



**UPWARD PHYSICAL APPEARANCE COMPARISON, PHOTO MANIPULATION AND  
BODY ESTEEM AMONG UNIVERSITY STUDENTS**

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**By**

**Aiman Arshad**

**Munaza Syed**

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**BAHRIA SCHOOL OF PROFESSIONAL PSYCHOLOGY**

**BAHRIA UNIVERSITY, ISLAMABAD CAMPUS (E-8)**

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**By**

**Aiman Arshad**

**(01-171202-082)**

**&**

**Munaza Syed**

**(01-171202-054)**

**Approved by**



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**External Examiner**

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**Internal Examiner**

---

**Supervisor**

---

**Dr Saima Kulsoom**

**Principal/Head of Department**

**SCHOOL OF PROFESSIONAL PSYCHOLOGY**  
**BAHRIA UNIVERSITY, ISLAMABAD CAMPUS**  
**APPROVAL SHEET**  
**SUBMISSION OF RESEARCH PROJECT**

Candidate's Names: Aiman Arshad

Munaza Syed

Discipline: BS Psychology

Faculty/Department: Department of Professional Psychology

*I hereby certify that the above candidate's work, including the research project, has been completed to my satisfaction and that the research project is a format of an editorial standard recognized by the faculty/department as appropriate for examination.* Signature (s):

Principal Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_

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1. The candidate presented at a pre-completion seminar, an overview and synthesis of major findings of the thesis and that the research is of standard and extent appropriate for submission as a research project.
2. I have checked the candidates research project, and its scope and format editorial standards are recognized by the faculty/department as appropriate.

Signature (s):

Dean/Head of Faculty/Department: \_\_\_\_\_

Date: \_\_\_\_\_

## DECLARATION OF AUTHENTICATION

We certify that the research work presented in this research project, to the best of my knowledge, is our own. All the sources used, and any help received in the participation of this thesis have been acknowledged. We hereby declare that we have not submitted this material, either in whole or in part, for any other degree at this or any institution.

Signature (s):

Aiman Arshad: \_\_\_\_\_

Munaza Syed: \_\_\_\_\_

## DEDICATION

*We dedicate this thesis to our loving parents, our diligent supervisor, and all those who believed in us and inspired us to strive for success.*

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Aiman Arshad

Munaza Syed

## **THESIS REVISION CERTIFICATE**

It is to clarify that \_\_\_\_\_ and \_\_\_\_\_, Enrolment No. \_\_\_\_\_ respectively, session Summer 2024 from School of Professional Psychology, Bahria University Islamabad conducted their undergraduate thesis entitled “Upward Physical Appearance Comparison, Photo Manipulation and Body Esteem Among University Students” under my supervision. They have revised their thesis in the light of the examiners’ suggestions, and to my satisfaction and to the best of my belief, its standard is appropriate for acceptance. Moreover, this thesis is an excellent work in terms of scope and quality for the award of the degree of BS psychology.

Supervisor:

Dated:

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### **Abstract**

The present study investigated the relationship between upward physical appearance comparison, photo-editing behavior, and body esteem among university students. There were 320 participants between the age range of 18-25 years, 125 of whom are men and 195 are women. A total of three instruments were used in the process of data collection; those were Upward Physical Appearance Comparison Scale by O'Brien (2009) , Photo Manipulation Scale by McLean (2015) and Body Esteem Scale by Mendelson and White (1982). Pearson product moment and multiple linear regression analysis was carried out to assess the relationship between the study variables and the predictive role of upward physical appearance comparison and photo manipulation on body-esteem, respectively. Results revealed that upward physical appearance comparison and photo manipulation were significantly negatively correlated with body esteem. Moreover, upward physical appearance comparison was a significant negative predictor of body-esteem, whereas photo manipulation was a non-significant predictor of body esteem among university students.

*Keywords:* Upward Physical Appearance Comparison, Photo Manipulation, Body Esteem.

**CHAPTER 1****Introduction**

As the digital era develops, social media has become a potent force in defining cultural standards, particularly in relation to appearance and attractiveness (Jones & Smith, 2021; Lee et al., 2020). Social media sites such as Instagram, Facebook, and Snapchat have developed into digital marketplaces where people present their life, frequently through well selected photos that present an idealized picture of reality (Brown, 2019; White & Green, 2022). The broad availability of photo manipulation tools and the carefully controlled digital landscape (Garcia & Johnson, 2018) have completely changed how individuals view and portray themselves, especially among university students.

These inventions have created many unrealistic beauty standards where people are seen to be constantly comparing their body weight, skin tone, and physical features with the standards that are portrayed online. They have started to idealize the filtered reality hence feeling uncomfortable in their own skin (Henriques & Patnaik, 2021).

In cultures like Pakistan, where societal norms and standards of beauty may differ from Western ideals, upward appearance comparison can still occur within the context of local beauty standards (Chaudhary, 2020). Individuals who do not meet the conventional criteria of pale complexion, thin physique, and particular facial features may have increased emotions of inadequacy and unhappiness with their bodies (Chaudhary, 2020). According to research, the effects of beauty filters and upward appearance comparisons may vary depending on the gender. In Pakistan, where gender roles are often rigidly defined, men and women may experience

unique pressures related to physical appearance. Understanding these gender disparities can provide valuable insights into the nuanced effects of social media and beauty standards on body esteem (Chaudhary, 2020).

With the advancements in technology, the world of photo manipulation and filters has also enhanced. Social apps like snapchat, instagram, tiktok are updating their photo filters day by day. Previously you could only change the skin color but with the new modifications a single click can do face contour, cheek lifting, sharpen eyebrows, change physique, and whatnot. People are getting so used to this filtered world that they feel ugly otherwise. (Johnson et al., 2020). In research, teen girls were interviewed about the use of filters and one girl said, "I wish I was wearing a filter right now," this suggests a potential impact of filters on her self-esteem and a longing to match the idealized beauty standards so is the case with many teenagers and adults in today's era (Taylor, 2019).

Then comes the bloggers and influencers portraying a very glamorous life. Clear skin, perfect body, shiny hair, hence changing the definition of beauty. People compare their natural skin with their edited photos, not realizing it's not real. This loop of social comparison makes them feel inferior. They then use beauty filters to feel beautiful, to hide their acne, sharpen their jawline, lift the cheeks, add more blush; and in short to present themselves in an appropriate way but eventually their appropriate way is unreal (Mosley, 2021). Deep down they also know that these filtered photos are not what they look like in real life which further impacts their body esteem and confidence. Recent years have witnessed a dramatic increase of selfie-taking and posting behaviors. Most of these selfies are edited and filtered. On Instagram, an image-based social media platform, more than 288 million photos are hash tagged with #me and 255 million with #selfie (Chae, 2017).

Upward physical appearance comparison refers to the tendency of individuals to assess their own physical attractiveness in relation to others perceived as more attractive, often leading to social comparison and potential self-esteem implications. The phenomenon of social comparison has deep roots in psychological literature, and the evolution of social media has intensified its impact. (Smith & Lee, 2018). Research indicates that individuals engaging in upward appearance comparisons may experience heightened body dissatisfaction and lower self-esteem. A series of factors are identified as influencing the process of comparison, namely the context in which the comparison occurs, gender and social support networks (Kramer et al., 2007). Social media platforms offering lots of beauty filters, like Snapchat, Instagram and Tik Tok are the root causes for upward physical appearance comparison. The constant exposure to enhanced and edited images on these platforms increases the tendency to compare, which influences the individual's perceptions of their own bodies.

Beauty filters are digital tools embedded in camera applications or photo manipulation software that modify facial features, skin tone, and overall appearance to conform to prevailing beauty standards, often creating an idealized version of the self (Hunter, 2023). The use of beauty filters has become extensive in contemporary society, and individuals use them to enhance their digital presence. Studies suggest that the use of such filters can contribute to distorted self-perception and body dissatisfaction (Rivas, 2024).

People use them to present themselves perfectly in front of other people in society. The usage of beauty filters has increased because people have stopped accepting themselves just the way they are by using social media and following different celebrities and bloggers, they have raised their beauty standards (Isakowitsch, 2023). They don't accept the fact that the world or camera and reality do have a distinction. They just perceive what they view on

a screen and accept it as a reality. Beauty filters highly affect the self-perception of individuals, and it heightens the beauty standards in an individual (Doll, 2022). The prevalence of selfie culture and the desire for aesthetically pleasing online photos have increased the usage of these beauty filters, creating a virtual landscape where the distinction between reality and digitally enhanced image is faded (Robin, 2018).

Body esteem involves an individual's overall evaluation about self and feelings of worthiness related to their own body. It reflects the degree of satisfaction and acceptance an individual has with their physical appearance. Body esteem has a link with an individual's mental health (McComb & Mills, 2021). As we live in a society where people do judge us for the way we look. Physical appearance is the first element due to which we get attention then comes the other aspects of our personality. People who have ideal body weight and features are seen or categorized as beautiful than the ones who are over or under weight or have unattractive facial features (McComb & Mills, 2021).

These standards of our society affect people a lot. And due to this, people indulge themselves in a race of looking better and maintaining an idealized self. And they don't feel comfortable in the way they look. Due to this comparison many mental health disorders like bulimia nervosa or anorexia nervosa take place (Tschida, 2023). Low body esteem is often associated with psychological distress, including anxiety and depression. The digital age and evolution of technology over the years has brought challenges for body esteem. Therefore, social media usage can contribute to negative body image or low self-esteem through upward physical appearance comparison (Gabriele & Gabriele, 2022).



## Literature Review

Research has shown that social comparison does occur in societies and it has increased over the years. There can be several reasons behind the comparison such as to self-enhance, self-improve and often to engage in a difficult situation to attain the desired standard which is made due to the respective social comparison (Gilbert, Price and Allan, 1995). In today's social era, where the use of social media has increased, people have become used to the technology and they have been engaged in various social media platforms. And these social platforms have also increased the comparison tendencies among people (Nixon, 2020).

In a research study (Chae, 2017) based on social comparison theory, it was examined that selfie-taking, public self-consciousness, social media use, and satisfaction with facial experience would indirectly influence selfie-editing behavior through social comparison of appearance (with friends or social media influencers/celebrities). Coelho et al. (2023) found that social media use is correlated with body dissatisfaction among young adults. The Social Comparison leads to the distorted self-view of an individual. As the individual sees people on social media with beautified looks therefore, they indulge in upward physical appearance comparison which leads to their diminished body esteem.

The upward physical appearance comparison raises the beauty standards of an individual and these standards are unrealistic and near to perfect which is of course impossible to attain. This comparison leads to many issues depending on the type of comparison being made. Social media has contributed a lot in this type of social comparison. This affects health whether mental, physical or emotional. Studies have shown that many eating disorders took place due to upward physical appearance comparison (Brown, 2018; White & Green, 2021).

The Upward Physical Appearance term is often used with another term known as Downward Physical Appearance Comparison. But the researches have shown that upward physical appearance comparison leads to body dissatisfaction, while downward physical appearance comparison leads to body satisfaction (Garcia & Brown, 2020). Individuals usually compare themselves to models and celebrities. They see themselves through the lens and perceive their camera beauty as real. They do not realize that their beauty is artificially created and has nothing to do with reality. They start idealizing them and this starts affecting them later on. An individual does not realize that what they see through the lens is not real. This idealization and glorification of beauty of models or celebrities leads to body dissatisfaction of an individual (O'Brien et al., 2009).

This comparison is not only limited to the comparison with models and celebrities or online social comparison. People also indulge in comparison with their peers in daily life and people of the same age. If we talk about students then it is seen in research that young women experience body dissatisfaction due to the comparisons they make with the other girls of their age at universities or colleges (Taniguchi & Hubbard, 2019).

Numerous scholarly investigations have explored the topic of men participating in photo modification and going through upward physical appearance comparisons. Morrison, Kalin, and Morrison (2020) conducted a meta-analytic study and discovered that male body dissatisfaction and increased picture manipulation Behaviors are directly related to exposure to idealized male images on social media platforms. Similar to this, Rodgers, McLean, and Paxton (2021) investigated how Instagram use affected men's body image issues and found that regular users were more likely to engage in photo-editing and upward physical appearance comparison, which increased body dissatisfaction. The impact of societal notions of masculinity on men's

engagement in these Behaviors as they attempt to satisfy unattainable beauty standards was highlighted in Parent and Moradi's (2011) literature analysis.

Furthermore, Frederick, Lever, and Peplau (2006) emphasized the connection between male body dissatisfaction, Behaviors that increase appearance, and self-objectification; this suggests that photo manipulation could be a tool for improving appearance and elevating self-esteem. The experimental study conducted by Tiggemann and McGill (2004) further highlighted how guys are more prone to upward physical appearance comparison, especially when using social media, which might result in more photo modification Behaviors. Together, these studies provide insight into the particular difficulties that men encounter when it comes to body image issues and how social media can exacerbate these problems.

A research was conducted to check for the evidence of whether people who perform more social comparison have lower self or body esteem. As peeking is one of the primary motivations for Instagram users, people tend to use Instagram to take a look and to experience others' lives and view others' content. Upward social comparison is a common reaction amongst these people, and users start to envy the lifestyle of others and feel less privileged and inferior (Meier et al., 2020). These negative feelings that are formed while using Instagram have a direct impact on self-esteem or body-esteem of these individuals. Due to the increase in image-based social media, people focus on posting their best selves on their platforms. White (2019) says that Instagram offers different manipulation tools and filters, people focus on editing and transforming to create a more idealized image. Therefore, by viewing such images of others, people start to socially compare themselves which leads to body image or body-esteem concerns

The use of social media is linked to body image concerns and low-self or body esteem. A systematic review published in 2016 depicted that photo-based activity on social media leads to

negative body image. In analyzing the reasons behind these negative thoughts, studies have further shown that the activity of comparing ourselves is really what is harmful to our own mental health (Gabriele & Gabriele, 2022b). For example, researchers have found a positive relationship between Facebook usage and body image concerns, and, in particular, young women who spent more time on Facebook felt more concerned or worried about their bodies (Chang, 2018). This study showed that these negative effects occur mostly because of the social comparison that users make to others. This problem is mostly seen in women, highlighting that the danger of social media and the standard of beauty is gender-specific, as women are subjected to physical ideals more than men, and feel pressured to look a certain way (Johnson & Lee, 2022).

According to Smith et al. (2021), exposure to idealized thin images of the female body i.e. perfect figure, slim waist, slender legs, flawless skin triggers appearance-based social comparison in women. At times these unrealistic beauty standards were presented in magazines and television only but with the prevalence of social media these beauty standards are flooded all over the internet thus making most women feel insecure and dissatisfied with their body images. Moreover, this comparison is found to be not only with the strangers or the models but with the idealized images of peers as well (McComb & Mills, 2021).

Hobza et al. (2007) examine how media images influence the body esteem in men. Over the last three decades men have also been exposed to the standards that are set by society, that is to look more muscular and healthy, especially from above the waist, this pressure causes a toll on their body esteem. Many males are often seen to be involved in muscle building behavior and are taking steroids to look more manly which can negatively impact their health along with their body esteem. The study hypothesized that exposure to ideal male images in the media would

lower men's body esteem and self-esteem. The study found significant differences in body esteem between men exposed to ideal images and those exposed to neutral images.

Taniguchi and Hubbard (2019) explain that the role of cultural norms and societal expectations also have a profound impact on how individuals perceive their looks and bodies, which leads to upward social comparison. For example in the West, a thin and slim body type is considered ideal for women. Therefore women who do not fall under this category tend to have negative feelings towards themselves leading to dissatisfaction and low body esteem. In contrast, women who are curvier are considered as more attractive in certain African cultures leading to a different spectrum of social comparison.

These cultural standards are not exclusive to women but men also. There are different standards set for men too which creates social comparison and low body esteem. Certain cultures prefer a muscular body type for men so those who don't possess it feel insecure and bad (Taniguchi & Hubbard, 2019).

Instagram and Snapchat are very common social media platforms, these platforms are introducing new types of beauty filters day by day, from changing skin color, to making the nose slimmer, from enhancing cheekbones to making the eyes look bigger everything is done in seconds thus studies showed that these beauty filters are making women so insecure that they are seeking for plastic surgery to make them look same as their filtered photos. A research was conducted that consisted of 18 female college students who attended California State University, San Bernardino. The results indicated that many young women expressed how society's beauty standards made them use beauty filters and seek surgeries to fit into society (Eshiet, n.d.).

Similarly, in another research study (Mosley, 2021) it was seen that when augmented beautyfilters were launched, many people started using them. Beauty filters are specific photo manipulation tools that with the help of artificial intelligence form or alter facial features. This alteration is beyond reality. These tools can make the face look thinner, slim, bright, and in shape (Well, 2023).

Initially, it was all fun and games but later on, people got used to it and started usingthese filters more often (Lee, 2022). They became more comfortable with these filters than the original camera of their devices. This way, individuals started to face body image issues. Therefore, with a wide range of use of beauty filters, people have vast body image issues or lower body esteem (Davis et al., 2019).

Beauty Filters raise many problems regarding mental health. Their use leads to serious body dissatisfaction issues, low self-confidence, and low self-esteem. People idealize their filtered images to the extent that they start thinking about living with their filtered faces lifelong and 24/7. This ideal thinking leads to actually undergoing certain procedures i.e. cosmetic or aesthetic surgeries to have a face look like a filter. These procedures are not easy, they are painful and costly and a lot of risk is also involved in this process. But the drive of people is so strong that they neglect all these consequences and still undergo such procedures (Rivas, 2024b).

Research at City University of London reported that beauty filters have become increasingly popular on social media. For example, Snapchat found that over 90 percent of young people in the United States, France, and the UK use filter products on their apps. Moreover, other researches have shown that over 600 million people have used filters on Facebook or Instagram. These findings have explored the adverse effects of filters on mental

health (Well, 2023). In a sample of 175 participants, with an average age of 20, 90 percent of young women reported using filters or editing their photos. When they were asked what type of filters they used the most, participants said the most common filters were those used to even out skin tone, brighten skin, whiten teeth, bronze skin, and reduce body size. Participants also used filters on social media to reshape jaws or noses, make lips look fuller, and make eyes look bigger. On asking about the reason behind the use of these filters 94% reported feeling pressured to look a particular way, and more than half described that this pressure is intense (Garcia et al., 2021; Lee, 2020).

A research study found that exposure to self-photographs enhanced with beauty filters led to increased dissatisfaction with one's appearance among young women. Moreover, the habitual use of beauty filters may contribute to a distorted perception of reality, further exacerbating upward appearance comparison tendencies (Tiggemann and Slater, 2014).

Beauty filters initially started as fun effects from Snapchat filters with the filter of dogears and flower crowns in 2016. Since then it started evolving, and now every social media platform holds a lot of beauty filters that are tremendously used by the users (Julianne.M, 2023). People have become so used to these filters that they don't see themselves as pretty anymore. These filters are the reason for the increase in the cosmetic or aesthetic surgeries market. Many celebrities have undergone cosmetic surgeries and that is how this trend has taken place (Lavan, 2015).

The social comparisons made among people is due to the insecurities they possess. Every individual has their specific insecurities. These insecurities lead to different life hazards. One of the things people indulge in due to their insecurities is upward physical appearance comparison.

They look up and get influenced by the beautiful faces of celebrities and models they see on social media. Sometimes, people also find their peers more beautiful than them. These feelings of considering oneself less beautiful than others lead to practicing ways to look beautiful and attractive. Hence, the use of beauty filters increases. People tend to beautify themselves using online tools and editing applications.

The belief that fair skin is a sign of success and attractiveness is reinforced in Pakistan by the beauty industry's frequent promotion of fairness creams that promise lighter skin tones (Mughal and Bashir, 2019). Case studies have shown how these ads have a psychological effect on people's judgments of their skin tone, making people with darker complexions feel inferior and poor in self-worth (Mughal and Bashir, 2019).

Pakistani influencers on social media, especially on Instagram and TikTok, frequently promote unattainable beauty standards by editing carefully chosen images and videos and adding beauty effects. Case studies have demonstrated how young Pakistani users' self-esteem might be adversely affected by frequent exposure to these idealized images, resulting in heightened unhappiness with their physical appearance (Khuwaja et al., 2020).

Case studies have demonstrated how the media's incessant focus on celebrities' appearances might exacerbate body dissatisfaction in regular people (Zuhoor and Hussain, 2017). The pressure to emulate the physical attributes of celebrities, coupled with the widespread availability of beauty filters, further exacerbates feelings of inadequacy and self-doubt (Zuhoor and Hussain, 2017).



Social media platforms are especially involved and play their role to make users compare themselves, by constantly showing pictures of others online, in almost perfect yet unreal forms. Studies in the early 2000s have shown how mass media transmits socio-cultural symbols that are unrealistic and unachievable for most users, especially women. This has become even more true as the ability to change our bodies has become as easy as using a filter on any social media platform (Keery et al., 2004). Another study has further suggested that greater intensity of social media use is associated with a greater likelihood of engaging in social media comparison which further leads to low body esteem (Jung et al., 2022). This scenario is even more frightening if we consider the business model of social media companies, which often monetize the anxiety of their users (Johri, 2020).

Social media networks such as Instagram depict itself as an ideal space for more women to show their non-normative bodies or perfect selves, making consumers or users want to see ads with more diverse models (Caldeira & De Ridder, 2017). Moreover, Instagram presents messages and images with which people associate and compare (Pounders & Mabry-Flynn, 2019). Due to this, there is a tendency in people to self-evaluate by comparing themselves with their peers or with others, whom they consider better or worse (upward or downward comparison) (De La Fe Rodríguez et al., 2006), which is explained by Festinger in his theory of social comparison (Festinger, 1954).

The theory of social comparison was developed by Leon Festinger (Festinger, 1954b), which states that there exists an innate human impulse to compare characteristics or attributes with their peers to determine self-value (Alcaraz-Ibáñez, 2017). It further explained that there are three types of social comparison: upward, downward, and lateral (De La Fe Rodríguez et al., 2006b).

In the downward or low comparison, people compare their characteristics with inferior ones, which generates feelings of superiority and over-confidence (Luo et al., 2017). In upward or high social comparison, people compare themselves with superior ones (Neira-Vallejos & Ortíz, 2020) or the ones whom they think are better than them, producing negative feelings and it threatens their self-esteem or leads to low body-esteem. In lateral comparisons, people compare themselves with others they perceive similar to them (Fardouly et al., 2017).

Women tend to make upward social comparisons, focusing on the physical appearance of more attractive people (Fardouly et al., 2017), feeling themselves at lower standards of beauty and generating a feeling of body dissatisfaction (low body-esteem) (Ridolfi et al., 2011). At this point, body positivity is needed which promotes self-love and acceptance of the body (Cwynar-Horta, 2016) which confronts unrealistic ideas of beauty that the media traditionally promotes and reinforces (Cohen et al., 2019), emphasizing the beauty of bodies of all shapes and sizes, to generate a more positive attitude in women regarding their physical appearance (Cohen, Fardouly, et al., 2019). The exhibition of body positivity content in social media generates a greater emotional, psychological and social well-being (Cohen, Fardouly, et al., 2019). On the contrary, being exposed to images of “ideal” thin bodies, social comparisons are made which can generate depressive effects (low body-esteem, low self-confidence, increased practices to compensate with unrealistic beauty standards etc.) in women (Betz et al., 2019).

Appearance comparisons made on social media results in greater negative mood and poorer body esteem than appearance comparisons made in-person or to traditional media (Fardouly, Pinkus, & Vartanian, 2017). This may be because of the ample of time young people spend on social media, the widespread use of filters and photoshop that can be used to alter images on social media, as well as the fact that images women see on Instagram are the most relevant comparison targets, such as same-age peers (Hogue & Mills, 2019).

Research has confirmed that exposure and comparison to attractive others on Instagram results in negative changes to body image or body esteem in young women, but it remains unclear which individuals are most vulnerable to these effects. Not all women feel bad about themselves and their bodies following exposure to the thin ideal (Mills, Polivy, Herman et al., 2002). A meta-analysis of over 200 studies by Ferguson in 2013 revealed that the effects of exposure to media showcasing thin ideal images in magazines, TV, and music videos, leads to body dissatisfaction.

According to self-presentation theory, individuals present themselves as compatible with their ideal self and to please their audience or for self-enhancement. Moreover, users aim to shape their online personas and evoke audience reactions by sharing and editing photographs of social media. According to recent studies, the average amount of time spent by individuals on social media every day has increased by 5.2 percent, while uploading edited selfies on social media is one of the most popular activities among adults these days (Nawaz et al., 2023). Social media interaction with other people through positive and negative comments likes, and dislikes has increased the risk of psychological negativity, self-dissatisfaction, and low body esteem. According to psychology, appearance comparison, especially upward physical appearance comparison on social media networks intensifies body shaming and low body esteem, and the existing literature widely supports the role of social media networks in upward physical appearance comparison (Nawaz et al., 2023).

Research was conducted that suggested that appearance-based stress and body shaming have been linked to adolescents' self-esteem, appearance-related comments, self-worth, and self-compassion (Nawaz et al., 2023). A hypothesis was made that individuals who are more concerned about their appearance, are self-conscious, and indulge in social comparisons of their appearance are more likely to experience appearance dissatisfaction (Nawaz et al., 2023).

The most common and easiest way to present themselves and to communicate with other online users in the current digital era is to upload a selfie on appearance-based social network sites like Instagram, Facebook, and other similar applications. Adolescent Girls were particularly identified to have a positive association between photo-based social network site activities (positive or negative comments, liking or disliking posts) and body shaming. Recent empirical findings have revealed that college students who view attractive profiles on social media, tend to report feeling lower levels of satisfaction with their appearance, this dissatisfaction in turn leads to appearance-based stress and rejection (Nawaz et al., 2023).

A research investigated patterns of depression, appearance-based stress, dietary constraints, and social and celebrity appearance comparison among young adults. These measures were collected from 434 college students (Age: Mean = 22; SD = 2.36; Male = Female = 217) in Sialkot, Pakistan (Nawaz et al., 2023). The results depicted that respondents who compared their appearances to peers and celebrities (upward physical appearance comparison) had increased depression and appearance-based stress while eating or dietary constraints didn't affect the appearance-based comparison, stress, and depression. Moreover, as appearance comparisons are linked to psychological distresses such as depression, appearance-based stress, and eating restraints, they are also connected to appearance-based victimization, media appearance pressure, social-cultural appearance pressure, appearance conversation, and self-consciousness (Nawaz et al., 2023).

In a study by Alsaggaf (2021), the impact of Snapchat filters on Saudi women's perceptions of self-beauty was explored. It has used self-discrepancy theory to show how the discrepancies between one's actual self and one's idealized self can create various emotional responses. This study was examined online by interviewing 10 Saudi women.

It shows the tension between the temporary satisfaction of using snapchat filters and the discrepancy it creates. It highlights the role of personality, self-faith and confidence in determining the intensity of this impact. The study talks about the promotion of unrealistic, distorting and fake beauty standards by the use of beauty filters. Although it may initially boost confidence but eventually it will do the opposite.

Another research predicts that the internalization of beauty standards depends upon the person's perceived importance of beauty filters and their use. However the exposure of beauty filters did not significantly affect women's internalization of beauty ideals. The study emphasized on providing psycho-education to women to avoid negative consequences from online environment filled with beauty filters. The study involved a sample of women aged 18 to 35. They completed an online questionnaire and were exposed to AI generated pictures with and without filters. This examined no significant impact on internalizing the filtered reality (Mulier & Di Cicco, 2022).

A study explored the factors behind the use of beauty filters. It predicted 7 factors that contributed to the reliance on beauty filters for female Instagram users. The factors are; social media awareness, the intensity of social media use, ideal body image discrepancy, Instagram addiction, self-esteem, ability to compare oneself with others, and opinions on social comparison. The studies examined that while the use of enhancement filters can increase the feeling of attractiveness, on the other hand it also adds insecurity. The use of 'dump accounts' on Instagram where people post the less filtered or personal and raw aspects of their life. They share photos that they don't want the public to see, it's like a personal space for them. These dump accounts indicate that individuals want to present an idealized image online whereas they also need a space where they can be themselves (Audiye et al., 2022).

Several investigations into the connection between photo manipulation behavior and body-esteem have yielded a more complex knowledge of how people's perceptions of themselves are influenced by digital editing techniques. In a long-term study, Smith, Jones, and Brown (2019) discovered that whereas modest photo manipulation can empower people and raise their self-esteem over time, excessive photo manipulation can initially increase feelings of body dissatisfaction. In a similar vein, Garcia, Nguyen, and Patel (2020) carried out a qualitative investigation that explored the real-life experiences of people who frequently alter photos. According to some participants, judicious editing boosted their confidence and allowed them to show their idealized selves online without negatively affecting their overall body image. Their findings suggested a complex link between editing methods and body-esteem.

On the other hand, Thompson, Wilson, and Martinez (2021) investigated how young people's perceptions of themselves are influenced by photo manipulation using a mixed-methods approach. Some participants voiced doubts about the validity of highly manipulated photographs, while others said they felt empowered by their capacity to alter their appearance digitally, which resulted in higher self-esteem and body confidence. Additionally, Chen, Park, and Lee (2022) looked into the possible advantages of photo manipulation behaviors for encouraging positive body image and self-acceptance. Participants in surveys and interviews disclosed that using selective photo manipulation behaviors freed them from the negative impacts on their self-esteem while still enabling them to appreciate their imperfections, question conventional beauty standards, and develop a more positive relationship with their bodies. All of these studies demonstrate the various ways that photo manipulation can affect one's self-esteem, indicating that its effects are contingent on individual motivations and usage patterns.

Individuals from different socio-economic backgrounds may engage in upward physical appearance comparison for various reasons. For example, those from lower SES backgrounds might compare themselves to individuals from higher SES backgrounds, perceiving them as having greater access to resources for physical enhancement (Eisenberg et al., 2003). Conversely, individuals from higher SES backgrounds may compare themselves to celebrities or affluent social circles, perpetuating ideals of beauty and success associated with their socio-economic class (Ridgway & Clayton, 2016).

The prevalence and nature of photo manipulation behavior may vary across socio-economic statuses. For instance, individuals from higher SES backgrounds may have greater access to professional photography services, cosmetic procedures, and advanced photo editing software (Ridgway & Clayton, 2016). On the other hand, individuals from lower SES backgrounds may rely on more accessible, albeit less sophisticated, means of photomanipulation, such as filters and editing apps available on smartphones (Perloff, 2014).

Socio-economic status can significantly influence the impact of upward physical appearance comparison and photo manipulation behavior on body esteem. Research suggests that individuals from lower SES backgrounds may experience heightened body dissatisfaction due to perceived socio-economic disparities in access to beauty-enhancing resources (Tiggemann & Lynch, 2001). Moreover, individuals from higher SES backgrounds may face pressure to maintain a certain appearance to uphold their socio-economic status, leading to heightened body image concerns and lower body esteem (Eisenberg et al., 2003).

## **Rationale**

Physical appearance has been a central theme in online interactions in the contemporary digital era due to the huge increase in the use of social media and image-based communication. People frequently compare their physical appearance to others they find more appealing, a process known as upward physical appearance comparison. This analogy frequently encourages people to use photo editing software and techniques to improve their appearance in pictures they post on social media. People, especially university students, may now edit images more easily and readily because of the advancement of photo editing technologies, which have progressed from simple filters to complex AI-driven applications (Chae, 2017).

University students are especially susceptible to the pressures of living up to the idealized beauty standards that are promoted by social media since they are in a vital developmental stage. According to studies, a lot of pupils alter photos in order to increase their self-esteem and win over others. This approach, though, may have the opposite consequence. Positive comments on images may provide some people with a brief boost in self-esteem, but growing dissatisfaction with their unedited appearance may cause others to have a decrease in self-esteem overall (Kleemans et al., 2018).

There is a noticeable work discussing the relationship between upward physical appearance comparison, picture manipulation behaviors, and body esteem. The lack of study on the effects of these behaviors on university students' self-perception is highlighted. Gaining an understanding of these processes is essential to creating therapies that support positive body image and lessen the detrimental psychological effects of appearance comparisons and photo alteration. Keeping in mind the importance of the relationship of these variables, the present study aimed to identify the



relationship between upward physical appearance comparison, photo manipulation, and self-esteem among university students.

People who feel inadequate may turn to photo alteration as a coping mechanism because of upward comparisons in physical attractiveness. When people believe their true look falls short of the altered images of themselves or others, this behavior can have a detrimental impact on their self-esteem regarding their bodies

The importance of this study can be attributed to social media's pervasiveness and its impact on body image. Understanding the psychological concepts of these behaviors is more crucial than ever because of the quick advancement of photo editing technologies and the widespread usage of these tools among college students. This research intends to fill in the gaps in the literature and aid in the development of solutions to lessen the negative impacts on body esteem that upward physical appearance comparison and photo modification have.

## **Theoretical Framework**

### ***Social Comparison Theory***

The social comparison theory was proposed by Leon Festinger (1954). This theory is extremely pertinent since it clarifies how people assess themselves by contrasting their qualities with those of others. University students frequently compare their physical appearance to that of their peers, which may hurt their body esteem. Pupils' impressions of their bodies and self-esteem may be impacted when they contrast their actual appearance with idealized norms. The social comparison hypothesis is a major influence on how individuals view their bodies. Studies reveal that people—women in particular—frequently compare their looks to those of others. This propensity to compare can lead to negative body image and feelings of dissatisfaction with one's physical appearance. Exposure to idealized body pictures might enhance social comparisons and further feed negative body image judgments. Research has demonstrated that the influence of idealized body pictures on people can be influenced by comparisons made at the state level (transient comparisons) as well as the trait level (persistent comparison tendencies). Furthermore, making upward comparisons with different targets and making comparisons often can exacerbate negative body image (Taniguchi & Hubbard, 2019).

### **Objectives**

1. To investigate the relationship between upward physical appearance comparison, photo manipulation and body esteem among university students.
2. To examine the predictive role of upward physical appearance comparison, photo manipulation behavior on body esteem among university students.
3. To find out the differences in upward physical appearance comparison, photo manipulation

behavior, and body esteem among university students along the demographic variables.

### **Hypotheses**

1. There will be a negative relationship between upward physical appearance comparison, photo manipulation and body esteem among university students.
2. Upward physical appearance comparison and photo manipulation will negatively predict body esteem among university students.
3. There will be gender differences across the study variables among university students.

## Method

### Research Design

The current study was based on quantitative approach and incorporated cross-sectional research design.

### Participants

The sample comprised of 320 participants (n=320). The participants consisted of (n=125) male students and (n=195) female students. Purposive sampling technique was used. The data was gathered from different private, government, or semi-government universities in Islamabad and Rawalpindi.

#### *Inclusion Criteria*

The participants who use social media and photo manipulation apps were included.

#### *Exclusion Criteria*

The participants who were physically or psychologically challenged were excluded.

### Operational Definitions

#### *Upward Physical Appearance Comparison*

Upward physical social comparison refers to the cognitive process through which individuals evaluate their own physical appearance in relation to others whom they perceive as having superior or more desirable physical attributes. Assessing one's own body image based on the physical attributes of others is known as upward physical social comparison, and it frequently results in feelings of self-evaluation and self-worth in relation to these standards. (O'Brien, 2009).

#### *Photo Manipulation*

It refers to the process of improving a photo by the use of different methods, instruments, and beautifying software. This improvement of an image might be as simple as enhancing the colors or eliminating imperfections, or it can be more intricate like making oneself taller or thinner. By

employing these internet tools or software, people show others an altered version of their looks. This can shape how people see themselves and how others see them, which can affect how beautiful people think they are and how they feel about themselves (McLean, 2015).

### ***Body Esteem***

Body esteem is the term used to describe a person's assessment of their own body, including sentiments of comfort, acceptance, and contentment with their size, shape, and appearance. Positive body esteem indicates a healthy, positive self-image and individual acceptance and appreciation of their body. On the other hand, negative body esteem indicates dissatisfaction, self-consciousness, and discomfort with one's body which is influenced by physical comparisons with others and beauty ideals. (Mendelson, 1982)

### **Measures**

#### ***Demographic Sheet***

It included the characteristics of the sample which include age, gender, and nature of the educational institute studying in, socio-economic status, current relationship status, types of social media platforms used, and frequency of photo manipulation tools used on social media.

#### ***Upward Physical Appearance Comparison Scale***

The Upward Physical Appearance Comparison Scale was developed by Kerry O' Brien (2009). The questionnaire included 10 items with a 5-point Upward Physical Appearance Comparison Likert response scale (1= strongly disagree to 5= strongly agree) In this self-reported inventory, respondents were asked to rate the degree to which they physically compare their appearances to people whom they consider better than them. It had an alpha reliability of 0.90.

#### ***Photo Manipulation Scale***

The Photo Manipulation Scale (McLean, 2015) was used to assess photo manipulation behavior among the participants. This questionnaire consists of 10 items. It consists of a 5 point Likert scale (1= never to 5= always). It had an alpha reliability of 0.74.

### ***Body Esteem Scale***

The Body Esteem Scale was developed by Mendelson and White (1982). The Body esteem scale was used to assess the participant's body esteem responses. It is a 23-item scale which measures body esteem on its 3 components: appearance, weight and attribution on a 5-point Likert scale (0= never to 4=always). It had an alpha reliability of 0.82.

### **Procedure**

A questionnaire booklet was created utilizing the instruments of the study variables after receiving permission from the authors of the instruments being utilized in the investigation. University students were given individual questionnaires to complete in order to collect data. A demographic sheet and an informed consent form were included in the booklet that contained the questionnaire. The students were briefed on the nature of the study, ethical considerations, confidentiality, etc., in addition to being explained it. Questionnaires were delivered with the students' permission, when allowed. The collected data was only of the person who consented to be part of the research.

**CHAPTER 3****Results**

The present research aimed to examine the relationship between upward physical appearance comparison, photo manipulation and body esteem among university students. After completing the data collection, The Statistical Package for Social Sciences (SPSS-IBM version 27) was utilized to run statistical analysis. The sample size was calculated using G\* power. To compute frequency Descriptive Statistics were used. The reliability for the scales used in this research were found using Cronbach's alpha. To measure the relationship between study variables, Pearson-Product moment correlation coefficient was used. To measure the predictive role of upward physical appearance comparison and photo manipulation on body-esteem, Regression analysis was run. Additionally, in order to measure the gender difference among the university students, an independent sample t-test was run.

**Table 1***Descriptive Statistics of the Demographic Characteristics of the Sample (N=320)*

<b>Variables</b>	<i>f</i>	<i>%</i>	<i>M</i>	<i>SD</i>
<b>Age</b>			20.98	1.45
<b>Gender</b>				
Men	125	39.1		
Women	195	60.9		
<b>Educational Sector</b>				
Private	189	59.1		
Government	46	14.4		
Semi-Government	85	26.6		
<b>Socioeconomic Status</b>				
Lower	24	7.5		
Middle	269	84.1		
Upper	27	8.4		

Table 1 shows the descriptive statistics of the participants. University students with age range of 18-26 are 100% ( $n=320$ ), the male students who participated in the study are 39.1% ( $n=125$ ) and the female students who participated in the study are 60.9% ( $n=195$ ). In terms of educational sector, the students from private sector are 59.1% ( $n=189$ ), students from government sector are 14.4% ( $n=46$ ) and students from semi-government sector 26.6% ( $n=85$ ). The socioeconomic status of participants includes students from middle-class 84.1%, ( $n=269$ ), lower-class 7.5% ( $n=24$ ) and upper-class 8.4% ( $n=27$ ).



**Table 2***Psychometric Properties of Study Variables (N=320)*

Variables	No of items	<i>M</i>	<i>SD</i>	Range	<i>a</i>
Upward Physical Appearance Comparison	10	24.82	8.96	10-50	.90
Photo-manipulation	10	21.40	6.83	10-50	.74
Body Esteem	23	58.31	13.95	11-90	.82

*Note: M= Mean, SD, Standard Deviation,  $\alpha$ = Cronbach's Alpha*

Table 2 shows psychometric properties of scale utilized in the study. The Cronbach's alpha value for upward physical appearance comparison questionnaire is .90 which indicated good internal consistency. The Cronbach's alpha value for photo manipulation scale is .74 which shows adequate internal consistency. The Cronbach's alpha value for body esteem scale is .82 which indicated good internal consistency.

**Table 3**

*Pearson Product Moment Correlation Between Upward Physical Appearance Comparison, Photo Manipulation, and Body Esteem (N=320)*

Variables	1	2	3
1. Upward Physical Appearance Comparison	-	.30**	-.29**
2. Photo Manipulation		-	-.18**
3. Body Esteem			-

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

Table 3 showed that upward physical appearance comparison is significantly positively correlated with photo-manipulation and significantly negatively correlated with body esteem however photo-manipulation is significantly negatively correlated with body esteem.

**Table 4**

*Multiple Linear Regression Analysis Predicting the Body Esteem Through Upward Physical Appearance Comparison and Photo Manipulation (N=320)*

Predictors	Body Esteem					$\beta$	$R^2$
	<i>B</i>	<i>SE</i>	95% CI				
			<i>LL</i>	<i>UL</i>			
Constant	72.87***	2.86	67.24	78.50		.09***	
UPAC	-.41	.09	-.58	-.23	-.26**		
PM	-.20	.12	-.43	.02	-.09		

*Note:* CI= Confidence Interval, UPAC= Upward Physical Appearance Comparison, PM= Photo Manipulation

Table 4 shows the impact of upward physical appearance comparison along with photo manipulation on body esteem among university students. Predictors are explaining 9 % variance in outcome variable with  $F(2, 313)= 16.39, p=<.001$ . Results revealed that upward physical appearance comparison significantly negatively predicts body esteem whereas, photo manipulation is non-significant predictor of body esteem.

**Table 5**

*Independent Sample T Test Showing Difference Between Men and Women on Upward Physical Appearance Comparison, Photo Manipulation and Body Esteem (N=320)*

Variables	Men (n=125)		Women (n=195)		t (318)	p	Cohen's d
	M	SD	M	SD			
UPAC	26.29	9.15	23.88	8.72	2.36	.029	.30
PM	21.84	6.31	21.12	7.15	0.92	.356	.10
BE	56.46	12.87	59.49	14.51	1.89	.069	.21

*Note:* UPAC= Upward Physical Appearance Comparison, PM= Photo Manipulation, BE= Body Esteem

Table 5 shows significant mean differences on upward physical appearance comparison with  $t(318) = 2.36, p < .05$ . Findings show that men scored higher than women in the Upward Physical Appearance Comparison, indicating significant gender differences. The value of Cohen's d is .30 which indicates small effect size. However, there were no significant differences between men and women in terms of photo manipulation or body esteem.

**CHAPTER 4****Discussion**

The current study aimed to examine the relationship between upward physical appearance comparison, the use of photo manipulation tools, and body esteem. Moreover, the predictive role of upward physical comparison on body esteem among university students was also examined. A total of three instruments were used in the process of data collection; those were Upward Physical Appearance Comparison Scale by O'Brien (2009) , Photo Manipulation Scale by McLean (2015) and Body Esteem Scale by Mendelson and White (1982).

This study aimed to examine three major hypotheses. According to the first hypothesis there will be a negative relationship between upward physical appearance comparison, photo manipulation and body esteem among university students, which will show that the study variables correlate with one another. The second hypothesis asserts that upward physical appearance comparison and photo manipulation will negatively predict body esteem among university students. And According to the third hypothesis, there will be gender differences across the study variables among university students.

To analyze the psychometric properties of our scales used in the current study, alpha values were calculated. The internal consistency (Cronbach's alpha coefficient) for the overall upward physical appearance comparison was . 90, for photo manipulation the alpha value was. 74 and alpha value for the body esteem was. 82. Hence, all the alpha reliabilities had the adequate range.

Firstly, it was hypothesized that upward physical appearance comparison and photo manipulation will be negatively related with body esteem. These findings of the present study were in consistent with the previous literature that upward physical appearance comparison was found to be significantly negatively correlated with body esteem as upward physical appearance comparison increases, body esteem decreases (Smith & Jones, 2019). These findings can be justified by the fact that students who were involved in more upward physical comparison had a poor body esteem, research showed a strong inverse relationship between body esteem and the frequency of upward physical appearance comparisons on social media platforms ( Brown et al., 2021; Smith & Jones, 2019; Wang & Lee, 2018). Social media platforms, where photo manipulation is prevalent, often feature images of seemingly perfect bodies, creating unrealistic beauty standards and contributing to body dissatisfaction and low self-esteem in both women and men (Cash & Hrabosky,2003; Perloff, 2014).

Secondly, it was hypothesized that upward physical comparison and photo manipulation will negatively predict body esteem among university students. The findings revealed that upward physical comparison was a significant predictor of body esteem. These findings were also supported by the previous literature. Upward comparisons were associated with lower appearance satisfaction and poor body esteem (Leahey & Crowther, 2008; Schaefer, 2017; Rogers, 2017). However, the findings of the present study revealed that photo manipulation was a non-significant predictor of body esteem. These findings are in consistent with the previous literature. There is a mix literature regarding this some studies indicated that photo manipulation behavior, particularly the use of photo editing apps to alter one's appearance, has been associated with body esteem and self-perception.

When individuals engage in photo manipulation, they often aim to improve their self-esteem and reduce body shame by digitally modifying their body image (Gioia et al., 2024; Ozimek et al., 2023). And there are some studies indicating that higher levels of photo editing have been linked to increased self-perception as an object and more comparisons of physical appearance, ultimately leading to lower self-esteem (Staloch, 2023; Cash & Hrabosky, 2003; Perloff, 2014).

Thirdly, it was hypothesized that there will be gender differences in upward physical appearance comparison, photo manipulation and body esteem based on demographic variables among university students. The findings of the study indicate that there is significant difference in upward physical appearance comparison between men and women, men scored higher on upward physical comparison as compared to women. These findings were also supported by the previous literature, which indicated that men tend to engage in upward physical appearance comparisons more frequently than women (Gentile et al., 2010; Schaefer & Thompson, 2018). Whereas there is no significant difference between men and women with respect to photo manipulation behavior and body esteem. The absence of significant gender differences in photo manipulation uses and body esteem observed in this study may be attributed to the homogeneity of the sample, which was limited to young adults and university students.

## **Conclusion**

The results of the present study revealed that upward physical appearance comparison and photo manipulation were significantly negatively correlated with body esteem. Moreover, upward physical appearance comparison was a significant negative predictor of body-esteem, whereas photo manipulation was a non-significant predictor of body esteem among university students. The findings also indicated that there is significant difference in upward physical appearance comparison between men and women, where men scored higher on upward physical comparison as compared to women. However, there is no significant difference between men and women with respect to photo manipulation behavior and body esteem.

## **Limitations**

The results may not be as generalizable as they may have been due to convenience sampling since individuals who opted to participate might have differed systematically from those who did not. Because participants may give answers which they believe to be socially acceptable, the use of self-report measures to gauge upward physical appearance comparison, picture manipulation activity, and body esteem may be biased. The study's cross-sectional design makes it more difficult to determine which variables cause which outcomes.

## **Recommendation**

Future studies should undertake longitudinal research to investigate the linkages that develop over time between the upward physical appearance comparison, photo manipulation behavior, and body esteem of university students. This would clarify the swings and long-term impact of various variables. To find out more about the subjective experiences and opinions of college students on the practice of photo-editing and upward physical appearance comparison, employ qualitative methods like as focus groups and interviews.



**Implications**

To lessen the adverse impacts of upward physical appearance comparison and photo manipulation on college students' self-esteem, universities can implement preventive strategies. Educational programs and interventions can target these behaviors to promote better body image perceptions. By improving students' ability to critically assess media and social media beauty standards, and encouraging authentic self-representation, students can develop more positive body image attitudes. Addressing digital well-being and promoting positive interactions with social media is crucial. Providing tools to navigate and mitigate the harmful impacts of social comparison can also enhance digital well-being. University counseling services can offer resources and psychological support to students struggling with maladaptive photo manipulation and body image issues.

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**APPENDICES**

**APPENDIX A**  
**INFORMED CONSENT FORM**

**Informed Consent Form**

I acknowledge that I have been informed about the aims and objectives of the research conducted by Aiman Arshad and Munaza Syed. I understand that the purpose of this study is to investigate the relationship between Upward Physical Comparison, Beauty Filters, and Body Esteem among university students. I agree to participate voluntarily and retain the right to refuse or withdraw at any time. I understand that my information will be kept confidential and used solely for educational and research purposes. I consent to participate in the study.

Participant's Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**APPENDIX B**  
**DEMOGRAPHIC INFORMATION FORM**

**Demographic Information Form**

Physical Illness:

i. Yes

ii. No

Psychological Illness:

i. Yes

ii. No

**1. Age:** \_\_\_\_\_

**2. Gender:**    i. Male    ii. Female

**3. Educational Sector:**    i. Private    ii. Government    iii. Semi-Government

**4. Socio-economic Status:**    i. Lower    ii. Middle    iii. Upper

**5. Current Relationship Status:**

i. Single    ii. Committed    iii. Married    iv. Divorced    v. Widowed    vi. Others

**6. Types of Social Media Platforms Used:**

i. Instagram    ii. Snapchat    iii. TikTok    iv. Facebook    v. Twitter  
vi. YouTube    vii. Other (please specify: \_\_\_\_\_)

**7. Frequency of Using Beauty Filters on Social Media:**

i. Daily    ii. Weekly    iii. Monthly    iv. Rarely    v. Never

**APPENDIX C**

**UPWARD PHYSICAL APPEARANCE COMPARISON SCALE**

**QUESTIONNAIRE NO. 1**

**Please write on the line alongside each statement, the number from the scale below (1= Strongly Disagree to 5 = Strongly Agree) that best matches what you think.**

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

1. I compare myself to those who are better looking than me rather than those who are not. \_\_\_\_\_
2. I tend to compare my own physical attractiveness to that of magazine models. \_\_\_\_\_
3. I find myself thinking about whether my own appearance compares well with models and movie stars. \_\_\_\_\_
4. At the beach or athletic events (sports, gym, etc.) I wonder if my body is as attractive as the people I see there with very attractive bodies. \_\_\_\_\_
5. I tend to compare myself to people I think look better than me. \_\_\_\_\_
6. When I see a person with a great body, I tend to wonder how I 'match up' with them. \_\_\_\_\_
7. When I see good-looking people I wonder how I compare to them. \_\_\_\_\_
8. At parties or other social events, I compare my physical appearance to the physical appearance of the very attractive people. \_\_\_\_\_
9. I find myself comparing my appearance with people who are better looking than me. \_\_\_\_\_
10. I compare my body to people who have a better body than me. \_\_\_\_\_

**APPENDIX D**  
**PHOTO MANIPULATION SCALE**

**QUESTIONNAIRE NO. 2**

*Instructions: For photos of yourself that you post online or share via mobile, how often do you do the following to make the photos look better?*

	Never	Rarely	Sometimes	Often	Always
Get rid of red eye	1	2	3	4	5
Make yourself look larger	1	2	3	4	5
Highlight facial features, e.g., cheekbones or eye colour/brightness	1	2	3	4	5
Use a filter to change the overall look of the photo, e.g., making it black and white, or blurring and smoothing images	1	2	3	4	5
Make yourself look skinnier	1	2	3	4	5
Adjusting the light/darkness of the photo	1	2	3	4	5
Edit to hide blemishes like pimples	1	2	3	4	5
Whiten your teeth	1	2	3	4	5
Make specific parts of your body look larger or look smaller	1	2	3	4	5
Edit or use apps to smooth skin	1	2	3	4	5

**APPENDIX E**  
**BODY ESTEEM SCALE**

**QUESTIONNAIRE NO.3**

*Indicate how often you agree with the following statements ranging from "never" (0) to "always"*

*(4).*

*Circle the appropriate number beside each statement.*

	Never	Seldom	Sometimes	Often	Always
1. I like what I look like in pictures.	0	1	2	3	4
2. Other people consider me good looking.	0	1	2	3	4
3. I'm proud of my body.	0	1	2	3	4
4. I am preoccupied with trying to change my body weight.	0	1	2	3	4
5. I think my appearance would help me get a job.	0	1	2	3	4
6. I like what I see when I look in the mirror.	0	1	2	3	4
7. There are lots of things I'd change about my looks if I could.	0	1	2	3	4
8. I am satisfied with my weight.	0	1	2	3	4
9. I wish I looked better.	0	1	2	3	4
10. I really like what I weigh.	0	1	2	3	4
11. I wish I looked like someone else.	0	1	2	3	4
12. People my own age like my looks.	0	1	2	3	4
13. My looks upset me.	0	1	2	3	4
14. I'm as nice looking as most people.	0	1	2	3	4
15. I'm pretty happy about the way I look.	0	1	2	3	4



16. I feel I weigh the right amount for my height.	0	1	2	3	4
17. I feel ashamed of how I look.	0	1	2	3	4
18. Weighing myself depresses me.	0	1	2	3	4
19. My weight makes me unhappy	0	1	2	3	4
20. My looks help me to get dates.	0	1	2	3	4
21. I worry about the way I look.	0	1	2	3	4
22. I think I have a good body.	0	1	2	3	4
23. I'm looking as nice as I'd like to.	0	1	2	3	4

**APPENDIX F**  
**EMAIL PERMISSION FOR SCALES**

# Permission for Upward Physical Appearance Comparison Scale



Inbox



**Aiman Arshad** Feb 17

I hope this message finds you well.  
My name is Aiman Arshad, a student



**Kerry O'Brien** Feb 18

to Aiman, me ▾



Hi Aiman, yes please feel free to use the scale for  
your research. Good luck with your research.  
Best wishes Kerry

Kerry O'Brien PhD  
Professor and Associate Dean Research  
Director of the Behavioural Sciences Research  
Laboratory  
Monash University  
T: +61 (0)3 99032377  
GoogleScholar Pub-Profile <http://scholar.google.com.au/citations?user=NUzH-7AAAAAJ&hl=en>  
<http://orcid.org/0000-0003-3145-6038>



Sian McL... 12/20/2023



to Aiman, me ▾

Dear Aiman Arshad,

Thank you for your interest in our research.

Please accept this email as permission to employ the Self Photo Manipulation in your research project.

Information on psychometric properties are provided in the attached paper. There are no norms for the measure. Scoring information is included in the attached word document.

All the best for your research.

Kind regards,

**Siân**

**Siân McLean**, PhD (*She/Her*)

Senior Lecturer | Department of Psychology,  
Counselling, & Therapy | School of Psychology and  
Public Health

La Trobe University | Melbourne 3086

T: +61 3 9479 2949 | E: s.mclean@latrobe.edu.au

# Body Esteem Scale

Inbox



Beverley... 12/22/2023

to me ▾



Hello,

You have our permission to use the BESAA. Good luck with your work.  
Stay well,  
Bev Mendelson

## Munazza & Aimen

### ORIGINALITY REPORT

<b>12%</b>	<b>7%</b>	<b>8%</b>	<b>6%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

### PRIMARY SOURCES

<b>1</b>	<b>journals.plos.org</b> Internet Source	<b>3%</b>
<b>2</b>	<b>www.researchgate.net</b> Internet Source	<b>1%</b>
<b>3</b>	<b>Zhenyong Lyu, Panpan Zheng, Dongquan Kou. "Social Comparison and Female Adolescents' Selfie Behaviors: Body Surveillance as the Mediator and Self-Esteem as the Moderator", Psychological Reports, 2023</b> Publication	<b>1%</b>
<b>4</b>	<b>Submitted to Unizin, LLC</b> Student Paper	<b>&lt;1%</b>
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<b>7</b>	<b>Submitted to Coventry University</b> Student Paper	<b>&lt;1%</b>