Examining the Impact of Instagram Influencers:

Unrealistic Appearances and Gender Differences in Self Esteem

Student Name: Cathlynn Frances Netscher

Student Number: 560343

Supervisor: Petra Tenbült

Media & Business Erasmus School of History, Culture and Communication Erasmus University Rotterdam

Masters Thesis *June 2024*

Word Count: 10902

EXAMINING THE IMPACT OF INSTAGRAM INFLUENCERS: APPEARANCES AND GENDER DIFFERENCES IN SELF-ESTEEM

ABSTRACT

Social media is a pervasive force that profoundly shapes perceptions, attitudes, and behaviours. Instagram, in particular, is a dominant platform where influencers wield significant power over their audiences. This thesis investigates the impact of Instagram influencers' appearances—categorised as realistic or unrealistic—on the self-esteem of their audiences, with a specific focus on gender differences. The central research question guiding this study is: "To what extent does the appearance of Instagram influencers (realistic versus unrealistic) affect the self-esteem of audiences between genders?" The problem addressed by this research is the growing concern about the negative effects of unrealistic beauty standards propagated by influencers, which are often unattainable and can lead to diminished self-esteem, especially among young users. Previous studies have highlighted the influence of media on self-esteem, but there is limited research specifically examining the differential impact of realistic versus unrealistic appearances and how these impacts vary between genders. To investigate this, a quantitative survey methodology was employed. Data collected from a diverse sample of Instagram users, comprising both male and female participants, through an online questionnaire. The survey included measures of self-esteem, exposure to different types of influencer appearances, and demographic information. Statistical analyses were conducted to compare the effects of realistic and unrealistic influencer appearances on self-esteem across genders. The findings reveal significant gender differences in self-esteem responses to influencer appearances. Female audiences generally experience lower self-esteem when exposed to unrealistic appearances compared to realistic ones. In contrast, male audiences show less variation in self-esteem between the two types of appearances, although some negative effects are still present. However, an interaction effect between the variables was not present. These differences are attributed to societal pressures and beauty standards that disproportionately affect women, emphasising the importance of physical appearance. The study highlights the critical need for promoting realistic portrayals on social media to mitigate negative self-esteem impacts. By understanding how different types of influencer appearances affect self-esteem across genders, this research provides valuable insights for marketers, social media platforms, and policymakers. Strategies can be developed to foster a healthier online environment, such as promoting diversity and authenticity in influencer content. This thesis contributes to the existing literature on social media's psychological impacts and underscores the importance of cultural and gender-sensitive approaches in addressing self-esteem issues. The findings advocate for a shift towards more realistic and inclusive digital spaces, ultimately aiming to enhance the well-being of social media users.

KEYWORDS: Influencers, Instagram, Self Esteem, Gender, Quantitative

Table of Contents

Abstract and keywords

ſ	Preface
	IIIII

1. Introduction	4
1.1. Scientific Relevance	4
1.2. Research Question	6
1.3. Social Relevance	6
2. Theoretical Framework	9
2.1. Self Esteem	9
2.2. Gender Differences	11
2.3. Instagram	12
2.4. Comparing Genders	13
2.5. Hypotheses	15
3. Methodology	17
3.1. Research Design	17
3.2. Sampling Strategy	18
3.3. Operationalisation	18
3.3.1 Pretest	18
3.3.1 Main Experiment	19
3.4. Procedure	20
3.5. Data Analysis	21
3.6. Ethical Considerations	21
4. Results	22
4.1. Pretest	22
4.2. Sample Description	24
4.3. Reliability Analysis	
4.4. Assumptions	
4.5. Two-way ANOVA	28
4.5. Hypotheses Overview	29
5. Discussion & Conclusion	
5.1. Key Findings	

5.2. Discussion	31
5.2.1 The Influence of Unrealistic Influencer Appearances on Self-Esteem	31
5.2.2 Gender Differences in Self-Esteem	_32
5.2.3 Contradictory Evidence and the Need for Inclusive Approaches	_33
5.3. Social and Societal Relevance	_34
5.4. Limitations	_36
5.5. Suggestion for Future Research	_38
5.6. Conclusion	40
References	41
Appendix A	_46
Appendix B	_49
Appendix C	_56

1. Introduction

In the age of digital interconnectedness, social media platforms have transformed the landscape of human interaction, communication, and societal influence. Among these platforms, Instagram has risen as a dominant force, offering a stage where influencers command substantial sway over their vast audiences. Central to this digital realm is the pervasive portrayal of idealised beauty standards by influencers, igniting discussions about its profound impact on the self-esteem of audiences, with particular emphasis on gender differences (Tiggemann & Slater, 2013 p. 630).

This research embarks on an exploration of the intricate interplay between Instagram influencers' portrayal of beauty standards and the self-esteem of individuals across genders. This study endeavours to dissect the complexities underlying the influence of these portrayals on individuals' self-perception and confidence.

We aim to unravel the multifaceted layers of influence embedded within Instagram's beauty-centric culture. Through a comprehensive examination of empirical evidence and theoretical frameworks, we seek to shed light on the mechanisms through which these portrayals shape individuals' perceptions of themselves and their place within society. In navigating through these dimensions, our research seeks not only to expand scholarly understanding but also to inform practical interventions aimed at promoting positive self-esteem and well-being in the digital era. Through rigorous analysis and critical inquiry, we endeavour to contribute to the ongoing discourse surrounding the impact of social media on individual psyche and societal norms.

1.1 Scientific Relevance

The study of the influence of social media on psychological well-being has garnered increasing attention in contemporary academic discourse (Perloff, 2014 p.365). Various studies have explored the effects of exposure to digitally altered images and curated representations of beauty on body image dissatisfaction, eating disorders, and self-esteem among young adults (Tiggemann & Slater, 2013 p.36, Perloff, 2014 p.365, Fardouly et al., 2015 p.40). From a psychological standpoint, exposure to idealised portrayals, often present

in media, contributes to the development of unrealistic standards and expectations. When individuals repeatedly encounter images and narratives featuring impeccably flawless physical attributes, luxurious lifestyles, or unattainable success, they may internalise these depictions as societal benchmarks for personal achievement and desirability. Consequently, this can give rise to a pervasive sense of inadequacy and dissatisfaction among individuals who perceive themselves as falling short of these artificial ideals (Fardouly et al., 2015 p.41). Scientifically, this research aims to delve into the psychological and sociological aspects underlying the impact of these idealised portrayals on the self-esteem of individuals.

Numerous studies have explored the correlation between exposure to idealised media images and body dissatisfaction, a key component of self-esteem. For instance, a study (Fardouly et al. 2015 p.41) found that exposure to idealised images on social media platforms led to increased body dissatisfaction among young women. Similarly, another study (Tiggemann & Slater 2014 p.632) revealed that exposure to thin-ideal Instagram images negatively impacted body image satisfaction among both women and men. However, while existing research has provided insights into the impact on female audiences, there is a gap in comprehensive studies that examine the nuanced effects across genders. The study (Tiggemann & Slater 2014 p.632) suggests that females may be more susceptible to negative body image perceptions, leading to lower overall self-esteem levels compared to males. While conversations about body image issues have primarily focused on women, there is growing recognition that men also face similar pressures and fears due to idealised norms propagated through social media platforms. However, thorough research to confirm whether men and women face the same pressures is lacking. Tiggemann and Slater's study (2013) p.632) suggests that for females, social media often promotes unrealistic beauty standards, leading to comparisons and feelings of inadequacy, thereby negatively impacting self-esteem. Conversely, men may experience pressure to achieve muscular ideals perpetuated by male influencers on social media, leading to body image concerns and self-esteem issues (Tiggemann & Slater 2014 p.633). The study underscores the need for more research on gender differences and the effects of social media on male self-esteem. Researching this is interesting because it can provide new insights on both genders that can contribute to existing research as a further confirmation or even as a contradiction. It would be interesting to

provide further insights on whether the self-esteem of males and females is affected similarly or differently by social media. This research seeks to bridge this gap by conducting a rigorous analysis that accounts for diverse gender perspectives.

Moreover, this quantitative research integrates theories from psychology, sociology, and communication studies to offer an understanding of the complexities surrounding self-esteem formation in the context of influencer-driven beauty standards. By employing robust methodologies and validated measures, this study aims to contribute empirical evidence to the existing body of literature, enabling a deeper comprehension of the intricacies involved in the relationship between Instagram influencer content and self-esteem.

1.2 Research Question

At its core lies a fundamental research question: To what extent does the appearance of Instagram influencers (realistic versus unrealistic) affect the self-esteem of audiences between genders? This question serves as a guiding beacon, directing our inquiry into the nuanced dynamics of self-esteem formation in the digital age and the differential impact experienced by male and female audiences.

1.3 Social Relevance

As confirmed by previous literature (Vogel et al., 2014 p.209), the pervasive influence of social media, especially Instagram, in shaping societal norms and individual perceptions cannot be understated. The platform serves as a conduit for the sharing of images, narratives, and lifestyles that often perpetuate unattainable ideals of beauty, leading to a phenomenon commonly referred to as "social comparison." Individuals, bombarded with meticulously curated images of flawless beauty, may experience heightened feelings of inadequacy and dissatisfaction with their appearance (Vogel et al., 2014 p.210).

Furthermore, the differential impact of these portrayals on genders remains a pertinent societal concern. While discussions surrounding body image issues have predominantly centred on females, there is an emerging recognition of similar pressures and insecurities faced by males due to idealised standards propagated through social media platforms (Perloff,

2014 p.365-368). However, there have not been enough comprehensive studies done to truly determine if males and females are subjected to the same pressures. This research seeks to shed light on the nuanced ways in which Instagram influencer content affects the self-esteem of individuals, transcending traditional gender-based stereotypes. By exploring the ramifications of unrealistic beauty standards perpetuated by Instagram influencers on the self-esteem of audiences across genders, this study aims to provide valuable insights for society at large. It endeavours to inform interventions and strategies that mitigate the negative impact of these standards, fostering a more inclusive and positive digital environment.

By examining how influencer content affects self-esteem, the study provides insights into the broader societal implications of social media usage in all different kinds of fields and influence change for the future. The findings of this study can possibly lead to educators incorporating media literacy lessons into the curriculum to support student's growth in critical thinking abilities, enabling them to properly explore social media content. Through these programmes, children can learn to identify and question unattainable beauty standards, which can lead to a more positive interaction with social media (Fardouly et al., 2015, p. 42). Policymakers can support these educational efforts by funding initiatives that promote media literacy in schools worldwide. This kind of assistance is crucial to raising resilient, knowledgeable young people who can evaluate the internet material they come across. Mental health professionals also play a crucial role. Interventions aimed at developing selfcompassion and resilience can empower people to resist the detrimental impacts of influencers' unrealistic beauty standards and deal with the pressures of social media. These interventions can help individuals, particularly those most affected by social media pressures, to resist the negative effects of unrealistic beauty standards (Holland & Tiggemann, 2016, p. 105). Techniques such as cognitive-behavioural therapy can be used to address and reframe negative thoughts related to body image (Fardouly et al., 2015, p. 42). Influencers and content creators have a big part in determining how social media affects self-esteem. Influencers can contribute to the representation of a more inclusive and realistic range of body types and appearances by encouraging diversity and authenticity in their portrayals. This change may help create a more encouraging social media atmosphere where users feel appreciated and validated (Holland & Tiggemann, 2016, p. 105). The frequently unachievable beauty standards that predominate on social media might be challenged by encouraging

influencers to offer unfiltered and honest content. By promoting diversity and authenticity, they can help create a more inclusive and realistic portrayal of beauty, contributing to a healthier social media environment (Holland & Tiggemann, 2016, p. 105).

In summary, this research aspires to unravel the intricate relationship between Instagram influencer content portraying unrealistic beauty standards and its effects on the self-esteem of audiences across genders. By addressing the gaps in the existing literature and acknowledging the evolving nature of social media influence, this study endeavours to contribute meaningfully to the ongoing discourse on the societal implications of digital media consumption.

2. Theoretical Framework

In academic research, previous literature serves as foundational pillars, providing a comprehensive understanding of existing knowledge within a particular field or topic. They play a vital role in contextualising research endeavours by synthesising previous studies, theoretical frameworks, and empirical findings. This theoretical framework embarks on an exploration of the impact of Instagram on self-esteem, situated within the broader context of social media's influence on societal perceptions. Through a meticulous analysis of existing scholarship, this review aims to elucidate the multifaceted relationship between Instagram, self-esteem, and gender differences. Moreover, this review endeavours to shed light on the importance of considering gender-specific influences on self-esteem within the context of Instagram's pervasive beauty-centric culture. By examining empirical evidence and scholarly insights, aiming to identify the unique pressures faced by males and females in navigating the digital landscape of idealised beauty standards propagated by influencers.

2.1 Self-esteem

The rise of social media platforms, particularly Instagram, has significantly influenced societal perceptions of beauty. With the prevalence of influencers portraying idealised and often unrealistic beauty standards, questions arise regarding their impact on the self-esteem of diverse audiences, both male and female. Understanding the theoretical underpinnings behind this phenomenon can shed light on its effects. Various theories provide an understanding of why social media affects audiences' self-esteem in the first place. According to social comparison theory (Festinger, 1954 p. 119), individuals tend to evaluate themselves by comparing with others. Social media platforms like Instagram provide an abundance of content, leading individuals to make upward social comparisons, where they measure themselves against seemingly 'perfect' influencers. Social media often presents an idealised version of people's lives, especially in terms of appearance and achievements. Upward social comparison occurs when individuals compare themselves to others they perceive as superior or more successful (De Vries et al., 2017 p. 224). On platforms like Instagram, influencers and celebrities frequently share images that conform to societal beauty standards and ideals. Users may find themselves comparing their own lives, bodies, and accomplishments to these idealised representations (De Vries et al., 2017 p. 224). Such

comparisons may lead to decreased self-esteem if individuals perceive a discrepancy between their appearance and the unrealistic standards portrayed. Social media platforms provide a constant stream of content, making it easy for individuals to engage in continuous social comparisons. Unlike traditional media, which individuals could choose to consume or avoid, social media is often integrated into daily life, making it challenging to escape the pervasive influence of these comparisons. The constant exposure to idealised images can create a cycle of comparison that has the potential to erode self-esteem over time. Research has consistently shown that frequent engagement in upward social comparison on social media is associated with negative outcomes, including decreased self-esteem, increased body dissatisfaction, and higher levels of stress and anxiety (De Vries et al., 2017 p. 238). The perception of falling short of idealised standards may contribute to a negative self-image and a sense of not measuring up to societal expectations.

Another theory that gives understanding to social media audiences is the selfobjectification theory (Fredrickson & Roberts, 1997). The theory posits that exposure to objectified images can lead individuals to internalise these ideals, resulting in selfobjectification. In the context of Instagram influencers, constant exposure to perfected and often digitally altered images may prompt audiences to focus excessively on their physical appearance, contributing to decreased self-esteem (Fredrickson & Roberts, 1997 p. 181). Instagram is a platform where individuals frequently present themselves visually, often emphasising physical appearance. Influencers, in particular, curate images that align with societal beauty ideals, showcasing a polished and perfected version of themselves. Constant exposure to idealised and digitally manipulated images on Instagram may prompt individuals to internalise these beauty ideals (Garcia et al., 2022 p. 426). The self-objectification process occurs when individuals start to adopt an external perspective, evaluating themselves based on how they believe others perceive them. As a result, individuals may place excessive importance on their physical appearance, judging their self-worth primarily in terms of beauty standards perpetuated by social media influencers (Fredrickson & Roberts, 1997 p. 185). When individuals focus excessively on their appearance and perceive a gap between their real selves and the idealised standards presented on Instagram, feelings of inadequacy and dissatisfaction may arise (Garcia et al., 2022 p. 431). This process can be particularly

harmful to mental well-being, as individuals may feel pressure to conform to unrealistic beauty standards that are perpetuated by influencers. The internalisation of idealised beauty standards can also lead to body dissatisfaction. Individuals may feel compelled to achieve an unrealistic and often unattainable physical ideal, contributing to negative body image perceptions. This dissatisfaction can have wide-ranging consequences, including the development of unhealthy behaviours such as extreme dieting, excessive exercise, or other body modification practices in an attempt to align with societal expectations (Garcia et al., 2022 p. 432).

2.2 Gender Differences

Numerous studies have examined the relationship between gender and self-esteem, providing valuable insights into potential differences between males and females. For instance, research conducted by Robins et al. (2002 p. 427) found that adolescent males tend to report higher levels of self-esteem than females. Similarly, in a meta-analysis by Kling et al. (1999 p. 478-483), which synthesised data from multiple studies, it was observed that males consistently reported higher self-esteem levels across various age groups and cultural contexts compared to females. Moreover, societal norms and gender roles may contribute to differences in self-esteem between genders. Socialisation processes often instil different expectations and standards for males and females, which can impact their self-perceptions. According to Eagly and Wood's social role theory (1999 p. 412), traditional gender roles prescribe assertiveness and independence for males, traits that are associated with higher self-esteem, while females are often expected to prioritise nurturing and communal attributes, which may not be as strongly linked to self-esteem.

Furthermore, factors such as body image concerns, academic achievement, and interpersonal relationships may also influence gender differences in self-esteem. For instance, research by McKinley and Hyde (1996 p. 211) suggests that females' self-esteem may be more susceptible to negative body image perceptions, contributing to lower overall self-esteem levels compared to males. Though the focus of conversations about body image issues has primarily been on women, there is a growing acknowledgement that men too experience comparable pressures and fears as a result of idealised norms spread through social media

platforms (Perloff, 2014 p. 370). To be certain that men and women face the same pressures, though, there has not been enough thorough research conducted. Research indicates potential gender differences in how social media influences self-esteem. For instance, one study (Tiggemann & Slater 2013 p. 632) found that exposure to idealised images on social media primarily affected females' body image dissatisfaction. For females, social media platforms often showcase images that promote unrealistic beauty standards, emphasising traits such as thinness, flawless skin, and a particular body shape. These idealised images can create a pervasive cultural norm that may lead women to compare themselves unfavourably and feel pressure to conform to these unrealistic standards. Such comparisons can contribute to body dissatisfaction and negatively impact self-esteem, as individuals may perceive themselves as falling short of the idealised images they encounter on social media (Tiggemann & Slater 2013 p. 623). On the other hand, men may experience a different set of pressures related to achieving muscular ideals that are often perpetuated by male influencers on social media. These ideals often include a lean and muscular physique, and the pressure to attain such a body image can lead to body image concerns and self-esteem issues among men. The constant exposure to images of muscular and seemingly perfect male bodies may create a sense of inadequacy for those who do not meet these standards, potentially impacting their self-esteem (Tiggemann & Slater 2013 p. 633). The study emphasises the need for more research conducted on the differences between genders and the effects of social media on male self-esteem.

2.3 Instagram

Specific studies have delved into the impact of Instagram on self-esteem. Fardouly et al. (2015 p. 342) uncovered that exposure to Instagram photos focusing on appearance led to increased body dissatisfaction among young women. The researchers investigated the effects of exposure to Instagram photos that primarily focused on appearance. The findings revealed a significant link between this exposure and increased body dissatisfaction among young women. Instagram is known for its visual nature, where users often share carefully curated images, particularly emphasising their physical appearance. The constant exposure to such images, often showcasing idealised beauty standards, contributed to a heightened sense of

body dissatisfaction among users, as they compare themselves to the curated and often unrealistic images presented on the platform.

Similarly, a study by Cohen et al. (2019 p.185) found a correlation between time spent on Instagram and negative body image perceptions. A study was conducted that explored the relationship between time spent on Instagram and negative body image perceptions. The research found a correlation between the amount of time individuals spent on Instagram and their likelihood of developing negative perceptions of their bodies. This correlation suggests that the more time users invest in scrolling through images on Instagram, the greater the potential impact on their body image. These studies underline the need for increased awareness of the potential negative consequences of social media use, particularly on platforms like Instagram. Additionally, the findings emphasise the importance of further research to understand the evolving dynamics between social media use and mental well-being.

In conclusion, previous literature has research that suggests Instagram influencers' portrayal of unrealistic beauty standards significantly impacts the self-esteem of both female and male audiences. Social comparison theories, self-objectification, and gender-specific influences play pivotal roles in understanding how exposure to such content affects individuals' perceptions of themselves. The findings highlight the lack of and need for further research on the effect between genders, specifically men.

2.4 Comparing Genders

This research takes on a 2x2 design, with the four groups being formed based on gender and influence with realistic and unrealistic appearances which can be seen in Table 2.1. This research design allows for differences to be seen across each group to determine the effects of unrealistic appearances on social media and the effect it then does or does not have on both genders.

Table 2.1: Research Design

	Influencer with Realistic Appearance	Influencer with Unrealistic Appearance
Female	Group 1	Group 2
Male	Group 3	Group 4

By ensuring that participants are exposed only to images of individuals of their own gender, researchers can minimise the influence of confounding variables that may arise from viewing individuals of the opposite gender (Gawronski & Bodenhausen, 2006 p.722; Rudman & Goodwin, 2004 p.498). If a study aims to investigate self-perception or social comparison processes within a specific gender group, presenting stimuli that align with participants' own gender reduces the potential for biases or distractions that could arise from viewing individuals of the opposite gender (Johnson & Ghavami, 2011; Lipsitz, 1981 p.357). This approach enhances the internal validity of the experiment, ensuring that any observed effects are more likely attributable to the variables under investigation rather than extraneous factors related to gender mismatch (Hofmann et al., 2008 p.1374).

Research by Gawronski and Bodenhausen (2006 p.724) highlights the importance of minimising confounding variables in evaluating implicit and explicit attitude change. By exposing participants to stimuli that align with their own gender, researchers can reduce potential biases that might arise from viewing individuals of the opposite gender, thus enhancing the internal validity of the experiment. This aligns with Rudman and Goodwin's (2004 p.502) findings on gender differences in automatic in-group bias, which suggest that individuals tend to exhibit stronger preferences for their own gender. Presenting gender-congruent stimuli helps mitigate the influence of these biases, allowing researchers to focus more accurately on the targeted psychological processes. Moreover, Johnson and Ghavami (2011) discuss the effects of identity threat on self-esteem, emphasising the significance of considering gender and racial congruence between individuals and stimuli. In studies investigating self-perception within specific gender groups, the use of gender-congruent stimuli reduces the likelihood of identity threat and associated negative emotions that could arise from exposure to incongruent stimuli. This, in turn, promotes more authentic responses from participants, contributing to the overall validity of the study.

Lipsitz's (1981 p.358) gender schema theory provides further insight into how individuals organise and interpret gender-related information. According to this theory, individuals develop cognitive structures (schemas) that guide their understanding of gender and influence their perceptions and behaviours. When stimuli align with participants' gender schemas, they are more likely to process the information in a manner consistent with their gender identity, leading to more accurate and reliable responses in experimental settings. Additionally, Hofmann et al.'s (2005 p.1381) meta-analysis on the correlation between implicit and explicit measures of attitudes recognizes the importance of stimulus congruency in understanding implicit biases. Gender-congruent stimuli facilitate the alignment of implicit and explicit evaluations, reducing potential discrepancies between conscious and unconscious attitudes and behaviours.

2.5 Hypotheses

This hypothesis is building on societal perceptions and existing research suggesting gender-based differences in self-esteem levels. Males typically exhibit higher levels of self-esteem compared to females (Robins et al., 2002 p.429).

Main effect

H1: Males have higher self-esteem compared to females

This hypothesis contends that influencers with unrealistic appearances are linked to a substantial decrease in overall self-esteem (Tiggemann & Slater, 2013 p.632). Recognizing the influence of appearance on self-esteem provides insights into the overall effect.

Second main effect

H2: The unrealistic appearance of an influencer will lead to lower self-esteem compared to a realistic appearance

This hypothesis explores the idea that females are more affected by influencer appearances leading to a more pronounced decline in self-esteem when encountering an influencer with an unrealistic appearance compared to males based on previous research (Fardouly et al., 2015 p.43).

Interaction effect

H3: Females have a lower self-esteem than males especially when the appearance of the influencer is unrealistic compared to realistic.

3. Methodology

3.1 Research Design

To investigate the research question, a quantitative survey approach is employed, using an experimental survey design with a between-subjects design. This approach allows for the systematic collection of data from a diverse sample of Instagram users. The use of a quantitative approach allows for the objective measurement of variables such as self-esteem, Instagram usage patterns, and the perceived impact of influencers (Babbie, 1989 p.256). Quantitative data, often in numerical form, facilitates statistical analyses that provide precise and standardised results (Neuman, 2014 p.150). In addition to enabling the collection of data from a large and diverse sample, this approach enhances the chances for reliable generalisability of findings to a broader population of Instagram users, providing insights into patterns that may exist across different demographics and usage behaviours (Babbie, 1989) p.257). By quantifying relationships and patterns, the results became more generalisable, allowing for the identification of trends and associations within the population (Neuman, 2014 p.160). In addition, quantitative surveys are efficient in terms of data collection. With a structured questionnaire, information can be collected from a large number of participants relatively quickly. This is an advantage as this study aimed to achieve a sizeable sample size, crucial for statistical analyses (Neuman, 2014 p.162). This chosen quantitative design facilitates systematic comparisons between genders and other demographic variables (Matthews & Ross, 2014 p.134). Allowing for a detailed exploration of how Instagram influencers impact self-esteem differently among males and females, contributing to a deeper understanding of the research question. While correlation does not imply causation, quantitative methods still provide a foundation for establishing associations (Vargas et al., 2017 p.213). Through carefully designed analyses, this study explores whether increased exposure to Instagram influencers is associated with decreased self-esteem, allowing for inferential insights. Measurements such as self-esteem and exposure to influencers are often easier to quantify through numerical scales. The use of validated quantitative instruments for the concepts provided standardised measurements, enhancing the reliability and validity of the study. As quantitative research allows for the replication and validation of findings, therefore in all a quantitative survey design method is best suited for this research study (Neuman, 2014 p.160).

3.2 Sampling Strategy

With a target of at least 250 participants, the sample size is chosen to allow for subgroup analyses and statistical exploration, ensuring a large enough sample size to draw reliable conclusions. The goal is for the sample to be as equally distributed as possible between male and female respondents. The target population included active Instagram users aged 18-35. For this study, the sampling method chosen was convenience sampling. A non-probability sampling technique was where participants were selected based on their availability and willingness to participate in the study (Babbie, 1989 p.195). Convenience sampling was the best way to ensure that the research got enough participants due to the practicality and accessibility of recruiting participants for a representative of the population; the results of the study could be generalised to the larger population (Babbie, 1989 p.199). The survey was distributed through various channels, including social media platforms, to reach a diverse audience, using Qualtrics software as the survey platform.

3.3 Operationalization

3.3.1 Pretest

A pretest was used among 20 participants for each gender, with a total of 40 participants. Participants were asked demographic information including age, gender, educational background, and nationality. Four Instagram posts for each gender were used and each had an original and edited version, a total of 8 images, all images can be found in Appendix A. The edited images had been altered and the people in the images had been edited including airbrushing, editing facial features like eyes, lips, nose, jawline and whitening teeth. As well as altering body proportions and editing skin tone including smoothing out skin texture to remove blemishes, wrinkles, and pores. Creating an appearance that was unrealistic. Participants were asked to rate the post. Participants who identified as male were shown Instagram posts containing men, and participants who identified as female were shown posts containing women. All posts (16) were rated on a 5-point Likert scale on whether the appearance of the Instagram influencer was realistic or not. The question asked was if the influencer had a realistic appearance (ranging from 1 - totally not agree to 5 - completely agree). The Instagram post for each gender with the best pretest results was selected for the main experiment. For both males and females, the influencer picture with the

results in which the non-edited photo is seen as most realistic and the edited photo is seen as most unrealistic compared to the other influencer images of the same gender is used in the main experiment. In the main experiment, the appearance (realistic/unrealistic) of the influencer is measured on the same 5-point Likert scale.

Manipulation Check

A manipulation check was used to measure that the materials used in the experiment contained an Instagram post with an influencer that was deemed realistic (original post) and unrealistic (edited post). The question asked the participant to agree with the statement that the influencer had a realistic appearance which they were asked to answer using a 5-point Likert scale (ranging from 1 - totally not agree to 5 - completely agree).

3.3.2 Main Experiment

Demographic Information:

Participants provided demographic details including age, gender, educational background, and nationality. For the demographic age, participants were asked "What is your age?" with a response option in which participants could answer using numerical values. For the demographic gender, participants were asked "What is your gender?" with answer options "Male," "Female", and "Other." For the demographic educational background, participants were asked "What is your educational background?" with answer options being "Less than high school", "High school graduate", "Bachelors", "Master", and "Doctorate". For the demographic nationality, participants were asked the question "What is your nationality?" with an open-ended text box in which they could write their nationality.

Materials

The influencer image with the best result for each gender from the pretest was selected to be used in the main experiment. The Instagram posts with the realistic appearance were images that had not had any Photoshop or editing done to them. The people in the images therefore had nothing changed to their appearance and looked how they usually do in everyday life. The unrealistic appearance Instagram posts were the same images as the realistic ones except the images had been photoshopped and edited. The images had been

altered and the people had been edited including airbrushing which entailed smoothing out imperfections in the skin, making it appear flawless. Editing facial features like eyes, lips, nose, and jawline to achieve a more idealised or symmetrical appearance and whitening teeth. As well as altering body proportions to conform to societal standards of beauty, including making waists smaller, thighs slimmer, or breasts larger. Editing skin tone to be more uniform or to achieve a particular aesthetic, as well as smoothing out skin texture to remove blemishes, wrinkles, and pores. Creating an appearance that was unrealistic.

Control Question:

A control question was used to measure if the participants truly looked at the image well enough to draw research conclusions from the results. The participants were asked to answer with the following statement "I took a good look at the displayed Instagram post".

The question was measured using a 5-point Likert scale with answer options ranging from 1 - totally not agree to 5 - completely agree.

Self-Esteem Measurement

The Rosenberg Self-Esteem Scale (RSES) was used to quantitatively measure self-esteem. This validated scale consisted of statements to which participants responded on a 5-point Likert-type scale, providing a numerical self-esteem score. The format ranged from strongly disagree to strongly agree. A 10-item scale that measured self-esteem by measuring both positive and negative feelings about the self.

3.4 Procedure

Prior to beginning the survey, participants were presented with a consent form outlining the purpose of the study, confidentiality measures, and the voluntary nature of participation. Participants had to provide explicit consent to continue with the survey. Upon agreeing to participate, participants were asked to answer questions on demographic information. In the main experiment, participants were presented with a selected Instagram post. This post depicted an influencer with either a realistic or unrealistic appearance, and the influencer was either male or female depending on the gender of the participant. Male participants saw a male influencer, and females saw a female influencer. This was done using

the participants' answers to the question on gender from demographic information. Participants were asked to rate the appearance of the influencer using the same 5-point Likert scale as in the pretest. The experiment participants were divided into 4 groups for the experiment. One group of males was shown an Instagram post containing a male with a realistic appearance, and then another group of females was shown a post of a female with a realistic appearance. Then another group was males being shown a post of a male with an unrealistic appearance and the last group was females shown a post of a female with an unrealistic appearance. Following the main experiment, participants underwent a manipulation check. Aimed at ensuring that participants perceived the appearance manipulation accurately. To ensure participants were thoroughly engaged with the survey material, the survey was followed with a control question. Then for the last part of the survey, participants completed a series of questions about self-esteem taken from the Rosenberg Self-Esteem Scale (RSES). Concluding the survey, participants were then thanked for their participation and responses. A copy of the complete survey instrument can be found in Appendix C.

3.5 Data Analysis

Quantitative data were analysed using statistical software. Descriptive statistics, such as means and standard deviations, characterised the sample. Inferential statistics, including a two-way ANOVA, were performed on SPSS to examine relationships between variables. Gender-specific analyses were conducted to explore relations in the impact of Instagram influencer appearances on self-esteem.

3.6 Ethical Considerations

Ethical considerations included obtaining pretests for stimuli to be used in the main experiment, informed consent, ensuring participant confidentiality, and adhering to data protection regulations. The survey explicitly stated its voluntary nature, and participants had the option to withdraw at any point without consequences, adhering to the methodological guidelines on ethics.

4. Results

This section presents the findings of the study, with the results including the pretest and a description of the sample characteristics. Following this, the assumptions for the ANOVA are examined. Continuing to the results of the two-way ANOVA are examined in relation to answering the hypotheses and examining the relationships between Instagram influencers' appearances, gender, and self-esteem.

4.1 Pretest

Female

The pretest used 4 images of women, each image had an edited and non-edited version. The goal of the pretest was to select which female had the most realistic appearance unedited and unrealistic appearance edited. After variables were recorded and combined into four variables for each different woman. The variables include Female 1, Female 2, Female 3, and Female 4, the means and standard deviations are presented in Table 4.1. The means are the average score for both the realistic and unrealistic for each female with unrealistic being reverse coded and the two being combined into one. Output results can be found in Appendix B.

Table 4.1 Descriptives of Female Variables

	Female 1	Female 2	Female 3	Female 4
Mean	4.52	3.69	3.33	3.17
Standard	0.58	0.77	0.58	0.51
Deviation				

Female 1 had the highest mean of all variables, with Female 2 having the second highest. A paired samples t-test was conducted to evaluate whether there was a significant difference between Female 1 and Female 2. The results indicated that the mean score for Female 1 (M = 4.52, SD = 0.58) was higher than the mean score for Female 2 (M = 3.69], SD = 0.77). This difference was statistically significant, (t=4.385, df=20), (p=<.001), with a mean

difference of *MD*=0.83 (95% *CI*: 0.43694, 1.22973). This indicates that, on average, the values for Female 1 are higher than those for Female 2. Therefore Female 1 will be used as stimuli for the main experiment.

Male

The pretest used 4 images of men, each image had an edited and non-edited version. The goal of the pretest was to select which male had the most realistic appearance unedited and unrealistic appearance. After variables were recorded and combined into four variables for each different man. The means are the average score for both the realistic and unrealistic for each male with unrealistic being reverse coded and the two being combined into one. The variables include Male 1, Male 2, Male 3, and Male 4, the means and standard deviations are presented in Table 4.2.

Table 4.2: Descriptives of Male Variables

	Male 1	Male 2	Male 3	Male 4
Mean	3.66	3.42	4.65	3.83
Standard	0.58	0.78	0.63	0.75
Deviation				

Male 3 had the highest mean of all variables, with Male 4 having the second highest. A paired samples t-test was conducted to evaluate whether there was a significant difference between Male 3 and Male 4. The results indicated that the mean score for Male 3 (M = 4.65, SD = 0.63) was higher than the mean score for Male 4 (M = 3.83], SD = 0.75). This difference was statistically significant, (t=4.524, df=19), (p=<.001), with a mean difference of MD=0.83 (95% CI:0.44331, 1.20669). Therefore Male 3 is selected to be used in the main experiment. Indicating that, on average, the values for Male 3 are higher. Therefore Male 3 will be used as stimuli for the main experiment.

4.2 Sample Description

Gender

The survey collected a total of 262 participants, after data cleaning the number of valid participants is N = 254. The gender distribution among respondents indicates a balanced representation within the surveyed population. Of the N = 254 valid responses, females make up the majority at 53.90%, followed closely by males at 45.70%.

Age

The age distribution of the surveyed population provides valuable insights into the demographics of the sample. With a total of 254 valid responses, the mean age is 25.46. The majority of participants fall within the age range of 23 to 29, comprising approximately 45% of the dataset collectively. Specifically, the most frequently occurring ages are 27 (13.20%), 24 (11.30%), and 23 (10.90%), suggesting a concentration of respondents in their mid to late twenties. Conversely, individuals aged 36 and above represent less than 2% of the sample, indicating a comparatively smaller presence of older participants.

Nationality

The nationality distribution reveals a diverse mix within the surveyed group. Dutch participants dominate at nearly 39%, with Americans following at 10.50% and British at 7.80%. Other nationalities, like French, Italian, and Belgian, contribute 2% to 5% each, reflecting a broad cultural spectrum. Less common nationalities, such as Albanian and Algerian, represent less than 1% individually. This diversity highlights the multicultural nature of the sample, enriching the study's perspectives and interpretations.

Education

The educational background breakdown reveals that Bachelor's degree holders make up the largest portion at 47.60%, followed by high school graduates at 37.40%. Those with Master's degrees represent 13.40%, while there are few respondents with education below high school (1.20%) or holding a Doctorate (0.40%). This distribution showcases a range of

academic achievements, from secondary education to advanced degrees, within the surveyed population.

4.3 Reliability Analysis

The self-esteem scale demonstrates high internal consistency, reflected in a Cronbach's Alpha coefficient of 0.94, indicating strong reliability and validity of the self-esteem scale, supporting its use for analysis. Results output can be found in Appendix B.

4.4 Assumptions

When conducting a statistical analysis, especially a two-way ANOVA, it is important to look at several key assumptions to validate the reliability and accuracy of the analysis. These assumptions include the nature of the dependent and independent variables, independence of observations, absence of significant outliers, normality, and homogeneity of variances. Each of these assumptions plays a pivotal role in confirming that the data meets the necessary criteria.

Continuous Dependent Variable

Regarding the first assumption, the dependent variable, self-esteem, is accepted as continuous since it is measured on a Likert scale, allowing for a wide range of responses and assuming a continuous underlying distribution. This meets the requirement for the ANOVA analysis, ensuring that the data structure is suitable for parametric testing.

Categorical Independent Variable

Concerning the second assumption, two independent variables must each contain two or more categorical, independent groups. In this study, the variable "influencer appearance" fulfils this criterion, as it encompasses four distinct groups: male realistic, male unrealistic, female realistic, and female unrealistic. Each group represents a different combination of gender (male or female) and the appearance of the influencer (realistic or unrealistic), providing the necessary categorical diversity for a comprehensive analysis of the influence of these factors on self-esteem. Therefore there is a categorical independent variable used to meet the requirement for the ANOVA analysis.

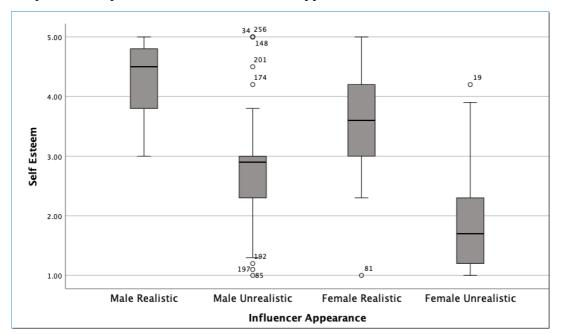
Independence of Observations

The independence of observations was ensured through a manipulation question implemented within the Qualtrics survey instrument. Participants were randomly assigned to different groups, each exposed to distinct sets of images corresponding to their respective conditions. This randomised assignment ensured that each participant provided responses independently of others and that their responses were not influenced by previous participants or external factors. By employing this randomised experimental design, we maintained the assumption of independence of observations in the dataset.

Outliers

In analysing the data, Both the "Female Realistic" and "Female Unrealistic" groups each had one outlier, which does not raise significant concerns. In the case of the "Female Realistic" group, one participant's self-esteem score fell below the rest of the group, potentially aligning with established hypotheses regarding women's generally lower self-esteem levels. Conversely, in the "Female Unrealistic" group, one outlier exhibited higher self-esteem than the rest of the participants, suggesting that the influence of an unrealistic influencer's appearance may not affect this specific female participant's self-esteem the same as the rest of the group.

No significant outliers were observed for the group "Male Realistic." However, notable outliers were detected for the "Male Unrealistic" group, indicating that there are some individuals within this group whose self-esteem scores deviate significantly from the majority which can be seen in Graph 4.1. These outliers suggest that certain men exhibit notably higher and others notably lower self-esteem levels when exposed to unrealistic male influencer appearances compared to the rest of the group. Therefore the assumption of outliers has been violated, this brings to light the potential limitations of the study.



Graph 4.1: Boxplot for Different Influencer Appearances and Self Esteem

Normality

The analysis of normality assumptions was conducted using two tests: the Kolmogorov-Smirnov test and the Shapiro-Wilk test. For the variable "Self Esteem," the Kolmogorov-Smirnov test yielded a statistic of 0.07 with 254 degrees of freedom, resulting in a significance level of .002. Similarly, the Shapiro-Wilk test produced a statistic of 0.95 with 254 degrees of freedom, leading to a p-value of less than .001. Both tests revealed significant deviations from normality at the .05 significance level, indicating that the assumption of normality is violated for the "Self Esteem" variable. Consequently, the data may not adhere to a normal distribution, which should be considered in further analyses and when discussing the limitations of the study.

Homogeneity

For the Self-esteem variable, the results show that the Levene statistic ranges from 0.94 to 1.03 across different metrics, with corresponding p-values ranging from 0.39 to 0.44. These p-values are all above the conventional significance level of 0.05, suggesting that there is no statistically significant difference in variances among the groups based on different metrics. Overall, these findings suggest that the assumption of homogeneity of variances is

met for the Self-esteem variable across the different metrics tested. Therefore, the data satisfy the assumption required for conducting certain parametric statistical tests, such as ANOVA.

In conclusion, the data analysis for the two-way ANOVA reveals mixed results regarding the assumptions required for a valid analysis. The continuous nature of the dependent variable (self-esteem) and the categorical nature of the independent variables (influencer appearance) are appropriate for ANOVA. Independence of observations was maintained through randomised assignment of participants to different groups. Outliers were present in several groups, suggesting potential limitations due to significant deviations in self-esteem scores. The normality assumption was violated However, the assumption of homogeneity of variances was met, as indicated by non-significant Levene's test results. Overall, while some assumptions are satisfied, violations in the normality assumption and the presence of outliers should be taken into consideration when interpreting the results of the ANOVA and discussing the limitations of the study.

4.5 Two-way ANOVA

An ANOVA was conducted to examine the effects of gender and the type of influencer appearance (realistic vs. unrealistic) on self-esteem scores. The results of the ANOVA are as follows and can be found in Appendix B.

H1: Males have higher self-esteem compared to females

The first main effect looking at the relationship between gender and self-esteem (F=64.198, df(1) was found to be significant (p=<.001). With males scoring a mean self-esteem of 3.54 (SE=0.7) and females scoring a mean self-esteem of 2.75 (SE=0.07). Therefore the results reveal that males on average have a higher self-esteem than females, accepting H1.

H2: The unrealistic appearance of the influencer will lead to lower self-esteem compared to a realistic appearance

The second main effect which looks at appearances as both realistic and unrealistic and the relationship with self-esteem. The results show that there is significance (F=272.382, df(1) in this relationship (p=<.001). For males, a realistic appearance resulted in a mean self-esteem score of 4.29 (SD=0.1), whereas for males an unrealistic appearance resulted in a mean self-esteem score of 2.78 (SD=0.1). For females, a realistic appearance resulted in a mean self-esteem score of 3.62 (SD=0.09) and for females an unrealistic appearance resulted in a mean score of 1.88 (SD=0.09). For both males and females unrealistic appearance resulted in lower self-esteem scores in comparison to realistic appearance as presented in Table 4.3, therefore H2 is accepted.

Table 4.3: Means & Standard Deviations

	Male	Male Realistic	Male Unrealistic	Female	Female Realistic	Female Unrealistic
Mean	3.54	4.29	2.78	2.75	3.62	1.88
Standard Deviation	0.07	0.1	0.1	0.07	0.09	0.09

H3: Females have a lower self esteem than males especially when the appearance of the influence is unrealistic compared to realistic.

For the interaction effect which examined the relationship of gender, influencer appearance and self esteem, the results show F=1.285, df(1) that it is not significant (p=0.258). These results suggest that both gender and the realism of influencer appearances independently affect self-esteem, but there is no evidence of an interaction between these two factors. Therefore H3 is rejected.

4.6 Hypotheses Overview

To conclude, the first two hypotheses H1 and H2 are accepted while the third hypothesis and the interaction effect H3 is rejected, as presented in Table 4.5.

Table 4.4: Overview of Hypotheses

H1: Males have a higher self esteem compared to females	Accepted
H2: Unrealistic appearance of influencer will lead to lower self esteem compared to realistic appearance	Accepted
H3: Females have a lower self esteem than males especially when the appearance of the influence is unrealistic compared to realistic.	Rejected

5. Discussion and Conclusion

5.1 Key findings

This quantitative study aimed to investigate the relationship between the appearances of influencers on Instagram and the impact it has on audiences' self-esteem. The key findings of the study bring to light the intricate relationship between the appearance of Instagram influencers and self-esteem. Notably, the results showed how exposure to influencers portraying realistic appearances leads to higher levels of self-esteem, while encounters with influencers featuring unrealistic appearances correlated with lower self-esteem scores for both genders. This shows the significant impact of media representations on individuals' self-esteem highlighting the potential consequences of idealised beauty standards perpetuated by social media platforms like Instagram.

Furthermore, the findings also indicate that gender differences in self-esteem levels were evident, with males exhibiting higher self-esteem compared to females. However, an interaction effect that females have a lower self-esteem than males especially when the appearance of the influencer is unrealistic compared to realistic was not found. However, this gender gap in self-esteem still further suggests the enduring societal norms and pressures that contribute to differential self-perceptions among men and women, with females facing heightened scrutiny and expectations related to appearance ideals.

Overall, these key findings contribute to a deeper understanding of the complex interplay between media influences, gender dynamics, and self-esteem in the digital age. By shedding light on the impact of Instagram influencer appearances on self-esteem and elucidating gender differences in self-perception, this research enters a discussion on the importance of media literacy, diverse representations and effects on audience well-being.

5.2 Discussion

5.2.1 The Influence of Unrealistic Influencer Appearances on Self-Esteem

Consistent with social comparison theory, the study found that individuals exposed to unrealistic influencer appearances reported lower self-esteem compared to those exposed to

realistic appearances. This aligns with prior research by Fardouly et al. (2015, p.42) and Cohen et al. (2019, p.185), which highlights the negative impact of idealised beauty standards on self-perception. Social comparison theory elucidates how individuals engage in upward social comparisons on platforms like Instagram, leading to decreased self-esteem when confronted with idealised images. This occurs because individuals may perceive a discrepancy between their own appearance and the perceived societal standard, leading to feelings of inadequacy and diminished self-esteem (Tiggemann & Slater, 2014, p.633).

Furthermore, self-objectification theory provides additional insights into how exposure to objectified images on Instagram can contribute to the internalisation of unrealistic beauty standards, thereby shaping individuals' self-perception (Fredrickson & Roberts, 1997, p.203). Influencers often present curated images showcasing flawless appearances, perpetuating unrealistic beauty ideals and fostering feelings of self-objectification among viewers (Perloff, 2014, p.375). Consequently, individuals may engage in self-monitoring and self-surveillance, scrutinising their own bodies against the unattainable standards depicted in influencer content, leading to negative self-evaluation and decreased self-esteem (Tiggemann & Slater, 2014, p.633). Thus, there is a clear relationship and negative correlation between the unrealistic appearance of influencers and self-esteem.

5.2.2 Gender Differences in Self-Esteem

The study's most compelling finding was the interaction effect between gender and influencer appearance on self-esteem. Specifically, females exhibited lower self-esteem compared to males. This highlights the nuanced ways in which gender identity intersects with media influences to shape individuals' self-perceptions (Grogan, 2021, p.62). For females, who are often subjected to heightened appearance scrutiny and beauty pressures, exposure to unrealistic beauty standards on Instagram may exacerbate feelings of inadequacy and self-doubt (Tiggemann & Slater, 2014, p.632). In contrast, males may experience less pressure to conform to idealised appearance standards, resulting in less pronounced effects on self-esteem.

Moreover, the findings are consistent with prior research indicating gender differences in self-esteem levels, with males exhibiting higher self-esteem than females (Robins et al., 2002, p.430; Kling et al., 1999, p.493). These gender disparities in self-esteem may stem from societal norms and gender roles, as proposed by Eagly and Wood's social role theory (1999, p.419). Social role theory suggests that historical divisions of labour have led to the development of specific roles for men and women, which in turn shape personality traits, behaviours, and self-perceptions.

Men, traditionally seen as leaders and protectors, are often socialised to be assertive, independent, and self-reliant. These traits are positively correlated with higher self-esteem, as men are encouraged to value and exhibit confidence and strength. Consequently, societal expectations align with behaviours that support and enhance self-esteem in men (Eagly & Wood, 1999, p. 408). In contrast, women have historically been assigned roles as caregivers and nurturers, expected to be more communal and interpersonally oriented. These roles can often lead to greater scrutiny and pressure regarding physical appearance and social relationships, which are heavily influenced by societal standards and media representations (Fredrickson & Roberts, 1997, p. 181). This scrutiny can result in higher levels of self-objectification and body image concerns, contributing to lower self-esteem.

Women may also internalise societal expectations to prioritise others' needs over their own, which can undermine their self-worth and confidence. Eagly and Wood's social role theory underscores the influence of these social roles in shaping gender-specific self-perceptions. For instance, the emphasis on physical attractiveness for women, perpetuated by media and cultural norms, can lead to greater dissatisfaction with their bodies and overall self-image (Fredrickson & Roberts, 1997, p. 182). On the other hand, men, who are less frequently judged based on appearance, might experience fewer such pressures, leading to relatively higher self-esteem. Moreover, social role theory highlights how these gender roles are reinforced through various socialisation agents such as family, peers, educational systems, and media. These agents perpetuate the expectations and norms that shape self-esteem differently for men and women (Eagly & Wood, 1999, p. 409).

5.2.3 Contradictory Evidence and the Need for Inclusive Approaches

Despite the findings and previous research revealing higher self-esteem observed in men, there is contradicting evidence in the findings that suggests men, too, are negatively affected by the unrealistic appearances of influencers. This challenges the notion that societal norms and gender roles exclusively predispose women to self-esteem issues related to appearance. The portrayal of unattainable physiques by male influencers can create unrealistic expectations and pressures for men to conform to these ideals, leading to decreased self-esteem when they inevitably fall short (Tiggemann & Slater, 2013, p. 633). Furthermore, social comparison theory suggests that both men and women are likely to compare themselves to others perceived as better off, which can adversely impact self-esteem.

Contrary to the traditional view of men as less vulnerable to body image issues, recent evidence suggests that the gender gap in body dissatisfaction may be narrowing. Men are experiencing similar pressures to achieve societal beauty standards, which are now heavily influenced by social media platforms like Instagram (Fardouly et al., 2015, p. 40). This is seen in the findings of this study as well. Although women still had lower self-esteem scores, the self-esteem of men was still negatively affected. This indicates that the detrimental effects of unrealistic appearances are not confined to women but are also relevant to men.

This contradictory evidence highlights the need to re-evaluate our understanding of gender differences in self-esteem and body image concerns. It underscores the importance of considering how societal expectations and media representations impact men, advocating for a more inclusive approach to addressing body image issues for both genders. Understanding these dynamics is crucial for developing interventions aimed at reducing gender disparities in self-esteem and promoting a healthier self-image across all individuals.

5.3 Social and Societal Relevance

The study's findings have significant social and societal relevance, particularly in the context of mental health and well-being. Given the pervasive influence of social media on individuals' self-perception, understanding the mechanisms underlying these effects is critical

for promoting positive body image and self-esteem. The study's results, which highlight the detrimental impact of unrealistic influencer appearances on self-esteem, underscore the need for responsible media representation and digital literacy initiatives (Perloff, 2014, p. 368). The implications of these findings are far-reaching. For instance, educators can play a crucial role by integrating media literacy programs into the curriculum, helping students develop critical thinking skills to navigate social media content responsibly (Hobbs, 2010, p. 24). These programs can teach students to recognize and challenge unrealistic beauty standards, fostering a healthier relationship with social media (Buckingham, 2003, p. 59). Policymakers can support these efforts by funding educational initiatives and creating guidelines that encourage the inclusion of media literacy in schools globally.

Mental health professionals also have a vital role to play. Interventions focused on fostering resilience and self-compassion can equip individuals, particularly females, to navigate the pressures of social media and resist the negative effects of unrealistic beauty standards perpetuated by influencers (Fardouly et al., 2015, p. 42). Such interventions could include workshops, support groups, and therapy sessions aimed at enhancing self-worth and promoting a positive body image. For example, cognitive-behavioural therapy techniques can be used to address and reframe negative thoughts related to body image.

Content creators and influencers themselves have a significant responsibility in shaping social media's impact on self-esteem. By promoting diversity and authenticity in their representations, influencers can help depict a more inclusive and realistic range of body types and appearances. This shift can contribute to a more positive social media environment where followers feel validated and accepted (Holland & Tiggemann, 2016, p. 105). Encouraging influencers to share unedited and candid content can help challenge the often unattainable beauty standards that dominate social media.

Furthermore, these findings highlight the importance of community and societal support in mitigating the negative effects of social media. Campaigns and public awareness initiatives can promote the importance of authenticity and diversity, encouraging a cultural shift towards more realistic and inclusive beauty standards (Levine & Piran, 2004, p. 64).

Social media platforms can also contribute by implementing policies that discourage the promotion of unrealistic body ideals and by supporting campaigns that celebrate body positivity (Perloff, 2014, p. 369).

In summary, the study's findings emphasise the critical need for a multi-faceted approach to address the impact of social media on self-esteem. Through the combined efforts of educators, policymakers, mental health professionals, content creators, and society at large, it is possible to foster a media landscape that supports positive self-esteem and mental well-being in the digital age (Tiggemann & Slater, 2013, p. 640). This holistic approach can help individuals navigate social media more healthily and positively, ultimately contributing to a more inclusive and supportive society (Livingstone, 2009, p. 58).

5.4 Limitations

Despite the valuable insights gained from this study, several limitations must be acknowledged. Firstly, one significant limitation of this study is the small sample size. A limited number of participants can restrict the generalisability of the findings, making it challenging to apply the results to a broader population. With a larger sample size, the study could have achieved more robust and reliable results, enhancing the validity and reliability of the conclusions (Faber & Fonseca, 2014, p. 27). The study did not thoroughly take into account different cultures and examine them. The issue with the generalisability, in this case, is that different cultures may have had different results, but due to the study not having a large enough sample size and results from different cultures, we cannot truly say that the results are relevant to all populations of males and females (Smith, 2018, p. 342). The limits of the sample size could be seen in the results when conducting the two-way ANOVA for this study, two critical assumptions were violated: the assumption of normality and the presence of outliers. The normality assumption, which requires that the distribution of residuals be normally distributed, was not met as the residuals significantly deviated from a normal distribution. This violation can lead to biased estimates and reduce the robustness of the ANOVA results, potentially affecting the validity of the conclusions drawn (Blanca et al., 2017, p. 9). Additionally, the presence of outliers in the data further complicates the analysis. Outliers can distort the results by inflating variances and affecting the mean values, thereby

skewing the interaction effects between the factors being studied (Aguinis, Gottfredson, & Joo, 2013, p. 270). These issues highlight significant limitations of the research, as the reliability and generalisability of the findings may be compromised.

Measurement bias is another limitation of this research. The study relied on self-reported measures, which are subject to certain biases such as social desirability and recall biases (Babbie, 1989, p. 260). Participants' responses may not fully reflect the true answers. The cross-sectional nature of the study precludes causal inferences about the observed associations (Shadish, Cook, & Campbell, 2002, p. 150).

A significant limitation of this study is that it did not account for the Instagram usage patterns of the audience. The frequency and nature of Instagram use can significantly influence how individuals are affected by the content they encounter. For instance, users who spend more time on Instagram or who actively engage with influencers might experience different levels of impact on their self-esteem compared to those who use the platform less frequently or passively consume content (Tiggemann & Slater, 2013, p. 642). Without examining these usage patterns, it is difficult to fully understand the context in which the observed associations between influencer appearances and self-esteem occur. The study's findings might differ significantly among heavy users, light users, and those who interact differently with the platform.

Another limitation of this study is that it did not thoroughly examine the roles of age and cultural factors. Age can influence how individuals perceive and are affected by social media content, with younger users potentially being more susceptible to the influences of Instagram influencers compared to older users. Different age groups may have varying levels of media literacy, body image concerns, and susceptibility to social comparison, all of which can affect self-esteem (Livingstone, 2009, p. 56). Similarly, cultural factors play a crucial role in shaping individuals' perceptions of beauty standards and self-worth. Cultural background can influence the impact of social media content, as different cultures have diverse norms, values, and expectations regarding appearance and self-esteem. By not accounting for these

variables, the study's findings may lack generalisability across different age groups and cultural contexts (Berry et al., 2011, p. 146).

5.5 Suggestions for Future Research

While the current study provides valuable insights into the relationship between social media influencer appearances, gender, and self-esteem, several limitations warrant consideration for future research. Firstly, the use of convenience sampling may limit the generalisability of findings, as participants were recruited based on availability and willingness to participate, potentially introducing selection bias. Future studies could employ more diverse sampling strategies, such as random sampling or stratified sampling, to ensure greater representativeness of the target population and enhance the external validity of findings (Babbie, 2016, p. 187).

Moreover, the reliance on self-report measures, such as the Rosenberg Self-Esteem Scale, introduces the potential for social desirability bias and measurement error, as participants may provide responses that align with societal norms or expectations rather than reflecting their true perceptions (Paulhus & Vazire, 2007, p. 232). Future research could supplement self-report measures with objective assessments or observational data to triangulate findings and enhance the reliability and validity of results (Podsakoff et al., 2003, p. 879).

Additionally, the experimental manipulation of influencer appearances may not fully capture the complexity of individuals' exposure to idealised media images in real-world contexts. The use of static images in experimental settings may oversimplify the dynamic and interactive nature of social media platforms, where users are exposed to a constant stream of curated content from multiple sources. Future studies could employ ecologically valid methodologies, such as experience sampling methods or longitudinal observation, to capture individuals' naturalistic media consumption patterns and assess their impact on self-esteem over time (Csikszentmihalyi & Larson, 1987, p. 526).

Future research should explore longitudinal associations between exposure to Instagram influencers and changes in self-esteem over time. Longitudinal studies would provide valuable insights into the temporal dynamics of media effects and help elucidate causal relationships between exposure to influencer content and changes in self-esteem (Menard, 2002, p. 15). Moreover, qualitative research could offer deeper insights into individuals' subjective experiences of engaging with influencer content on social media, shedding light on the underlying mechanisms driving self-esteem outcomes (Creswell, 2013, p. 45).

Furthermore, the study primarily focused on the impact of influencer appearances on self-esteem, neglecting other potential factors that may contribute to individuals' body image perceptions and psychological well-being, such as peer comparisons, family influences, and cultural norms. Future research could adopt a more holistic approach, considering the interplay between individual, interpersonal, and societal factors in shaping body image and self-esteem outcomes and how social media plays a part in these factors (Tiggemann, 2011, p. 12). Qualitative research methods, such as in-depth interviews and focus groups, could offer a nuanced exploration of individuals' lived experiences and perceptions regarding Instagram influencer culture and its impact on self-esteem (Guest et al., 2013, p. 23). By capturing participants' subjective experiences and narratives, qualitative studies could uncover the underlying mechanisms driving the observed associations between media exposure, gender identity, and self-esteem, providing valuable context and depth to quantitative findings (Denzin & Lincoln, 2011, p. 16).

Additionally, cross-cultural research initiatives could explore how cultural norms, values, and beauty ideals intersect with social media influences to shape individuals' self-esteem across diverse cultural contexts. By examining variations in media consumption habits, body image ideals, and self-esteem outcomes across different cultural groups, researchers could identify culturally specific risk and protective factors and inform culturally tailored interventions to promote positive body image and self-esteem worldwide (Berry et al., 2011, p. 146).

In light of these limitations, future research endeavours should aim to address these methodological constraints and explore more nuanced dimensions of social media influence on self-esteem. By adopting rigorous research designs, employing diverse sampling strategies, and considering multifaceted influences on body image and self-esteem, future researchers can advance the understanding of these complex dynamics.

5.6 Conclusion

The present study investigated the impact of Instagram influencer appearances on self-esteem among young adults, with a particular focus on gender differences. The research aimed to elucidate how exposure to influencers' images, portraying either realistic or unrealistic appearances, influences individuals' self-esteem. The findings provide valuable insights into the nuanced dynamics of social media's effects on self-perception, shedding light on the differential impacts on males and females.

The research question regarding the influence of Instagram on self-esteem, to what extent does the appearance of Instagram influencers (realistic versus unrealistic) affect the self-esteem of audiences between genders? Through an analysis of existing scholarship and empirical evidence, the study revealed significant associations between exposure to Gender, Instagram influencers and self-esteem levels. The results underscored the importance of considering gender-specific influences on self-esteem within the context of Instagram's pervasive beauty-centric culture.

In conclusion, the study's findings underscore the complex interplay between social media, self-esteem, and gender identity, highlighting the need for multifaceted interventions to promote positive body image and well-being. By addressing the detrimental effects of unrealistic beauty standards propagated by influencers, society can move towards a more inclusive and empowering media landscape that celebrates diversity and authenticity.

References

- Aguinis, H., Gottfredson, R. K., & Joo, H. (2013). Best-Practice recommendations for defining, identifying, and handling outliers. *Organizational Research Methods*, *16*(2), 270–301. https://doi.org/10.1177/1094428112470848
- Babbie, E. R. (1989). The practice of social research. *Teaching Sociology*, 17(4), 499. https://doi.org/10.2307/1318433
- Babbie, E.R. (2016) The Practice of Social Research. 14th Edition, Cengage Learning,

 Belmont. References Scientific Research Publishing. (n.d.). https://www.scirp.org/
 reference/referencespapers?referenceid=2439585
- Berry, J. W., Poortinga, Y. H., Breugelmans, S. M., Chasiotis, A., & Sam, D. L. (2011). *Cross-Cultural psychology*. https://doi.org/10.1017/cbo9780511974274
- Blanca, M. J., Alarcón, R., Arnau, J., Bono, R., & Bendayan, R. (2017). Non-normal data: Is ANOVA still a valid option? *PubMed*, *29*(4), 552–557. https://doi.org/10.7334/ psicothema2016.383
- Buckingham, D. (2003). Media Education: Literacy, Learning, and contemporary culture.

 *ResearchGate. https://www.researchgate.net/publication/

 276935485 Media Education Literacy Learning and Contemporary Culture
- Cohen, R., Newton-John, T., & Slater, A. (2017). The relationship between Facebook and Instagram appearance-focused activities and body image concerns in young women. *Body Image*, 23, 183–187. https://doi.org/10.1016/j.bodyim.2017.10.002
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods* approaches. SAGE Publications, Inc. https://www.ucg.ac.me/skladiste/blog_609332/ objava_105202/fajlovi/Creswell.pdf
- Creswell, J.W. (2013) Research Design Qualitative, Quantitative, and Mixed Methods

 Approaches. 4th Edition, SAGE Publications, Inc., London. References Scientific

 Research Publishing. (n.d.). https://www.scirp.org/reference/ReferencesPapers?

 ReferenceID=1485543
- Csikszentmihalyi, M., & Larson, R. (1987). Validity and reliability of the Experience-Sampling Method. *the Journal of Nervous and Mental Disease*, *175*(9), 526–536. https://doi.org/10.1097/00005053-198709000-00004

- De Vries, D. A., Möller, A. M., Wieringa, M. S., Eigenraam, A. W., & Hamelink, K. (2017). Social comparison as the thief of joy: Emotional consequences of viewing strangers' Instagram posts. *Media Psychology*, 21(2), 222–245. https://doi.org/10.1080/15213269.2016.1267647
- Eagly, A. H., & Wood, W. (1999). The origins of sex differences in human behavior: Evolved dispositions versus social roles. *American Psychologist*, *54*(6), 408–423. https://doi.org/10.1037/0003-066x.54.6.408
- Faber, J., & Fonseca, L. M. (2014). How sample size influences research outcomes. *Dental Press Journal of Orthodontics*, 19(4), 27–29. https://doi.org/
 10.1590/2176-9451.19.4.027-029.ebo
- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image*, *13*, 38–45. https://doi.org/10.1016/j.bodyim.2014.12.002
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. https://doi.org/10.1177/001872675400700202
- Fredrickson, B. L., & Roberts, T. A. (1997). Objectification Theory: toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21(2), 173–206. https://doi.org/10.1111/j.1471-6402.1997.tb00108.x
- Garcia, R. L., Bingham, S., & Liu, S. (2022). The effects of daily Instagram use on state self-objectification, well-being, and mood for young women. *Psychology of Popular Media*, 11(4), 423–434. https://doi.org/10.1037/ppm0000350
- Gawronski, B., & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: An integrative review of implicit and explicit attitude change.

 *Psychological Bulletin, 132(5), 692–731. https://doi.org/
 10.1037/0033-2909.132.5.692
- Grogan, S. (2021). *Body image*. <u>https://doi.org/10.4324/9781003100041</u>
- Hobbs, R. (2010). Digital and Media Literacy: A Plan of Action. A white paper on the digital and media literacy Recommendations of the Knight Commission on the Information Needs of Communities in a Democracy. https://eric.ed.gov/?id=ED523244
- Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & Schmitt, M. (2005). A Meta-Analysis on the correlation between the implicit association test and explicit Self-

- Report measures. *Personality & Social Psychology Bulletin*, *31*(10), 1369–1385. https://doi.org/10.1177/0146167205275613
- Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*, *17*, 100–110. https://doi.org/10.1016/j.bodyim.2016.02.008
- Johnson, K. L., & Ghavami, N. (2011). At the Crossroads of Conspicuous and Concealable: What Race Categories Communicate about Sexual Orientation. *PLOS ONE*, *6*(3), e18025. https://doi.org/10.1371/journal.pone.0018025
- Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, *125*(4), 470–500. https://doi.org/10.1037/0033-2909.125.4.470
- Levine, M. P., & Piran, N. (2004). The role of body image in the prevention of eating disorders. *Body Image*, *I*(1), 57–70. https://doi.org/10.1016/s1740-1445(03)00006-8
- Lipsitz, S. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354–364. https://doi.org/10.1037/0033-295x.88.4.354
- Livingstone, S. (2009). Children and the internet: great expectations, challenging realities.

 *ResearchGate. https://www.researchgate.net/publication/

 30529730_Children_and_the_Internet_Great_Expectations_Challenging_Realities
- Matthews, B., & Ross, L. (2014). *Research methods: A Practical Guide For The Social Sciences*. Pearson Higher Ed.
- McKinley, N. M., & Hyde, J. S. (1996). The objectified body consciousness scale. *Psychology of Women Quarterly*, 20(2), 181–215. https://doi.org/10.1111/j.1471-6402.1996.tb00467.x
- Menard, S. (2002) Longitudinal Research, Series Quantitative Applications in the Social Sciences, Publication # 76, 2nd Edition, SAGE, Thousand Oaks. References Scientific Research Publishing. (n.d.). https://www.scirp.org/reference/referencespapers?referenceid=1831402
- Neuman, W. L. (2014). Social Research Methods: Qualitative and Quantitative Approaches: Pearson New International Edition.
- Paulhus, D. L., & Vazire, S. (2007). The Self-Report Method. In R.W. Robins, R. C. Fraley, & R. F. Krueger (Eds.), Handbook of Research Methods in Personality Psychology (pp.

- 224-239). New York, NY The Guilford Press. References Scientific Research Publishing. (n.d.). https://www.scirp.org/reference/referencespapers? referenceid=1999986
- Perloff, R. M. (2014). Social media Effects on Young Women's Body Image Concerns:

 Theoretical Perspectives and an Agenda for research. *Sex Roles*, 71(11–12), 363–377.

 https://doi.org/10.1007/s11199-014-0384-6
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879
- Robins, R. W., Trzesniewski, K. H., Tracy, J. L., Gosling, S. D., & Potter, J. (2002). Global self-esteem across the life span. *Psychology and Aging*, *17*(3), 423–434. https://doi.org/10.1037/0882-7974.17.3.423
- Rosenberg's Self-Esteem scale. (n.d.). https://wwnorton.com/college/psych/psychsci/media/ rosenberg.htm
- Rudman, L. A., & Goodwin, S. A. (2004). Gender differences in Automatic In-Group bias: Why do women like women more than men like men? *Journal of Personality and Social Psychology*, 87(4), 494–509. https://doi.org/10.1037/0022-3514.87.4.494
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and Quasi-Experimental designs for generalized causal inference.
- Smith, J. A. (2018). *Qualitative Psychology : A Practical Guide to research methods*. Smith, Jonathan a. SAGE Publications Ltd Torrossa. https://www.torrossa.com/en/ resources/an/5730629
- Tiggemann, M. (2011). Sociocultural perspectives on human appearance and body image.

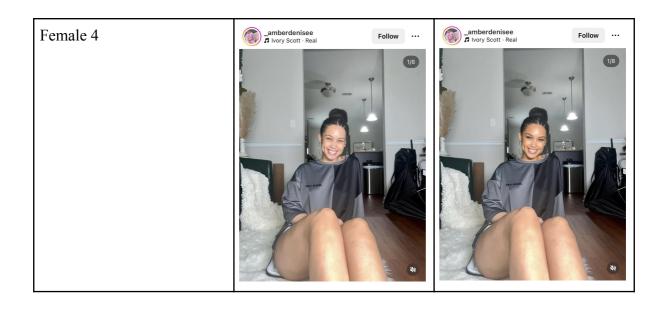
 *ResearchGate. https://www.researchgate.net/publication/

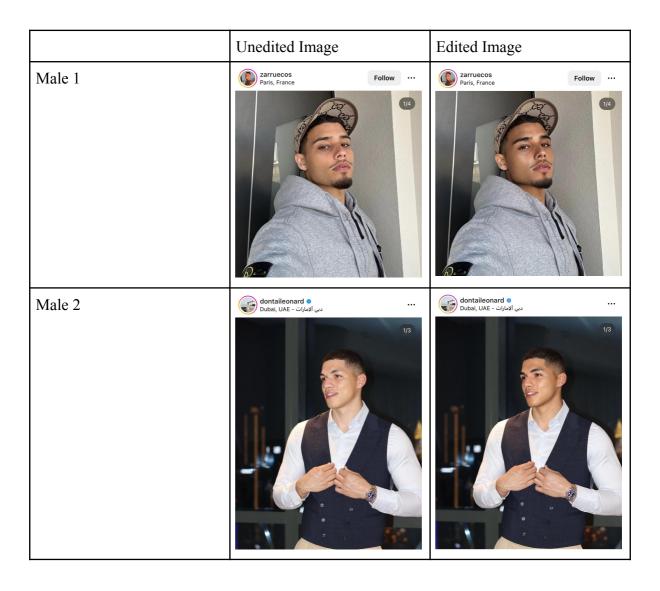
 284656207_Sociocultural_perspectives_on_human_appearance_and_body_image
- Tiggemann, M., & Slater, A. (2013). NetGirls: The Internet, Facebook, and body image concern in adolescent girls. *International Journal of Eating Disorders*, 46(6), 630–633. https://doi.org/10.1002/eat.22141

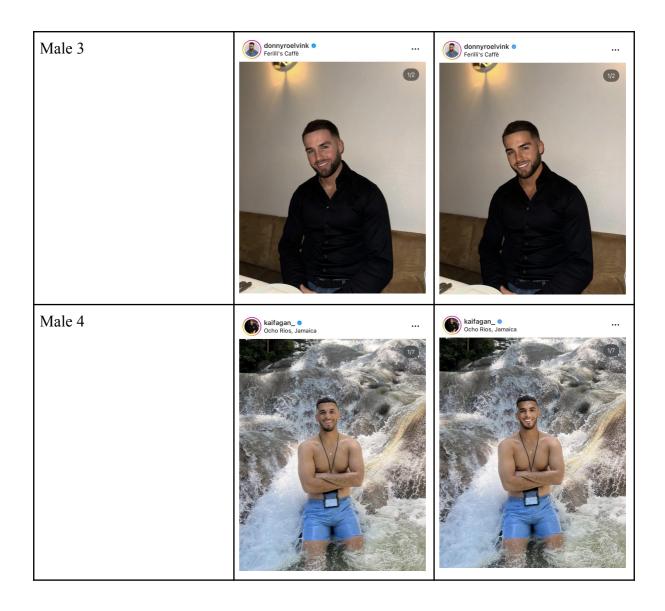
- Vargas, P. T., Duff, B. R. L., & Faber, R. J. (2017). A Practical guide to experimental advertising research. *Journal of Advertising*, 46(1), 101–114. https://doi.org/1 10.1080/00913367.2017.1281779
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, *3*(4), 206–222. https://doi.org/10.1037/ppm0000047

Appendix AStimuli used in pretest and main experiment

	Unedited Image	Edited Image
Female 1	Caroesteph On No Doubt - Just A Girl	
Female 2	shaniceeasty Suggested for you **Follow** **Follow**	shaniceeasty Suggested for you Follow
Female 3	breeelenehan A Healthy Dose of Reality Follow 1710	breeelenehan A Healthy Dose of Reality Follow 1/10







Appendix B

Output - Pretest

Statistics					
	Male1	Male2	Male3	Male4	
N	Valid	19	19	20	20
	Missin g	24	24	23	23
Mean	3.6579	3.4211	4.6500	3.8250	
Median	3.5000	3.5000	5.0000	4.0000	
Std. Deviation	.57862	.78640	.63037	.74824	
Variance	.335	.618	.397	.560	
Minimum	3.00	2.00	3.00	2.50	
Maximum	5.00	5.00	5.00	5.00	

Statistic s					
	Female 1	Female 2	Female 3	Female 4	
N	Valid	21	21	21	21
	Missing	22	22	22	22
Mean	4.5238	3.6905	3.3333	3.1667	
Median	4.5000	4.0000	3.5000	3.0000	
Std. Deviation	.58043	.76610	.57735	.50827	
Variance	.337	.587	.333	.258	
Minimum	3.00	2.00	2.00	2.00	
Maximum	5.00	5.00	4.50	4.00	

Paired Samples Statistics				
	Mean	N	Std. Deviatio n	Std. Error Mean

Pair 1	Male3	4.6500	20	.63037	.14096
	Male4	3.8250	20	.74824	.16731
Pair 2	Female 1	4.5238	21	.58043	.12666
	Female 2	3.6905	21	.76610	.16718

Paired Samples Correlations					
			Significanc e		
	N	Correlatio n	One-Sided p	Two- Sided p	
Pair 1	Male3 & Male4	20	.310	.092	.184
Pair 2	Female1 & Female2	21	.186	.210	.419

Paired Samples Effect Sizes						
			95% Confidenc e Interval			
	Standardizer a	Point Estimate	Lower	Upper		
Pair 1	Male3 - Male4	Cohen's	.81556	1.012	.461	1.545
		Hedges' correctio n	.84962	.971	.442	1.483
Pair 2	Female1 - Female2	Cohen's	.87082	.957	.429	1.468
		Hedges' correctio n	.90527	.921	.413	1.412

a. The denominator used in
estimating the effect sizes. Cohen's d uses the sample standard deviation of the mean difference. Hedges' correction uses the sample standard deviation of the mean difference, plus a correction

Output - Two-way ANOVA

Estimates				
Dependent Variable: SelfEsteem				
			95% Confidence Interval	
Influencerappearance	Mean	Std. Error	Lower Bound	Upper Bound
Male Realstic	4.298a	.103	4.094	4.501
Male Unrealistic	2.780a	.102	2.580	2.980
Female Realistic	3.618a	.097	3.428	3.809
Female Unrealistic	1.876ª	.093	1.693	2.060
a. Based on modified population marginal mean.				

Pairwise Comparisons						
Dependent Variable: SelfEsteem						
		Maara			95% Confidence Interval for Differenced	
(I) Influencerappearance	(J) Influencerappearance	Mean Difference (I-J)	Std. Error	Sig.d	Lower Bound	
Male Realistic	Male Unrealistic	1.518*,b,c	.145	<.001	1.233	
	Female Realistic	.679*,b,c	.141	<.001	.401	

	Female Unrealistic	2.421*,b,c	.139	<.001	2.147	2.695
Male Unrealistic	Male Realstic	-1.518*,b,c	.145	<.001	-1.803	-1.233
	Female Realistic	839*,b,c	.140	<.001	-1.115	562
	Female Unrealistic	.903*,b,c	.138	<.001	.632	1.175
Female Realistic	Male Realstic	679*,b,c	.141	<.001	958	401
	Male Unrealistic	.839*,b,c	.140	<.001	.562	1.115
	Female Unrealistic	1.742*,b,c	.134	<.001	1.477	2.006
Female Unrealistic	Male Realstic	-2.421*,b,c	.139	<.001	-2.695	-2.147
	Male Unrealistic	903*,b,c	.138	<.001	-1.175	632
	Female Realistic	-1.742*,b,c	.134	<.001	-2.006	-1.477
Based on estimated marginal means						
*. The mean difference is significant at the .05 level.						
b. An estimate of the modified population marginal mean (I).						
c. An estimate of the modified population marginal mean (J).						
d. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).						

Univariate Tests

Dependent Variable: SelfEsteem

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	210.047	3	70.016	115.150	<.001
Error	150.186	247	.608		

The F tests the effect of Influencerappearance. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Pairwise Comparisons						
Dependent Variable: SelfEsteem						
			95% Confidence Interval for Difference ^d			
(I) What is your gender?	(J) What is your gender?	Difference	Std. Error	Sig.d	Lower Bound	Upper Bound
Male	Female	.791*,b,c	.099	<.001	.597	.986
Female	Male	791*,b,c	.099	<.001	986	597
Based on estimated marginal means						
*. The mean difference is significant at the .05 level.						
b. An estimate of the modified population marginal mean (I).						
c. An estimate of the modified population marginal mean (J).						
d. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).						

Univariate Tests

Dependent Variable: SelfEsteem

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	39.035	1	39.035	64.198	<.001
Error	150.186	247	.608		

The F tests the effect of What is your gender?. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Between-Subjects Factors		
	Value Label	N

What is your gender?	1	Male	116
	2	Female	135
RealisticVSUnrealistic	1.00	Realistic Appearance	122
	2.00	Unrealistic Appearance	129

Descriptive Statistics

Dependent Variable: SelfEsteem

What is your gender?	RealisticVSUnrealistic	Mean	Std. Deviation	N
Male	Realistic Appearance	4.2977	.62010	57
	Unrealistic Appearance	2.7797	.84032	59
	Total	3.5256	1.06033	116
Female	Realistic Appearance	3.6183	.77155	65
	Unrealistic Appearance	1.8764	.84783	70
	Total	2.7151	1.19063	135
Total	Realistic Appearance	3.9357	.78017	122
	Unrealistic Appearance	2.2895	.95473	129
	Total	3.0897	1.20039	251

Tests of Between-Subjects Effects

Dependent Variable: SelfEsteem

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	210.047a	3	70.016	115.150	<.001
Intercept	2463.341	1	2463.341	4051.278	<.001
Gender	39.035	1	39.035	64.198	<.001
RealisticVSUnrealistic	165.619	1	165.619	272.382	<.001
Gender * RealisticVSUnrealistic	.781	1	.781	1.285	.258
Error	150.186	247	.608		

Total	2756.285	251		
Corrected Total	360.233	250		

a. R Squared = .583 (Adjusted R Squared = .578)

Appendix C

Copy of Survey Instrument Start of Block: Consent Form

Q11 The purpose of this study is to explore perceptions of influencer appearances on Instagram and their relationship with self-esteem. Your participation in this study is entirely voluntary, and you have the right to withdraw at any time without penalty.

During the course of this study, you will be asked to complete a survey consisting of demographic questions, rating tasks, and scales measuring self-esteem. The survey will take approximately 5 minutes to complete. Your responses will be anonymised and used for research purposes only.

All data collected in this study will be kept strictly confidential. Your responses will be stored securely and accessed only by the research team. No identifying information will be linked to your responses in any reports or publications resulting from this study.

Participation in this study is entirely voluntary. You have the right to decline to participate or to withdraw from the study at any time without providing a reason. Your decision to participate or not participate will not affect your current or future relationship with the researchers or the institution. If you have any questions or concerns about this study, you may contact Cathlynn Netscher at 506343cn@eur.nl.

By clicking "I agree" below, you confirm that you have read and understood the information provided in this consent form. You voluntarily agree to participate in this study under the terms outlined above.

I agree (1)

I do not agree (2)

Skip To: End of Survey If The purpose of this study is to explore perceptions of influencer appearances on Instagram and th... = I do not agree

End of Block: Consent Form

Start of Block: Demographic Information

Q18 What is your age?

Q12 What is your gender?

Male (1) Female (2) Other (3)

Skip To: End of Survey If What is your gender? = Other

Q14 What is your nationality

Q13 What is your educational background?

Less than high school (1) High school graduate (2) Bachelors (3) Masters (4) Doctorate (5) End of

Block: Demographic Information

Start of Block: Realistic Male Influencer

Display This Question: If What is your gender? = Male

Q21 Look at the Instagram post

Display This Question:

If What is your gender? = Male

Q22 The influencer in the Instagram post above has a realistic appearance

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

End of Block: Realistic Male Influencer Start of Block: Unrealistic Male Influencer

Display This Question: If What is your gender? = Male

Q23 Look at the Instagram post

Display This Question: If What is your gender? = MaleQ24 The influencer in the Instagram post above has a realistic appearance

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

End of Block: Unrealistic Male Influencer

Start of Block: Realistic Female Influencer

Display This Question: If What is your gender? = Female

Q25 Look at the Instagram post

Display This Question: If What is your gender? = Female

Q26 The influencer in the Instagram post above has a realistic appearance

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

End of Block: Realistic Female Influencer

Start of Block: Unrealistic Female Influencer

Display This Question: If What is your gender? = Female

Q27 Look at the Instagram post

Display This Question:

If What is your gender ? = Female

Q28 The influencer in the Instagram post above has a realistic appearance

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

End of Block: Unrealistic Female Influencer

Start of Block: Control Ouestion

Q17 I took a good look at the displayed instagram post

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

End of Block: Control Question

Start of Block: Self Esteem

Self Esteem 1 On the whole, I am satisfied with myself.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

Self Esteem 2 At times I think I am no good at all.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

Self Esteem 3 I feel that I have a number of good qualities.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

Self Esteem 4 I am able to do things as well as most other people.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

Self Esteem 5 I feel I do not have much to be proud of.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

Self Esteem 6 I certainly feel useless at times.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

Self Esteem 7 I feel that I'm a person of worth, at least on an equal plane with others. Strongly

disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Self Esteem 8 I wish I could have more respect for myself.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

Self Esteem 9 All in all, I am inclined to feel that I am a failure.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Self Esteem 10 I take a positive attitude toward myself.

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4)

Strongly agree (5)

End of Block: Self Esteem Start of Block: Conclusion

Q18 Thank you for participating in this study on influencer appearances on Instagram. Your insights are invaluable and greatly appreciated. Your contribution helps advance our understanding of this important topic. If you have any questions, feel free to reach out.

Thank you again for your time and participation.

Cathlynn Netscher 506343cn@eur.nl

End of Block: Conclusion

Copy of Pretest

Start of Block: Demographic Information

Age: What is your age?

Gender What is your gender?

Male (1) Female (2) Other (3)

Nationality What is your nationality

Education What is your educational background?

Less than high school (1) High school graduate (2) Bachelors (3) Masters (4) Doctorate (5)

End of Block: Demographic Information

Start of Block: Male

Display This Question: If What is your gender? = Male

Male 1 Realistic Look at the Instagram post

Display This Question:If What is your gender? = Male

Male 1 Realistic The influencer in the Instagram post above has a realistic appearance

Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question:If What is your gender? = Male

Male 1 Unrealistic Look at the Instagram post

Display This Question: If What is your gender? = Male

Male 1 Unrealistic The influencer in the Instagram post above has a realistic appearance

Strongly agree (1) Somewhat agree (2) Neither agree nor disagree (3) Somewhat disagree

(4) Strongly disagree (5)

Display This QuestionIf What is your gender? = Male

Male 2 Realistic Look at the Instagram post

Display This QuestionIf What is your gender? = Male

Male 2 Realistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Male

Male 2 Unrealistic Look at the Instagram post

Display This Question: If What is your gender? = Male

Male 2 Unrealistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Male

Male 3 Realistic Look at the Instagram post

Display This Question: If What is your gender? = Male

Male 3 Realistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This QuestionIf What is your gender? = Male

Male 3 Unrealistic Look at the Instagram post

Display This QuestionIf What is your gender? = Male

Male 3 Unrealistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question:If What is your gender? = Male

Male 4 Realistic Look at the Instagram post

Display This Question: If What is your gender? = Male

Male 4 Realistic The influencer in the Instagram post above has a realistic

appearanceStrongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3)

Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Male

Male 4 Unrealistic Look at the Instagram post

Display This Question:If What is your gender? = Male

Male 4 Unrealistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

End of Block: Male

Start of Block: Female

Display This Question: If What is your gender? = Female

Female 1 Realistic Look at the Instagram post

Display This Question: If What is your gender? = Female

Female 1 Realistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Female

Female 1 Unrealistic Look at the Instagram post

Display This Question: If What is your gender? = Female

Female 1 Unrealistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Female

Female 2 Realistic Look at the Instagram post

Display This Question: If What is your gender? = Female

Female 2 Realistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Female

Female 2 Unrealistic Look at the Instagram post

Display This Question: If What is your gender? = Female

Female 2 Unrealistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender ? = Female

Female 3 Realistic Look at the Instagram post

Display This Question: If What is your gender? = Female

Female 3 Realistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Female

Female 3 Unrealistic Look at the Instagram post

Display This Question: If What is your gender ? = Female

Female 3 Unrealistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Female

Female 4 Realistic Look at the Instagram post

Display This Question: If What is your gender? = Female

Female 4 Realistic The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat agree (4) Strongly agree (5)

Display This Question: If What is your gender? = Female

Female 4 Unrealistic Look at the Instagram post

Display This Question: If What is your gender? = Female

Unrealistic 8 F The influencer in the Instagram post above has a realistic appearance Strongly disagree (1) Somewhat disagree (2) Neither agree nor disagree (3) Somewhat

agree (4) Strongly agree (5)

End of Block: Female