated the effects of photo activity on social media. Instagram, as one of the leading social networking site, has multiple such tools to craft false realities by editing photos. Such false realities have potential to create multiple effects on users, especially female users regarding the body image. This research, by inquiring 400 female university students of Lahore-Pakistan through a quantitative survey, intended to investigate how Instagram photo activity effects young respondents regarding body image, body dissatisfaction, intra-sexual competition and drive for thinness. The results revealed positive relationship between the use of Instagram photo activity and above said variables regarding body image.

**Keywords: Instagram, Body Image, Body Dissatisfaction, Drive for Thinness, Fake Reality**

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## 1. Introduction

Social media has revolutionized the globe by making networking and interaction more widespread and effective. Literature indicates that users especially female compare their appearance on social networking sites which leads them towards body dissatisfaction and drive for thinness. This study is based on false reality which includes picture editing and filtration on Instagram. Social media has introduced some editing and filtration tools which are commonly used by females to edit and shape their pictures by doing fake makeup and body shaping to represent them as they wish to be. Such effect of media on female's body appearance is studied vastly in social science research (Bessenoff, 2006).

According to research, girls use various types of media to satisfy their needs of learning about beauty products and standards and about physical appearance (Heinberg, Altabe, & Tantleff-Dunn, 1999). Previous studies concluded that social media messages affect females which lead them to body dissatisfaction and drive for thinness (Groesz, Levine & Murnen, 2002). Users of social media, includes celebrities manipulate the pictures which shows unrealistic body and weight (Grabe, Hyde, & Ward, 2008). In previous studies women declare that they are pressurized by social media regarding their body weight and appearance (Lally, 2007). Female users of Instagram compare themselves with other member's pictures and videos. This led them to a world of negativity i.e body dissatisfaction, unhealthy lifestyle, and intra-sexual competitiveness for mates and eating disorder to become thinner.

Present study indicates the importance of Instagram on which female users use photo manipulation tools to look better than other friends and users. This study includes young girls who share their images on social networking sites to show that they have ideal body. This race leads young girls towards negativity, which involve overthinking on their body appearance and intra-sexual competitiveness of mates.

The purpose of the study is to examine how Instagram photo activity of young female affect their body image and how it creates body dissatisfaction; and how they drive themselves for thinness. This study also indicates how Instagram photo activity creates intra sexual competition with their friends and family for their mates. This study primarily focuses on how social media (Instagram) affect female body image which leads them to body dissatisfaction and drive for thinness.

### 1.1 Research Questions

**RQ1:** How Instagram Photo Activity, appearance related comparison, Intra-sexual competition, body dissatisfaction and drive for thinness are significantly related?

**RQ2:** How Instagram photo activity is a significant predictor of body dissatisfaction among Pakistani female students?

**RQ3:** How Appearance related comparison on social networking sites is a significant predictor of intra-sexual competition among female university students?

**RQ4:** How Appearance related social comparison on Instagram is a significant predictor of drive for thinness among female students?

## 1.2 Hypothesis

**H<sub>1</sub>** There is significant relationship between Instagram Photo Activity, appearance related comparison, Intra-sexual competition, body dissatisfaction and drive for thinness.

**H<sub>2</sub>** Instagram photo activity is a significant predictor of body dissatisfaction among Pakistani female students.

**H<sub>3</sub>** Appearance related comparison on social networking sites is a significant predictor of intra-sexual competition among female university students.

**H<sub>4</sub>** Appearance related social comparison on Instagram is a significant predictor of drive for thinness among female students.

## 2. Theoretical Framework

Social Comparison Theory as theoretical framework gives life to this research by making the concepts under this study more understandable and meaningful (Adom & Hussein, 2018; Imenda, 2014).

In 1954, Leon Festinger published the first document on Social Comparison Theory. Festinger proposed that people evaluate themselves in comparison to others. People judge their own self on the basis of social comparison or analyzing the self in relation with others. People set up a standard level on which they evaluate their selves (Festinger, 1980). For example in a classroom student might compare herself with the toper of the class. If she finds that her abilities and score is not on the level of toper, she might concentrate more on her studies and improve her abilities (Miller & et al, 2015).

Festinger mentioned following hypothesis of social comparison theory in his book 'Social Comparison Processes'.

- i. There exist, in the human organism, a drive to evaluate his opinions and abilities.
- ii. To the extent that objective, non-social means are not available, people evaluate their opinions and abilities by comparison respectively with the opinions and abilities of others.
- iii. The tendency to compare oneself with some other specific person decreases as the difference between his opinion or ability and one's own increases.
- iv. There is a unidirectional drive upward in the case of abilities which is largely absent in opinions.
- v. There are non-social restraints which make it difficult or even impossible to change one's ability. These non-social restraints are largely absent from opinions.

According to this theory people compare themselves with other people, who are similar to them and have similar abilities. Comparison is more authentic when the target person's age gender and abilities are same.

According to Festinger's theory of social comparison there are two types of social comparison.

- i. When a person compare with the other person who is better than him/her is known as upward comparison. Upward comparison occurs when there is a desire to improve oneself.
- ii. Downward comparison occurs when a person compares himself with the person who is worse than him. It occurs when a person realize his abilities are better than others.

There are numerous theories which explain the negative effects of media on body image. Social comparison theory is most applicable theory regarding effect of media on body image (Groesz et al., 2002; Crowther & Myers, 2009). This theory states that people compare their opinions and abilities with other abilities, attitudes and opinions (Festinger, 1954). Comparison exists in two ways, upward comparison and downward comparison.

Appearance related comparison on Instagram evaluates being attractive and thinner (Groesz et al., 2002). When a woman compares themselves with thinner model or women it directly leads them towards body dissatisfaction. This comparison on Instagram motivates females to do dieting and cosmetic surgeries to achieve ideal body image. Previous studies have shown that appearance comparison on social media leaves negative effects, including lower self-esteem, eating disorder and body dissatisfaction (Cachelin & Regan, 2006; Herman & Polivy, 2002). On social networking site, when a women compare her profile with other women who is thinner than her develop greater level of body dissatisfaction.

Some people especially females idealized other users (may be celebrities) and want to become like them. This comparison on social media negatively effects female towards body dissatisfaction. Literature shows that female usually make upward comparison rather than downward comparison in their daily lives (Leahey & Crowther, 2008; Crowther, & Ciesla, 2011). The literature also reveals that appearance comparison on Instagram develops intra-sexual competition and body dissatisfaction among female students of Pakistan. Most of the females are suffering from upward social comparison because they want to become like others who have better body image.

### **3. Review of Literature**

#### **3.1 Social Media, Female Body Image and Body Dissatisfaction**

Today, social media is very popular among every age group of people. Instagram is one of the popular social networking site among youth and this social networking site allows users to share pictures with a lot of features of picture editing, photo manipulation and filters. Research studies reveal that the females believed being more concerned about their weight and health than non-users of Instagram. In United States female students at high school are more conscious about their appearances in school than other non-users of Instagram (Gray & Meier, 2014). According to Tiggemann & Miller female who spend more time on social media are more dissatisfied from their body image. Body image is a self-body attitude or feeling towards your own body especially body shape, weight and appearance. This feeling and behavior may affect negatively or positively to the person (Bailey et al, 2015).

In an experimental study researcher give pictures of three types of model to participants (Groesz, Levine, & Murnen, 2002). Thin body women, over size women and normal size women pictures were distributed to measure how much women feel dissatisfied from their bodies. In these experimental studies this concluded that women are very much concerned about their bodies after watching thin females (Hendrickse, Secharan, & Clayton, 2016). According to research, magazines are most common source which creates body dissatisfaction among youth. 'Body dissatisfaction is the negative

thoughts about your own body which create negative effects, depression, eating disorder and dissatisfaction (Dittmar 2005). 47% women read magazines for fashion tips and beauty which leads them to body dissatisfaction. Because of reading magazines researchers indicated that magazines are responsible for developing dissatisfaction females.

Berg et al (2007) found out that there is no relationship between media and body dissatisfaction among males. On the other side females who are suffering from body image issues are directly affected by media. Holmstrom (2004) conducted a meta-analysis on previous literature based on body dissatisfaction, eating disorder and body image issues. Holmstrom selected 34 studies in which media was independent variable and body dissatisfaction, body image and disorders are dependent variable. He concluded that female feel satisfied about their bodies after viewing heavy body images and they are not changing their lifestyle and appearance after viewing thin bodies. Halliwell and Dittmar (2004) presented some advertisements of models and no model pictures. They instructed the participants to make comparisons of their appearance with the body shown in the pictures. They examined that those participants who viewed thin model advertisements are suffering from body image issues than those who viewed normal commercials. Similarly Lin & Kulik (2002) concluded that body dissatisfaction is among those participants who viewed thin peer, then those who viewed nothing. Ahadzadeh and Sharif (2017) also concluded that Instagram usage is directly associated with body dissatisfaction and low self-esteem. In an experimental study participant showed images of celebrities and unknown images of groups from public profiles of Instagram. It is concluded that people are more exposed to thin model images (Brown, Tiggemann, 2016). The effect of traditional media images on female body image is studied 1980's (Grabe et al., 2008; Want, 2009).

### **3.2 Social Media, Appearance Comparison, Intra-Sexual Competition and Drive for Thinness**

Female usually compare their appearance with other members on social media. A recent study investigates the appearance related comparison on Facebook. Researchers select those participants who owned their Facebook accounts and use magazines websites. The researcher concluded that people who use magazines websites are very much concerned about their appearance and those who use Facebook are mostly concerned about their face beauty, skin and hair (Fardouly et al., 2015). In 2004 Hawkins, Richards, Granley & Stein conducted a research in which they reported that images of thin models create body dissatisfaction among females. In America a report was published on 'ethics of photo editing (Brandeis University, 2012). Thin model images are also used to attract male audience. During a research male participants were showed images of different women of different shape light and heavier. Most of them rate thin female images more attractive (Wilson, Tripp and Boland, 2005). Leahey and Crowther (2008) conducted research on upward and downward appearance. In the research they ask participants to fill out questionnaires about appearance comparisons they face in their daily lives. This research concluded that women who face upward appearance comparison are facing negative effects in their lives. Ritchins (1991) found that 50 percent

of women compare their bodies with models which are shown in the advertisements, and he also declared that advertisements forced women to hate their bodies.

Fisher and Cox (2011) performed qualitative research in which they asked participants to list down all the tactics they do for mate attention. The results showed that the majority of tactics were those related to self-promotion, followed by mate manipulation. After qualitative research Fisher and Cox (2011) conducted quantitative research on these tactics to check that how much people use this behavior in their life. They concluded that self-promotion is the most significant tactics used by women during intra-sexual competition. Self-promotion is related to self-improvement. It means person improve their image in front of their mate (Cox, Fisher & Gordon, 2009). Intersexual competition is higher in females as compared to males (Payne, 1979). Females are more possessive than males when making mating decisions (Symons, 1980; Buss, 1995). Literature shows that women compete, but in a different way than men (Goor & Solano, 2010). Both male and females are involved in intra-sexual competition, both sexes are aggressive, but they show it differently (Bettencourt & Kernahan, 1997; Björkqvist, Lagerspetz, & Kaukiainen, 1992). According to Calpan's (2005) research, women get pressurized to behave nice, good, and helpful, to look attractive and never get rude. Strikwerda (1992) examined that male compete to get reward and women compete for male attention.

According to American media research popular TV programs which shows that thin body women are more beautiful, popular and successful (Tiggemann & Hargreaves, 2003). This is the reason that ordinary women want to be thin and successful (Forbes et al, 2007).

Hendricks (2002) conducted research on traditional media prime time. In which he examined that every comedy show involved a heavy overweight female which are teased by the others. In the end of the show overweight stressed women lost her weight and become more successful and confident. Harrison and Hefner (2006) found that female who use traditional media are suffering from eating disorder and planning for thinner body in future. During a research Stice and Bearman (2001) find out that females who are going through body image issues and lack of social support are more pressurized to become thin. During an experimental research, Tiggemann and McGill (2004) selected female students and give them pictures of thin model body parts and some neutral advertisements without models. They examined that females who viewed model pictures are more dissatisfied from their appearance as compared to other neutral advertisements.

Harrison et al (2006) conducted content analysis on comedy dialogues which are used in dramas. They examined that female who are overweight in dramas received negative comments on their body shape and figure in a sense of humor. On the other hand thin body female received beautiful comments by the male character. This study also concluded that these dramas directly affect women who are suffering from body dissatisfaction. During a meta-analysis Strasburger (1995) found from twenty experimental studies that the higher exposure of thin models increased negative feelings among young woman regarding their bodies.

Keeping in view the literature mentioned above, the present study considers the case of Pakistan, not comprehensively researched before, to investigate how Instagram false realities push young university female students of Lahore for body image comparison, body dissatisfaction, intra-sexual competition and drive for thinness. It will attempt to add the case of Pakistan to the existing literature on the subject and reveal the tendencies of young female university students in the domains before said.

#### **4. Method**

The method employed for data collection regarding the above-mentioned research questions is quantitative survey. It has collected data through a static questionnaire for the whole sampled respondents. For this study, female of Pakistan age 18 to 28 are being taken as the universe, while female age 18 to 24 of different universities of Lahore are regarded as population for conducting the survey. A sample of 400 females was considered for this study. The sample has been extracted from the following universities of Lahore-Punjab.

- i. University of Management and Technology (UMT)
- ii. Kinnaird College for Women Lahore (KC)
- iii. Lahore School of Economics (LSE).
- iv. University of South Asia (USA)

The researchers have drawn 100 female respondents from each university. The reason behind selecting these universities was convenience for the researchers to approach them for data collection. The researchers have used 'purposive sampling'. "A purposive sample is a non-probability sample that is selected based on characteristics of a population and the objective of the study" (Crossman, 2018).

Closed-ended questionnaire was formulated for collecting the data from respondents. Keeping in view the objectives of the study, 5 points Likert Scale has been used to get information from the respondents, where 1 mean strongly disagree and 5 means strongly agree. The obtained quantitative data has been analyzed with SPSS to statistically test the stated hypothesis.

#### **5. Results**

##### **5.1 Results of Research Questions**

Four research questions were formulated for this research, which yielded the following results:

##### **5.1.1 How Instagram Photo Activity, appearance related comparison, Intra-sexual competition, body dissatisfaction and drive for thinness are significantly related?**

Instagram is one of the popular website which allows users to post pictures and videos. Based on previous studies, Instagram photo activity, appearance comparison, intra-sexual competition, body dissatisfaction and drive for thinness are significantly related. That means, when Instagram photo activity increases, appearance comparison will also increase. Same as, when appearance comparisons on Instagram increase intra-sexual comparison will also increase. On the other side the result of the study shows that body dissatisfaction does not increase with Instagram photo activity. Results of the study showed that Instagram photo activity is significantly positively related to appearance

comparison and drive for thinness. Previous studies also show that usage of social media creates negative effect on female behavior. If media activity is increased, appearance comparison and low self-esteem is also increased (Mehdizadeh, 2010; Steinfield, Ellison & Lampe, 2008). Female users who want to have an ideal body and to become popular, they drive themselves for thinness and various cosmetic surgeries (Tanis & Vermeulen, 2012).

On the other side results of this study show that Instagram photo activity is significantly negatively related to body dissatisfaction and intra-sexual competition. Recently, a study conducted on Instagram including 195 female participants exposed that viewing ideal body images does not create body dissatisfaction. The results showed that female users on Instagram are not dissatisfied, rather, they feel positive and satisfied from their body appearance (Cohen, Fardouly & John 2019). Results of our study also shows that most of the female users are not dissatisfied. A research, conducted in Netherlands and Canada, on intra-sexual competition and its differences resulted that intra-sexual competition is increased and become stronger (Bunnk, 2011). On the other hand, our research resulted that 248 female users agree that they buy attractive clothes and maintain their bodies to attract males but somehow, they didn't agree on that appearance comparison develops intra-sexual competition for mates.

#### **5.1.2 How Instagram photo activity is a significant predictor of body dissatisfaction among Pakistani female students?**

The use of social media is growing rapidly, especially after 2002. This is also declared that social media is mostly used by young boys and girls (Pew, 2015). This study is based on Instagram that how it affects female body image. To get the results, participants were asked some questions based on their daily routine of Instagram photo activity. 54% respondents agree that they check other's users profile, and 26% respondents strongly agree with it. 234 respondents agree that they like photos and videos of other friends. However 248 respondents strongly agree that they compare their bellies with other friends on Instagram. 62% respondents agree that their body parts are huge than other friends. 154 respondents were found not satisfied with their bodies. Females who are suffering from body image issues are directly affected by Instagram.

#### **5.1.3 How Appearance related comparison on social networking sites is a significant predictor of intra-sexual competition among female university students?**

Darwin (1871) realized that male or female compete with same gender for opposite gender attention. The results of the study show that 236 respondents compare their lives with others, and they also agree that they compare their achievements with other users on social networking sites. 82% respondents agree that they compare their physical appearance with other users on Instagram. However 84% respondents agreed to it that if they look skinner, they will more attractive to men and 79% respondents disagree with it. 68% respondents agree that they keep their bodies fit than other females to save their partners from others. 75% respondents agreed that they buy beautiful clothes to impress their partners and 234 respondents said that they don't bother opinion of other women. Female users on Instagram compare their appearance with other users which increase



intra sexual competition among university students. 233 respondents strongly agree that romantic partner is more important to them.

#### 5.1.4 How Appearance related social comparison on Instagram is a significant predictor of drive for thinness among female students?

From 400 respondents 233 respondents did not like the shape of their bodies. 224/400 respondents want to look perfect and ideal same like their social media friends. 241 Respondents agree that they exaggerate or magnify the importance of weight, after using social media and 68 respondents disagree to it. 62% respondents were found afraid of gaining weight after using social networking sites. 229/400 respondents agreed that if they gain a pound, they will keep gaining it. 157/400 respondents disagree that they eat sweets and carbohydrates without feeling nervous. Many female users of Instagram compare their bodies with other users and drive their own bodies for thinness. 179/400 respondents agreed that they think about dieting after using Instagram. 249/400 respondents strongly agreed that they feel extremely guilty after overeating.

### 5.2 Results of Hypotheses

Following are the results of hypotheses.

**H<sub>1</sub>: There is significant relationship between Instagram Photo Activity, appearance related comparison, Intra-sexual competition, body dissatisfaction and drive for thinness.**

Table 1: Pearson correlation Score (N=400)

Variables	1	2	3	4	5
1. Instagram Photo-activity	1	.285**	-.164**	-.127*	.200**
2. Appearance Comparison	---	1	.462**	-.608**	.751**
3. Intra-sexual Comparison	---	---	1	.139**	.303**
4. Body Dissatisfaction	---	---	---	1	-.355**
5. Drive for Thinness	---	---	---	---	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

The relationship between photo activity, appearance comparison, intrasexual competition, body dissatisfaction and drive for thinness (as measured by the self-administered scale) and Perce (as measured by the Perceived Stress Scale) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There is a significant positive relationship between Instagram Photo Activity and appearance related comparison,  $r(398) = .285, p < .05$ . There is a significant negative relationship between Instagram photo activity with intra sexual competition,  $r(398) = -.164, p < .05$ .

There is a significant negative relationship between Instagram photo activity with body dissatisfaction,  $r(398) = -.127, p < .05$  and there is a significant positive relationship between Instagram photo activity with drive for thinness,  $r(398) = .200, p < .05$ .

**H<sub>2</sub>: Instagram photo activity is a significant predictor of body dissatisfaction among Pakistani female students.**

To examine the result of Instagram photo activity on body dissatisfaction simple linear regression is applied.

*Table 2: Simple Linear Regression Analysis for Students Body Dissatisfaction Score (N=400)*

Predictor	B	SE(B)	$\beta$	t	Sig. (p)
Constant	30.164	.869			
Instagram Photo Activity	-.110	.043	-.127	-2.559	.011

Note.

$R^2 = .016$

A simple linear regression analysis was conducted with body dissatisfaction as the criterion variable and Instagram photo activity as the predictor. Instagram photo activity is a significant predictor of body dissatisfaction,  $\beta = -.127, t(-2.559) = 0.11, p < .05$ , and accounted for 1.6% ( $R^2 = .016$ ) of the variance in body dissatisfaction scores.

**H<sub>3</sub>: Appearance related comparison on social networking sites is a significant predictor of intra-sexual competition among female university students.**

Simple linear regression is used to examine that appearance comparison on Instagram is significant predictor of intra sexual competition among female university students.

*Table 3: Simple Linear Regression Analysis for Students Intra-sexual Competition Score (N=400)*

Predictor	B	SE(B)	$\beta$	t	Sig. (p)
Constant	20.972	.618			
Appearance Comparison	.119	.011	.462	10.401	.000

Note.

$R^2 = .214$

Simple linear Regression analysis was conducted with intrasexual competition among females as the criterion variable and appearance related comparison on Instagram as the predictor. Appearance related comparison on social networking sites is a significant predictor of intrasexual competition among female university students,  $\beta = .462, t(10.401) = .000, p < .05$ , and accounted for 21.4% ( $R^2 = .214$ ) of the variance in intra-sexual competition scores.

**H<sub>4</sub>: Appearance related social comparison on Instagram is a significant predictor of drive for thinness among female students.**

*Table 4: Simple Linear Regression Analysis for Students Drive for thinness Score (N=400)*

Predictor	B	SE(B)	$\beta$	t	Sig. (p)
Constant	-14.716	1.848			

Appearance Comparison	.776	.034	.751	22.713	.000
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Note.  $R^2=.565$

Simple linear Regression analysis was conducted with drive for thinness among females as the criterion variable and appearance related comparison on Instagram as the predictor. Appearance related social comparison on Instagram is a significant predictor of drive for thinness among female students,  $\beta = .751$ ,  $t (22.713) = .000$ ,  $p < .05$ , and accounted for 56.5% ( $R^2=.565$ ) of the variance in drive for thinness scores.

## 6. Conclusion

Social networking sites are growing rapidly. Facebook, Instagram and Snapchat are very common social media which allow users to share their images and life happenings. Through these social networking sites, people interact with each other and somehow, they compare their life and appearance with other users. Appearance related comparisons on social media is increasing day by day. Women who use Facebook and have their personal profiles on social media are not satisfied from their appearance (Stronge et al, 2015). Literature indicates that female users mostly compare their appearance with other users on Instagram. Female users compare their appearance with other female images.

The results of this study show that 236/400 respondents compare their lives with others and also agreed that they compare their achievements with other users on social networking sites. 82% respondents agreed that they compare their physical appearance with other users on Instagram. The results show that appearance comparison on Instagram is significantly related to body dissatisfaction, intra-sexual competition and drive for thinness. When Instagram photo activity increases, appearance comparison also increases.

The results also showed that intra-sexual competition is associated with appearance comparison. 68 % respondents agreed to it that if they look skinny, they will be more attractive to men, which shows that female who are suffering from body dissatisfaction are also involved in intra sexual competition. The results indicated that females who compare their bodies with other on Instagram are more engaged in body dissatisfaction and drive for thinness.

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