



Faculty of Cognitive Sciences and Human Development

**THE EFFECT OF INSTAGRAM USAGE ON BODY IMAGE
PERCEPTION AND SELF-ESTEEM AMONG UNIMAS
UNDERGRADUATE STUDENTS**

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ABSTRACT

The influence of Instagram on an individual's psychological wellbeing has become prevalent in recent years. Despite the widespread usage of Instagram among university students, there is limited understanding of how Instagram usage impacts the body image and self-esteem of undergraduate students at the University Malaysia Sarawak (UNIMAS). This quantitative study aims to study the effects of Instagram usage on body image and self-esteem with UNIMAS undergraduate students as the population. Using a cross-sectional survey design, this study yielded 165 respondents aged between 19 to 30 years old, predominantly female. Instagram usage was measured using time spent daily on Instagram and Passive and Active Usage Measure (PAUM). Body image was measured with Body Shape Questionnaire (BSQ-8c) meanwhile self-esteem was measured with Rosenberg Self-Esteem Scale (RSES). Results indicated there are significant effects of Instagram usage on body image perception and self-esteem and there is a significant negative correlation between body image concern and self-esteem. However, there are no significant gender differences in body image perception and self-esteem. These findings highlight the need for academic institutions to take the initiative to increase students' digital literacy to reduce the negative effect of Instagram on their body image and self-esteem.

Keywords: Instagram usage, body image, self-esteem, undergraduate students, gender

ABSTRAK

Pengaruh Instagram terhadap kesejahteraan psikologi individu telah menjadi semakin berleluasa sejak beberapa tahun kebelakangan ini. Walaupun penggunaan Instagram secara meluas dalam kalangan pelajar universiti, terdapat pemahaman yang terhad tentang bagaimana penggunaan Instagram memberi kesan kepada imej badan dan harga diri pelajar sarjana muda di Universiti Malaysia Sarawak (UNIMAS). Kajian kuantitatif ini bertujuan untuk mengkaji kesan penggunaan Instagram terhadap imej badan dan harga diri dengan pelajar sarjana UNIMAS sebagai populasi. Menggunakan reka bentuk tinjauan keratan rentas, kajian ini mendapat 165 responden berumur antara 19 hingga 30 tahun, kebanyakannya perempuan. Penggunaan Instagram diukur menggunakan masa yang dihabiskan setiap hari di Instagram dan *Passive and Active Measure* (PAUM). Imej badan diukur dengan *Body Shape Questionnaire* (BSQ-8c) manakala harga diri diukur dengan Rosenberg Self-Esteem Scale (RSES). Keputusan menunjukkan terdapat kesan signifikan penggunaan Instagram terhadap persepsi imej badan dan harga diri dan terdapat korelasi negatif yang signifikan antara kebimbangan imej badan dan harga diri. Walau bagaimanapun, tiada perbezaan jantina yang ketara dalam persepsi imej badan dan harga diri. Penemuan ini menunjukkan keperluan untuk institusi akademik mengambil inisiatif untuk meningkatkan literasi digital para pelajar untuk mengurangkan kesan negatif Instagram terhadap imej badan dan harga diri mereka.

Kata kunci: Penggunaan Instagram, imej badan, harga diri, pelajar sarjana, jantina

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study aims to explore how Instagram usage affect body image perception and self-esteem among UNIMAS students. It also seeks to examine the connection between body image perception and self-esteem among university students. This chapter will offer an overview of the research, covering the study's background, research problems, objectives, questions, hypotheses, conceptual frameworks, study significance, definitions of terms, and a summary.

1.1 Background of Study

In the contemporary era of digitalization, where social media dominate most of human's leisure time, the influence of online platforms on various aspects of human life has become an undeniable reality. One domain where this impact is particularly evident in the way individuals perceive their own body image and its deep correlation with self-esteem. Various studies agreed that social media affect an individual's body image and self-esteem negatively (Engeln et al., 2020).

Constant exposure to curated, filtered, and 'perfect' image on social media applications such as Instagram can influence one's body image perception in a negative way (Pedalino & Camerini, 2022). As of August 2023, Instagram has over 2.35 billion active users in which 71 percent are aged between 18 to 29 years old (Ruby, 2023). Due to this, it is no surprise young adults are more likely to be influenced by Instagram contents (Dopson, 2022). Instagram is mostly used to share images and videos that the users had modified using creative tools and filters before

uploading them to their account (Fardouly et al., 2017). In Instagram, users engaged with their peers, celebrities and influencers. Many young people look up to celebrities and Instagram influencers and make their Instagram contents as a guideline for a perfect life. This is because Instagram content is characterized as positivity bias, in which the users have the tendency to only show the idealized image of themselves in their posts (Pedalino & Camerini, 2022). Instagram users can be said seeing the world through rose-tinted glasses.

Lots of Instagram contents are targeting young people in that platform. Most of the contents are about one's appearance, for example, videos on how to lose weight and get a perfect body, tutorial on how to build muscle, how to get rid of acne and etcetera. These types of contents are over-exposing body "ideals" to the users, and this can make the targeted users becoming more concerned and stressed about their appearance (Heger, 2022). In fact, studies reported that adolescences and young people feel stressed, dissatisfied with their physical appearances, and feel compelled to appear flawless on social media (Pedalino & Camerini, 2022). This also can lead to detrimental effects on self-esteem, as individuals may internalize the notion that they fall short of the standard they considered perfect. Once individuals are excessively concerned and stressed about their body and appearance, body dissatisfaction can happen.

According to Engeln et al. (2020), Instagram users showed decreased in body satisfaction suggesting that social media use does influences body image of an individual. Furthermore, social media usage is evidently one of the main contributors to societal conceptions about body dissatisfaction that lead to unhappiness and low self-esteem (Parwin & Lone, 2022). According to Rohde et al. (2014), body dissatisfaction is one of the predictors of eating disorder. Hence,

understanding the impact of Instagram's intensity usage on body image perception and self-esteem are crucial, especially in an era dominated by social platforms that promotes idealized body images, so that interventions to promote healthier body image perception and higher self-esteem can be done.

1.2 Problem Statement

Despite the widespread research into how Instagram impacts the body image perceptions and self-esteem of adolescents and young adults all over the world, there are still lacking research within the context of young adult in Malaysia (Uddin & Wok, 2020; Mayukh & Manaf, 2022). Most studies on how Instagram usage affects body image perceptions and self-esteem are saturated in the Western countries (Jan et al., 2017; Keshk et al., 2019; Alfonso-Fuertes et al., 2022). Social and cultural can influence how individuals perceive and interact with the world. For example, Prieler et al. (2021) conducted a study revealing that the impact of appearance comparison on Facebook adversely affected girls' body esteem across all European countries but did not show the same effect in South Korea. This could be attributed to the likelihood that South Korean girls face higher levels of appearance comparison and societal expectations regarding beauty standards in their offline lives, possibly more so than their European counterparts. Thus, the findings from other countries may not reflect the influence of Instagram usage on Malaysian young adults' body image and self-esteem. Hence, the objective of this study is to explore the impact of the usage of Instagram on body image and self-esteem among young adults in Malaysia, focusing specifically on students from the University Malaysia Sarawak (UNIMAS).

A notable research gap exists in understanding how Instagram usage impacts university students in the Malaysian context. Most Instagram users fall within the 18 to 29 age group, making them more susceptible to the influence of appearance-focused content (Ruby, 2023). The platform's promotion of positivity-biased and edited images may contribute to lower levels of body appreciation and heightened tendencies for appearance comparison among users, potentially leading to body image disturbances such as dissatisfaction, a desire for a thin body, and self-objectification (Pedalino & Camerini, 2022; Engeln et al., 2020). Furthermore, the correlation between the usage of Instagram frequency and its effects on self-esteem remains inconclusive in the existing literature, with conflicting findings on whether increased usage has a positive or negative effect (Uddin & Wok, 2020; Mayukh and Manaf, 2022). This study aims to fill this gap by investigating the degree to which Instagram usage influences body image perception and self-esteem among young adults studying at UNIMAS in Malaysia.

Additionally, the study recognizes the significance of understanding the impact of distorted body image perceptions on self-esteem. Existing research emphasizes the incorrect perceptions individuals often have about their bodies, with implications for dissatisfaction and subsequent negative effects on self-esteem (Pakki & Sathiyaseelan, 2018). While studies in foreign countries have explored the interplay between body dissatisfaction and self-esteem, the Malaysian context, specifically among university students, remains largely unexplored (Keshk et al., 2019; Kim, 2020; Macêdo Uchôa et al., 2020). This study aims to contribute to this understanding by investigating how UNIMAS students' perceptions of their bodies influence their self-esteem.

Lastly, considering the gender differences in body image dissatisfaction, it is crucial to explore whether similar patterns exist among young adults in Malaysia. Existing studies reveal varying results, with some indicating higher dissatisfaction among females and others suggesting an underestimation of body size among both genders (Latiff et al., 2018; Quittkat et al., 2019; Keshk et al., 2019). Moreover, there are more research on the influence of Instagram usage on female body image than male body image (Fardouly et al., 2017; Baker et al., 2019; Brown & Tiggemann, 2020; Pedalino & Camerini, 2022). The lack of studies focusing on male body image perception in the Malaysian context, especially at UNIMAS, highlights a significant research gap. Therefore, this study aims to investigate both genders view on body image perception among UNIMAS students, contributing valuable insights to the existing literature on body image and self-esteem.

1.3 Research Objectives

1. To investigate the effect of Instagram usage on body image perception and self-esteem among university students
2. To investigate the relationship between body image perception and self-esteem among university students
3. To investigate the differences in body image perception between males and females
4. To investigate the differences in self-esteem level between males and females

1.4 Research Questions

1. Is there a significant effect of Instagram usage on body image perception and self-esteem among UNIMAS students?

2. Is there a significant relationship between body image perception and self-esteem among university students?
3. Is there a significant difference in body image perception between males and females?
4. Is there a significant difference in self-esteem level between males and females?

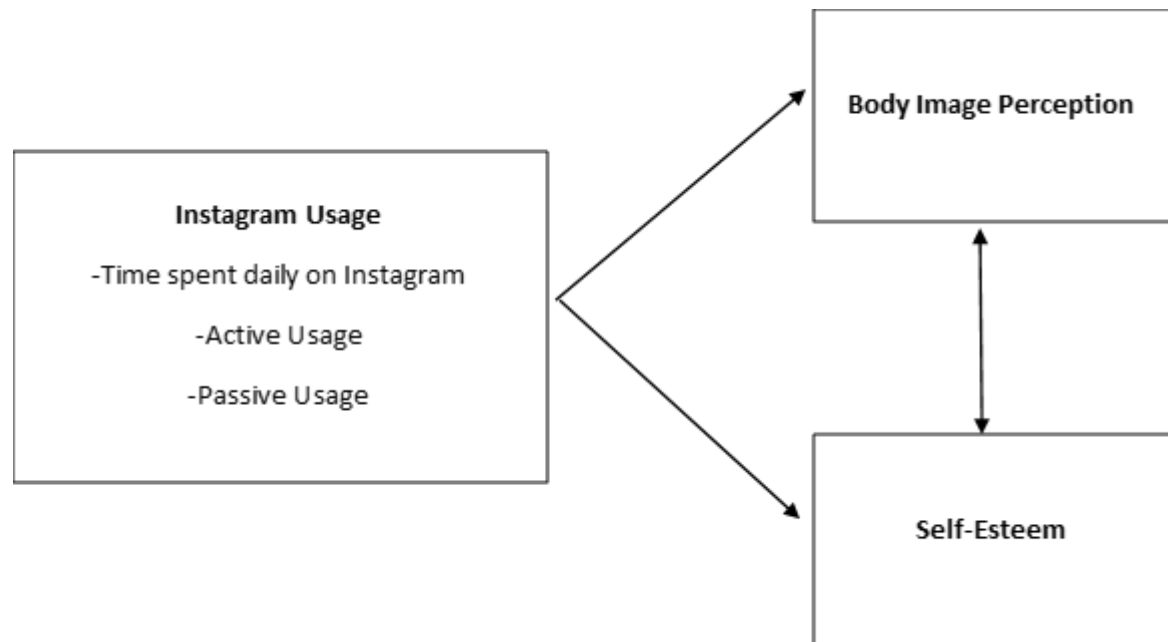
1.5 Research Hypotheses

- ❖ H_{1a} : There is a significant effect between the usage of Instagram and body image perception.
- ❖ H_{1b} : There is a significant effect between the usage of Instagram and self-esteem
- ❖ H_2 : There is a significant relationship between students' body image perception and self-esteem.
- ❖ H_3 : There is a significant difference in body image perception between males and females.
- ❖ H_4 : There is a significant difference in self-esteem level between males and females.

1.6 Conceptual Framework

Figure 1

Conceptual Framework



Based on the research objectives and hypotheses, a conceptual framework was developed to understand the relationship between the independent variable and the dependent variable, focusing on how the independent variables influence the dependent variable. In the context of this study, Instagram usage is categorized as the independent variable, representing the digital platform's impact on individuals' perceptions and behaviors. Concurrently, the dependent variables under scrutiny are body image perception and self-esteem among UNIMAS (Universiti Malaysia Sarawak) students. By categorizing these variables, the study aims to investigate how Instagram usage correlates with students' perceptions of body image and their self-esteem levels. Additionally, this study sought to explore the correlation between body image perception and self-esteem. Hence, the second independent variable is body image perception, reflecting individuals' subjective evaluations of

their own bodies and the dependent variable is self-esteem, which encompasses individuals' overall evaluations of their self-worth, capabilities, and value. By structuring the research within this conceptual framework, the study aims to investigate the complex interplay between Instagram usage, body image perception, and self-esteem among UNIMAS students. This structured approach enables a thorough analysis of the factors influencing students' perceptions and psychological well-being within the digital age context, contributing valuable insights to the field of social psychology and digital media research.

1.7 Significance of Study

This study explores in depth the influences of Instagram usage on the relationship of body image perception and self-esteem among UNIMAS students that may raise awareness on mental health concern such as eating disorders, promote media literacy, and enhance overall well-being within UNIMAS students. Firstly, current research will enable students and the public to understand more about how Instagram usage can impact their perceptions of body image and their self-esteem. With this, it will encourage people to use their Instagram wisely and responsibly.

Understanding the role of Instagram on one's body image perception and self-esteem is crucial due to the prevalent mental health concern among university students. According to Wong et al. (2023), the study on university students in Selangor, Malaysia indicate a prevalence of 53.9% for depression, 66.2% for anxiety, and 44.6% for stress. University life can lead to increase in stress and anxiety level as students often struggle to balance their academic, social, and personal time. In this study, Instagram plays a significant role. The portrayal of idealized beauty standards and lifestyles in Instagram can contribute to body image

dissatisfaction and low self-esteem. Investigating the relationship between Instagram usage, body image perception and self-esteem will promote better mental health outcomes among university students. Understanding the effect of Instagram usage on body image perception also can contribute to media literacy initiatives, educating individuals on the impact of media and promoting a critical approach to the content they consume.

Moreover, body image perception is highly correlated to the prevalence of eating disorder. This is because body image dissatisfaction can make an individual practice unhealthy weight-control behavior, which also known as disordered eating. The insight from understanding the relationship between body image perception and self-esteem can aid in the formulation of prevention programs that aimed at body image concerns and self-esteem issues. By addressing these factors early on, there is potential to reduce the incidence of eating disorders and related mental health issues.

Furthermore, body image is shaped by one's societal norms, cultural norms, and environment. Doing a research study in the context of Malaysian students who are studying in Sarawak might produce different results compared to the research done in other places. Malaysia is a diverse country with a rich tapestry of cultures, and this may lead to different view in body image perception. In Sarawak, for instance, there may be unique cultural elements that influence how students perceive their bodies. Additionally, the multicultural nature of Sarawak's society, which includes various indigenous communities such as Iban and Bidayuh, may introduce different perspectives on body image. Therefore, conducting research among Malaysian students that are studying in UNIMAS can shed light on whether body image perception do impact Malaysian students' self-esteem or not.

Lastly, this study focusses on young adult as the researcher's target participant. This is because young adults and adolescence are particularly vulnerable to body image concerns. Young adults and adolescence phase are considered as the self-discovery period, and they often struggle with their self-identity. Consequently, their self-esteem can be significantly affected by how they perceive their bodies. Therefore, the result of this study can be a guideline to develop targeted prevention and intervention strategies and programs. These programs can help university students in Malaysia build more positive body image perceptions and higher self-esteem, potentially resulting in decrease in the prevalence of mental health issue.

1.8 Definition of Terms

This research study will include certain terms, which will be defined below in two categories: conceptual definition and operational definition.

1.8.1 Body Image

Conceptual Definition:

Body image is defined as the mental or subjective representation of an individual's own body, irrespective of its actual physical appearance (Hosseini & Padhy, 2019). Body image is a multifaceted construct encompassing thoughts, feelings, perceptions, and behaviors associated with one's physical appearance. Body image can be influenced by societal ideals, cultural norms, personal experiences, and psychological factors.

Operational Definition:

In this research study's context, body image is characterized as the thoughts and feelings an individual has towards their own body. This definition is assessed quantitatively using the Body Shape Questionnaire-8c (BSQ-8c), a validated self-report instrument. The BSQ-8c consists of eight items related to body shape concerns, weight preoccupation, and the impact of these concerns on daily functioning. Participants are instructed to rate their agreement with each statement on a Likert scale to rate their satisfaction with their body size, shape, and appearance to reveal their thoughts of their own body.

1.8.2 Self-esteem

Conceptual Definition:

Self-esteem refers to the degree to which a person appreciates their qualities and attributes including how a person views their physical appearance, accomplishments,

values, and how others perceive them in a positive light (American Psychological Association, 2014). Higher self-esteem indicates a more positive perception of these qualities, while low self-esteem associated with feelings of worthlessness often seen in depression.

Operational Definition:

In the context of this research, self-esteem is how positive an individual values themselves and their qualities. The participants' self-esteem will be measured with Rosenberg Self-esteem Scale (RSES). The RSES comprises ten items that measure positive and negative feelings about the self. Participants respond to each statement on a Likert scale, providing a numerical representation of their self-esteem. Greater scores on the RSES indicate higher levels of self-esteem, demonstrating a more optimistic self-image and a heightened sense of individual value.

1.8.3 Instagram

Conceptual Definition:

Instagram is a social media application that is primarily designed for sharing photos and videos (Holak, 2017). Users can utilize this application to upload media that has been edited with various filters and other creative tools. Posts or contents can be shared with the public or preapproved followers if the Instagram profile is not open to public (i.e., private profile)

Operational Definition:

In current research, Instagram is a widespread social media application that is used to post, see pictures, and watch videos all around the world that can affect an individual's perception of themselves. For research purposes, the frequency, the duration, and a set of questions on users' pattern of usage (Passive and Active Use

Measure) are quantified through self-report survey. The PAUM comprises items addressing the frequency and type of user activities on Instagram. Participants provide responses to each item using a Likert scale, providing a quantitative representation of their passive and active Instagram behaviors. Higher scores on the PAUM indicate more pronounced engagement in either passive or active usage patterns. These measurements provide data to assess the extent of Instagram's impact on a person's body image perception and self-esteem.

1.8.4 Active Usage

Conceptual Definition:

Active Instagram usage refers to the consistent and engaged use of the Instagram platform by an individual. It involves frequent interactions with the platform's features, including posting content, engaging with others' posts through likes, comments, and shares, viewing and interacting with stories, using direct messaging, and exploring content through the search and explore functions (Verduyn et al., 2020).

Operational Definition:

For this research purpose, active Instagram usage includes assessing how frequently the users post contents, like and comment on others' posts, share pictures and video with others, and sending messages to others through Instagram. The frequency was recorded with a self-reported questionnaire, Passive and Active Usage Measure (PAUM).

1.8.5 Passive Usage

Conceptual Definition:

Passive Instagram usage refers to the behavior of using Instagram in a more observational or consuming manner rather than actively engaging with content. This

involves viewing posts, stories, and videos without actively participating through likes, comments, shares, or content creation. Passive users are primarily viewers, consuming content without contributing to any engagement (Verduyn et al., 2020).

Operational Definition:

For this research purpose, passive Instagram usage includes assessing how frequently the users viewing the posts without liking and commenting on the posts. The frequency was recorded with a self-reported questionnaire, Passive and Active Usage Measure (PAUM).

1.9 Summary

This chapter highlighted the purpose and significance of investigating the impact of Instagram usage on the body image perception and self-esteem of young adults. The aim is to decrease the prevalence of mental health issues in Malaysia.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter introduces a review of existing works of literature on social media, Instagram, body image perception, self-esteem, and the influence of Instagram on both body image perception and self-esteem. In this chapter, the researcher aims to review existing literature to assess the effects of Instagram use on the body image perception and self-esteem of university students. This literature review also aims to examine studies that specifically investigate how Instagram use influences body image perception and self-esteem differently among male and female.

2.1 Related Theories

2.1.1 Social Comparison Theory

Social comparison theory is characterized as the inclination to utilize other individuals as sources of information to assess how one is faring in comparison to others or to gauge how one should behave, think, and feel (Festinger, 1954). Social comparisons happen when someone compares themselves or their experiences to others. There are two types of social comparison. Some individuals tend to compare themselves to someone perceived as more attractive or superior in some aspect. This is called upward social comparison. According to Festinger (1954), making upward social comparisons with others creates a perceived negative contrast between one's own appearance and the idealized model, leading to the feeling of dissatisfaction when the difference between themselves and the person they deem superior becomes noticeable. There is also downward comparison which involves an individual comparing

themselves to someone they deem inferior (Guyer & Vaughan-Johnston, 2018). Individuals often engage in downward comparison to boost their self-esteem by highlighting areas in which the individual feels more competent or successful compared to inferior target (Guyer & Vaughan-Johnston, 2018). According to Wills (1981), engaging in downward comparison, comparing oneself with a less fortunate individual, can potentially enhance subjective well-being.

2.1.2 Self-Objectification Theory

Self-objectification theory is a framework developed to understand how individuals, especially women, internalized societal beauty standards promoted by media, leading them to perceive themselves as objects subject to observation and evaluation (Gattino et al., 2023). The self-objectification process takes place when individuals perceive themselves as sexual objects, subject to evaluation and judgment primarily based on their physical appearance (Fredrickson & Roberts, 1997). Based on literature reviews by Gattino et al. (2023), self-objectification is being measured by two dimensions which are body surveillance, and body shame. With the widespread use of social media, many users opt to shape their online personas by selecting specific photos to present themselves (Feltman & Szymanski, 2017). Media, including social media platforms such as Instagram, plays a significant role in shaping societal beauty ideals. The portrayal of idealized images in the media can contribute to individuals adopting an objectified view of their own bodies (Feltman & Szymanski, 2017). Several studies have found a relationship between Instagram use, self-objectification, body image concerns, and self-esteem among young women. Instagram usage has been positively associated with self-objectification, which in turn is linked to body image concerns and body dissatisfaction. (Fardouly et al., 2017, Pedalino & Camerini, 2022, Ozimek et al., 2023). This relationship is mediated by factors such as upward social comparison with

peers and influencers, exposure to idealized images, and photo editing behavior (Fardouly et al., 2017, Pedalino & Camerini, 2022). The regular experience of self-objectification through Instagram can undermine positive attitudes and result in diminished self-esteem (Ozimek et al., 2023). Therefore, the evidence suggests that higher Instagram use is associated with increased self-objectification, which in turn is linked to lower self-esteem and negative body image concerns

2.2 Social Media

According to Oxford Language, social media is characterized as platforms and applications that allow users to generate and share content or engage in social networking on the Internet. Social media has become increasingly popular year by year. As of October 2023, there are 4.95 billion social media users worldwide (Statista, 2023). This amount consists of 61.4% of the world population. This is due to social media addicting nature such as user friendly which make it easy to use and the users can scroll infinitely. Interesting content and infinite scrolling feature unnoticedly have the potential to increase an individual's screen time. Time spent by an individual on social media usually depends on their country. According to Taylor-Jackson and Moustafa (2021), the amount of time spent on social media is driven by the age demographics of each country.

Social media has significantly transformed the dynamic of social interaction among users, and there are growing concerns that social media is adversely affecting individuals' mental well-being. In a study done by Aalbers et al. (2019), it was found that social media usage is associated with concentration problems, lower interest of offline activities, fatigue, and loneliness. Aalbers et al. (2019) also discovered a positive correlation between social media usage and certain symptoms of depression such as

feeling inferior and experiencing extreme sadness. Moreover, meta-analysis study done by Ma (2021) on the impact of social media usage on stress, anxiety, and depression, found that time spend on social media is negatively associated with stress level and anxiety. Ulvi et al. (2022) also revealed that an increased level of social media usage is associated with depression and various other mental health disorders. Mental health issues due to excessive use of social media are more prevalent in those who are mentally vulnerable. Problematic social media usage is usually linked to depression and anxiety (Lopes et al., 2022).

Different types of social media would affect the users differently. This is because different social media are used for different purposes. For instance, Facebook is used to express feelings and show what the users are currently doing, and share pictures, and videos with friends. On the other hand, Instagram is more focused on sharing pictures and videos that are aesthetically pleasing to the eyes. The difference between Facebook and Instagram is that only mutual friends can see each other's posts on Facebook, but Instagram's posts can be seen by anyone if they follow the users. Those that were friends on Facebook are often an offline network such as contacts, friends, and family (Taylor-Jackson and Moustafa, 2021). According to Ulvi et al. (2022), frequent usage of Facebook is associated with declining mental health. Conversely, there is a positive correlation of mental health and the usage of Twitter, suggesting Twitter can serve as a beneficial social media platform in addressing mental health concerns (Ulvi et al., 2022). According to the same study, anxiety, depression, fear of missing out, and sleep loss have arisen with the increase in Instagram usage. Moreover, a literature review by Taylor-Jackson and Moustafa (2021) stated that social media users are more likely to think that they portray their "real selves" on Facebook than on Instagram. In a survey by the Royal Society for Public Health (RSPH, 2017),

the participants of the study scored Instagram as the worst social media for their mental well-being.

2.2.1 Instagram

The usage of social media spiked after Covid-19, especially Instagram, which is just second to TikTok. According to Molla (2021), there are 43% surge in Instagram visits compared to the pre-pandemic year. Instagram was chosen to be the focus of this study as it is primarily a visual platform where users share images and videos. The visual nature of the content on Instagram is particularly relevant to the study of body image, as it emphasizes appearance and aesthetics. According to research done by Jambulingam et al. (2018), the younger generation, or Generation Z preferred to use Instagram and Snapchat compared to Facebook and Twitter. It was found that these two applications are preferred because of the aesthetic features of the applications (Jambulingam et al., 2018). Due to this aesthetic feature, Instagram users are more likely to only portray a pleasing and good side of themselves on Instagram (Trifiro & Prena, 2021).

The content in this social media is carefully curated, posed, edited, and only good-looking photos and videos will be posted. The curation often involves showcasing moments of happiness, success, and aesthetic beauty. The need to only show a good thing on Instagram made this social media characterized as positive bias applications (Pedalino & Camerini, 2022). Positive bias refers to individuals' inclination to express exclusively positive perspectives of reality (Hoorens, 2014). Users tend to highlight and magnify the favourable aspects of their lives while downplaying any negative aspects. This bias has created a skewed representation of reality.

According to Adeyanju et al. (2021), social comparison is one of the factors that moderate the relationship between the usage of Instagram and mental health issues. When consuming content that is overly positive, beautiful, and successful, users engage in upward social comparison, comparing their lives with those they see on Instagram. Based on past research, social comparisons on social networking sites can negatively impact people's subjective well-being (Verduyn et al., 2020). Moreover, another study found that social comparison is significantly associated with depression and anxiety (McCarthy & Morina, 2020). Hence, it can be said that the usage of Instagram is associated with mental health issues and negative well-being.

Time spent, frequency, and type of usage patterns on Instagram all can affect mental-wellbeing, body image, and self-esteem. According to some study, those who spent more time on Instagram engaged in greater physical appearance comparison which led to higher body dissatisfaction, and lower self-esteem (Alfonso-Fuertes et al., 2022). Two types of Instagram usage patterns are active usage and passive usage. Active usage involves actions such as creating and sharing content, uploading pictures to one's account, liking others' content, or commenting on posts while passive usage refers to monitoring others' lives through their posts without directly interacting with other users (Trifiro & Prena, 2021). It was found that active usage is associated with positive users' outcome such as higher self-esteem and higher level of well-being (Verduyn et al., 2017; Trifiro & Prena, 2021). However, passive usage often leads to a reduction in self-esteem (Verduyn et al., 2016). This study aims to contribute to another finding of influence of Instagram usage on body image and self-esteem.

2.3 Body Image Perception

Body image is how an individual perceives their body shape, form, and size (Slade, 1994). An individual view of their body image is often influenced by their culture, history, social circle, and their biological state (Slade, 1994). Based on this definition, body image is not solely based on an individual's physical appearance, it is more on the thoughts, feelings, and behaviors an individual has towards their own body.

Most individuals harbor concern about at least one part of their body and may view them negatively. This is considered as negative body image (Quittkat et al., 2019). According to Eva et al. (2022), positive body image where individuals are satisfied with their bodies and accept them as they are, is linked to elevated levels of psychological well-being. Conversely, negative body image is often linked to lower self-esteem, depression, anxiety, and abnormal eating behavior (Malik & Nazia Binte Ali, 2021).

2.3.1 Body Image among Young Adults

Young adulthood is a period where individuals shift from adolescent-focused structures to those tailored for adulthood. It is a critical period for identity formation, including the development of self-perception and body image (Bonnie et al., 2015). Individuals in this age group often undergo significant physical, emotional, and social changes, influencing how they perceive and relate to their bodies (Bonnie et al., 2015). Body image among young adults is a significant concern, with many experiencing dissatisfaction and negative feelings about their bodies (Mental Health Foundation, 2023). This can lead to various issues, such as increased likelihood of depressive symptoms, risk-taking behaviors, and mental health problems (Mental Health Foundation, 2023). Body image among young adults is influenced by various factors,

including societal standards, peer comparisons, media exposure, and individual perceptions (Jiotsa et al., 2021; Shen et al., 2022). Young adults are disproportionately exposed to media, including social media, where idealized body images are prevalent (Pedalino & Camerini, 2022). This exposure can have a profound impact on shaping body ideals, leading to body dissatisfaction and potentially harmful behaviors to attain those ideals (Pedalino & Camerini, 2022; Alfonso-Fuertes et al., 2022). Therefore, the studies highlighted the critical need to understand the body image perception in the context of young adults to ensure their well-being.

2.3.2 Unrealistic Beauty Standards and Body Ideals

The rising social media usage has exposed individuals with social media accounts to unrealistic beauty ideals from flawless skin and impossibly toned bodies to carefully crafted facial features. Though unrealistic beauty standards have existed for generations, the usage of social media has simply facilitated the widespread of unrealistic body “ideals”, amplifying the impact on individuals' perceptions of beauty and body image. According to Danylova (2020), exposure to social media content portraying idealized faces and bodies increases the level of body dissatisfaction among both women and men. Body dissatisfaction is defined as the degree of satisfaction an individual has towards their body (Trifiro & Prena, 2021). The extent of individuals' satisfaction with their bodies predominantly relies on how they perceive their body image. Hence, when consuming the curated nature of content on social media, it contributes to a distorted representation of bodies and beauty, leading to body dissatisfaction which may impact one's body image.

Furthermore, the need to conform to unrealistic beauty standards can result in body image distortion (Aparicio-Martinez et al., 2019). Body image distortion is defined as the discrepancy between an individual's physical appearance and their

subjective perception of how they look (Hosseini & Padhy, 2019). Unrealistic beauty and body ideals raised body image concerns among social media users (Aparicio-Martinez et al., 2019). When an individual is overly concerned about conforming to the beauty standard, they may develop a distorted image of their own body, noticing their body is different from their idealized standard that may not actually exist. Body image distortion causes body dissatisfaction which potentially leads to eating disorders, body dysmorphic disorder, social anxiety disorder, depression, and low self-esteem (Aparicio-Martinez et al., 2019; Danylova, 2020).

2.3.3 Body Image and Upward Social Comparison

In the context of body image, individuals often engage in upward social comparisons regarding their physical appearance. This is known as appearance comparison. The exposure to beauty standards and idealized body image from any form of media enables any individual to have the opportunity to engage in social comparison to their peers, celebrities, and models (McComb & Mills, 2021). In one research study, it was discovered that individuals who engage in self-comparison reported experiencing reduced positive emotions (Trifiro & Prena, 2021). In addition, according to McComb and Mills (2021), upward social comparison on idealized body image led to reduced confidence and heightened dissatisfaction with both appearance and weight.

Appearance comparisons have the potential to contribute to body dissatisfaction and body image disturbance (Wang et al., 2019). This is supported by Fuller-Tyszkiewicz et al. (2019), who found that engaging in appearance comparison predicted alterations in one's immediate sense of body satisfaction. In one survey on the influence of body dissatisfaction on Brazilian students' self-esteem, body dissatisfaction is one of the predictors of the causes of low self-esteem in students (Macêdo Uchôa et al., 2020). This finding is also in sync with a finding from research on the Lebanese

population which stated that body dissatisfaction is in fact associated with low self-esteem, depression, social anxiety, and eating disorders.

2.3.4 Gender Differences in Body Image Perception

Societal norms and media portrayals have played a crucial role in shaping body image perceptions for both men and women. According to Gualdi-Russo et al. (2022), there are differences in how men and women views on what constitutes a desirable body shape. According to Frederick et al. (2017), women often face societal pressure to adhere to a "thin ideal" promoted by media and cultural standards. Societal standards that emphasize thinness and beauty lead to higher levels of body dissatisfaction, with many women feeling pressured to engage in dieting, cosmetic surgery, and other body-altering behaviors to meet these ideals. On the other hand, men tend to focus on muscularity and body fat percentage (Porras-Garcia et al., 2020). The societal ideal for men often includes being muscular and lean can cause men to harbor dissatisfaction towards their body (Porras-Garcia et al., 2020). Due to this, men are more likely to engage in excessive exercise, use steroids, and develop disordered eating patterns in their pursuit of a muscular physique.

Various studies found that females have higher body dissatisfaction than males (Gualdi-Russo et al., 2022; Quittkat et al., 2019; Frederick et al., 2017). This is because in general, females are more concerned about their body image compared to males due to a combination of sociocultural pressures, media representation, internalization of thin ideals, and social comparison tendencies (Jiotsa et al., 2021). Furthermore, in one meta-analysis by He et al. (2020), it was found that males had higher levels of body appreciation than females. These findings indicates that female may have higher body image concern, body dissatisfaction, and lower body appreciation compared to male.

2.4 Self-Esteem

Self-esteem is a central component of an individual's daily experience, representing an individual's overall perception of their own value or self-worth (Ackerman, 2019). Self-esteem is best understood as an affective construct where the worthiness, value, likeableness, and acceptance of an individual are related to their emotions (Kernis, 2003). In other words, an individual's self-esteem is connected to their self-concept.

Self-esteem serves as a reflection of an individual's self-identity and their perception of themselves. Therefore, according to Trifiro and Prena (2021), individuals with high self-esteem usually harbor a more positive view of themselves than individuals with lower self-esteem. People experiencing low self-esteem frequently harbour feelings of uncertainty and negativity regarding their own value. This discovery aligns with the research conducted by Sivakumar and George (2019), affirming that diminished self-esteem adversely affects how an individual perceives oneself. Conversely, according to Salice (2020), higher self-esteem is associated with happiness, leading to a self-perception as a happy and independent person.

Various factors can contribute to an individual's self-esteem. This includes personal relationships, life experiences such as stress, abuse, and loneliness, and individual circumstances such as education, and health. The central concern of this study is to investigate whether Instagram usage and body image are contributing factors to the level of an individual's self-esteem. The rise of image-based social media usage concerns body image and self-esteem. According to Jan et al. (2017), elevated social media usage results in a decline in self-esteem, primarily triggered by engaging in upward social comparison. As spending too much time on social media will allow

individuals to engage in upward social comparison, individuals who consume body and beauty ideals content may experience body dissatisfaction.

2.4.1 Self-Esteem among Young Adults

Self-esteem among young adults is a significant aspect of their psychological well-being and development. During this life stage, individuals experience various challenges and transitions that can influence their self-perception and confidence (Chung et al., 2014). Self-esteem among young adults refers to the favorable or unfavorable attitude towards oneself (Ackerman, 2019). Self-esteem can affect how much a person likes and values themselves, believes in themselves and their abilities, stands up for themselves when under pressure, is willing to try new or difficult things, and moves on from mistakes without blaming themselves unfairly. Young adults often engage in social comparison, both in real life and through social media (Jan et al., 2017). Comparing oneself to peers or societal standards can impact self-esteem, especially if individuals perceive themselves as falling short in certain aspects (Jan et al., 2017; Fagundes et al., 2020). Young adults with low self-esteem may be at a higher risk of experiencing anxiety, depression, and other mood disorders (Mofatteh, 2020). Furthermore, young adults who struggle with self-worth may develop unhealthy attitudes towards their bodies, leading to the adoption of extreme dieting, exercise habits, or even the development of eating disorders (Aparicio-Martinez et al., 2019; Dziewa et al., 2023). Therefore, the studies highlighted the critical need to understand the self-esteem among young adults to ensure their well-being and mental health.

2.4.2 Gender Differences in Self-Esteem

From a societal perspective, traditional gender roles and expectations significantly shape self-esteem (Zuckerman et al., 2016). Women often face pressure to conform to beauty ideals that are frequently promoted through television, magazines, and social media (McComb & Mills, 2021). The constant exposure to unrealistic beauty standards can lead to heightened body dissatisfaction, as women compare themselves to these unattainable ideals. Consequently, women's self-esteem is frequently linked to their physical appearance (Zuckerman et al., 2016). On the other hand, men are typically expected to show strength, independence, and success in professional and financial domains (Zuckerman et al., 2016). Men's self-esteem is often more closely tied to achievements, status, and the ability to provide and protect, reflecting societal values that prioritize these traits in men (Zuckerman et al., 2016). However, meta-analysis study done by Zuckerman et al. (2016) found that gender differences in self-esteem had decreased over the years. This is because as societies move towards more equality and freedom, the gender gap in self-esteem tends to narrow, especially in more developed countries (Zuckerman et al., 2016).

Furthermore, social comparison and media influence are also critical factors affecting self-esteem differently in males and females (Samra et al., 2022). According to Samra et al. (2022), females are more likely to engage in social comparison, especially concerning appearance and social relationships compared to males. Males, on the other hand, are susceptible to social comparison focusing more on achievements, status, and physical fitness (Samra et al., 2022). This can be concluded that social comparison and media influences both genders, but men may be more affected by portrayals of success and physical strength rather than appearance alone.

Study by Pop et al. (2022) found that men obtained higher scores than women in the self-esteem assessment, suggesting that men generally exhibit higher levels of self-esteem compared to women. This study is supported by Magee and Upenieks (2019), who also found that men tend to score higher in self-esteem measures compared to women. Conversely, there are multiple findings that found that there are no notable differences in self-esteem levels among males and females (Fagundes et al., 2020; Khalaf et al., 2021). This indicates that findings are inconsistent based on the population. Therefore, the studies highlighted the critical need to understand the gender differences in self-esteem levels.

2.5 Previous Findings of Instagram and Body Image Perception

Baker et al. (2019) conducted a qualitative study using the focus group method with a total of 27 female participants in the age range of 18 to 22 to explore the relationship between Instagram usage and body image. This study found that the participants carefully chose the best picture of themselves and put great importance on the number of likes and comments they received on their posts. Furthermore, they found that the participants always strive to adhere to the trending beauty standards, tend to compare their looks and likes to other Instagram users, and some even reported that they feel dissatisfied with their appearance. Participants also discussed their concerns about their viewers' perception of them when they posted a picture of themselves. Based on this study, it was clear that the usage of Instagram does influence the body image of young women negatively. The limitation of this study is that the sample size is too small, and the findings cannot be generalized due to individual differences. Research with a bigger sample size needs to be done in the future.

Brown and Tiggemann (2020) conducted a study to investigate the potential of two types of Instagram captions to reduce the adverse impact of celebrity images on the body image of 256 female undergraduate students. This study found that Instagram captions do not have a significant effect on women's body image. However, it was found that the exposure of attractive celebrities' photos does increase body dissatisfaction and decrease body appreciation among the participants in comparison to the exposure to travel pictures. This indicates that Instagram does affect body image negatively when users engage in social comparison. The limitation of this study is that the participants only consisted of young adult women. A study on more diverse background participants needs to be done in the future.

In an in-between group experimental study conducted by Casale et al. (2019), 130 non-Instagram users were recruited to participate in this study. In a week-long period, 54 participants, maintaining an equal gender distribution, are exposed to a series of real Instagram profiles that emphasized physical appearance while another 76 participants also with a balanced ratio of men and women acted as the control group, not exposed to any Instagram posts. This study discovered that repeated exposure to Instagram profiles featuring attractive women resulted in increased body dissatisfaction among women. However, no significant impact was observed when men were exposed to images of same-sex attractiveness, with no notable effect on muscular or fat dissatisfaction. This may indicate that social comparison may affect women's body image more than it affects men's body image. The study's limitation lies in its experimental design, implying that participants were required to examine Instagram profiles in a manner that are different from how they might naturally engage in a real-life setting. (Casale et al., 2019). The participants might not view the content instructed by the researchers in their daily lives. Hence, a study with the most natural settings in

which the participants do it because that is what they usually do to avoid internal validity should be done.

Alfonso-Fuertes et al. (2022) used a self-reported questionnaire to study the impact of time spent on Instagram and type of content viewed on self-esteem, tendency to make physical comparisons, and satisfaction with body image. The sample consisted of 585 young adults in Spain with the age range of 18 to 40. This study found that individuals who spent more time on Instagram had higher levels of body dissatisfaction, engaged in greater physical comparison, and had lower self-esteem. This indicates that time spent on Instagram can affect an individual's body image negatively. Some limitations in this study are that it consisted of sample populations interested in mental health. It can cause cognitive bias to the result. In future research, a diverse background of participants is needed to generalize the study.

While numerous studies concentrated on the adverse impact of Instagram on body image, it is undeniable that Instagram can also contribute to fostering a positive body image. In a quasi-experimental intensive longitudinal study conducted by Fioravanti et al. (2021), 122 young women were randomly allocated to three distinct conditions of daily Instagram exposure—namely, body-positive, fitspiration, and neutral content. The participants were then observed using a structured diary technique for a continuous period of 28 days. This study found that daily exposure to body-positive images was associated with an increase in positive mood and higher body satisfaction. This indicates that body-positive images on Instagram may lower users' body image concerns.

In summary, through the review of these studies, it was found that Instagram usage can impact body image negatively (Baker et al., 2019; Brown and Tiggemann,

2020; Alfonso-Fuertes et al., 2022). Next, through literature review, the role of social comparison is highlighted in shaping body image perceptions within the Instagram landscape (Casale et al., 2019; Brown & Tiggemann, 2020). Significantly, research by Fioravanti et al. (2021) introduces a distinctive narrative by emphasizing the potential positive influence of exposure to body-positive images on Instagram. This diverges from the prevailing negative discussions on the subject. Reviewing the methodology used in the reviewed literature, Casale et al. (2019) employ an experimental design to investigate body dissatisfaction, diverging from Baker et al. (2019) and Alfonso-Fuertes et al. (2022), who adopt qualitative methods, and Fioravanti et al. (2021), who opt for a quasi-experimental design. Furthermore, while Casale et al. (2019) specifically explore gender differences and identify a more pronounced effect on women, the remaining studies predominantly concentrate on women without delving into gender nuances. Finally, Brown and Tiggemann (2020) research on how Instagram captions impact body image perceptions revealed that Instagram captions have limited influence on shaping body image perceptions.

2.6 Previous Findings of Instagram and Self-esteem

Fagundes et al. (2020) used an online survey to collect data on how the intensity of Instagram use, social comparison, and the five major personality factors impact self-esteem. The survey was completed by 625 Brazilians individuals in which 63.7% of the respondents are female. This study found that there is a significant negative association between Instagram use intensity and self-esteem with social comparison as the mediating factor. This study reported that Instagram use intensity affect women's self-esteem negatively more than it affect men. Furthermore, they discovered no notable distinction on the levels of self-esteem for men and women but for both genders, there

was a notable positive correlation between the extent of Instagram use and engagement in social comparison. This means those that use Instagram more frequently tend to engage more in comparing their abilities and opinions to others on the platform. The limitation of this study is that researchers do not investigate the type of Instagram usage, active or passive. Future research should investigate how does different types of Instagram use affect self-esteem.

In 2021, Vall-Roqué et al. (2021) examined the influence of the Covid-19 pandemic on the use of social media, disruptions in body image, and self-esteem in adolescents and young women using an online survey involving 2601 participants. All the respondents are in the age range of 18-35 living in Spain. This research revealed a rise in the count of women who are following Instagram profiles that emphasize appearance after Covid-19. This study also found that there is a significant relationship between the frequency of Instagram usage with low self-esteem, body dissatisfaction, and drive for thinness (Vall-Roqué et al., 2021). This may indicate that increased exposure to appearance focused content can affect women's self-esteem level negatively. The limitation of this study is that participants' recruitment was conducted online. Hence, the sample of the study does not represent the Spanish population. Future studies should employ both physical and online surveys to include more participants.

Chansiri and Wongphothiphan (2023) conducted an online experiment to explore how BMI and perceived weight affect women's self-esteem with Instagram images as the mediator. The sample population consisted of 221 female undergraduate students from various ethnicity. This research discovered that images promoting fitness ideals have a more negative effect on women who are overweight but perceive themselves as healthy compared to women with a healthy weight and the same perception. They also found that thinspiration images resulted in lower self-esteem in

healthy weight women that perceived themselves as overweight. This indicates that BMI and perceived weight play a role in the impact of different Instagram images and social media trends on low self-esteem. The limitation of this study is that this study has low sample size of women with underweight perception and BMI. Future study needs to focus more on this population so that the finding can be generalized.

Kim (2020) conducted an online survey to study the impact of Instagram selfie-posting on self-esteem and body dissatisfaction with Korean young adult women with the sample population of 321 Korean female college students. This study found that frequent engagement in the active use of Instagram, specifically taking and sharing selfies, is linked to elevated levels of self-esteem, as indicated by the findings of this study. Furthermore, it was found that frequently taking and posting selfies on Instagram impacts self-esteem positively only if the individual has a low and moderate need for popularity. These results indicate that selfie posting on Instagram only positively impacts an individual's self-esteem if they are not actively seeking popularity. This study's constraint lies in its use of a cross-sectional design, which means it cannot ascertain the causal direction of relationships between variables. To address this limitation, future research should opt for longitudinal studies to provide clarity on the directionality of relationships involving selfie-posting, self-esteem, and body image concerns.

In summary, these studies collectively illuminate the complex dynamics between Instagram use and self-esteem. Fagundes et al. (2020) highlighted a negative association between Instagram use intensity and self-esteem, with social comparison as a mediating factor, particularly impacting women. Vall-Roqué et al. (2021) highlighted an increase in women following appearance-focused profiles, linking heightened exposure to negative outcomes. Chansiri and Wongphothipphan (2023) emphasized BMI

and perceived weight in moderating the impact of Instagram images on self-esteem, stressing the need for broader demographic exploration. In contrast, Kim's (2020) study revealed that frequent active Instagram usage such as selfie-posting on Instagram correlates positively with self-esteem, especially for those with a low to moderate need for popularity. Despite valuable insights, these studies suggest the need for future research exploring diverse usage patterns, demographic considerations, and employing longitudinal designs for a comprehensive understanding of these relationships.

2.7 Previous Findings of Body Image and Self-Esteem

Khalaf et al. (2021) used an online survey to examine the correlation between body appreciation and self-esteem among 237 Omani University students. This study found that there is discovered no notable difference in level of self-esteem between male and female students. Furthermore, the researchers discovered that greater body appreciation is positively linked to higher self-esteem levels. This indicates that positive body image has a positively significant relationship with an individual's self-esteem. Based on this study, high level of body appreciation led to positive body image and positive body image increases self-esteem. Thus, body image has an impact on self-esteem. The limitation of this study is that the number of female participants exceeds the number of male participants. Future study should collect data from a balance ratio of both male and female participants.

Pop et al. (2022) conducted a research survey on the relationship between body esteem, self-esteem, and loneliness of young social media users through an online survey with the sample population of 427 medical students in Romania. In this study, researchers noted that men obtained higher scores than women in the self-esteem assessment, suggesting that men generally exhibit higher levels of self-esteem

compared to women. Furthermore, this study also found that individuals who expressed less satisfaction with their own bodies received lower scores in the assessment of self-esteem. This indicates that low body esteem negatively impacts self-esteem levels. As body esteem is one of body image's components, this suggests that body image does have significant effects on self-esteem. The limitation of this study is that it focuses only on medical students. Future studies should delve into the differences between young adults with varying educational backgrounds and those without such backgrounds.

Saranya et al. (2022) conducted a survey to investigate the relationship between body image and self-esteem among females. Information was gathered from a group of 100 individuals aged between 18 and 40. This study found a negative significant relationship between body image and self-esteem among females, indicating that as body image score increases, self-esteem decreases. Furthermore, the study implies that having a negative body image perception correlates with diminished self-esteem, as elevated scores on the body image questionnaire signify a heightened intensity of negative body image perception. Overall, the study findings validate the idea that body image significantly influences self-esteem in females, indicating an adverse connection between these two factors. The limitation of this study is that it only focused on females, which means that the results may not apply to males or individuals of other genders. Hence, future research should include the study of gender differences in body image and self-esteem.

In summary, all the studies highlight the relationship between body image and self-esteem. Khalaf et al. (2021) reveal a positive association between body appreciation and self-esteem among Omani university students, with a call for future research to address gender distribution imbalance. In contrast, Pop et al. (2022)

highlights the gender differences in self-esteem, showing higher scores among men and emphasizing the negative impact of lower body esteem on self-esteem. The limitation is that it focuses solely on medical students, prompting a need for broader research encompassing diverse educational backgrounds. On the other hand, Saranya et al. (2022) emphasized on the negative relationship between body image and self-esteem among females, highlighting the detrimental effect of negative body image perceptions on self-esteem levels. Nevertheless, the exclusive focus on females poses a limitation, urging future investigations to explore gender differences comprehensively. Overall, these studies deepen our understanding of the relationship between body image and self-esteem providing valuable insights for future research and interventions aimed at fostering positive self-perception.

2.8 Suggestion for Improvement

Based on all the literature the researcher had reviewed, it can be concluded that the limitations faced by other researchers are the participants' gender percentages are always imbalanced. The reason for this lies in the fact that women exhibit a greater interest in discussions related to body image and self-esteem when contrasted with men. In future research, the researchers should control the ratio of participants' genders to get a validated result when comparing data between both genders. Next, most of the research in this area of study mostly focused on females. There is a lack of studies on male body image and self-esteem. Hence, future studies should focus more on researching men's body image and self-esteem. Furthermore, most of the studies reviewed are a cross-sectional design that only captures the impact of Instagram on body image and self-esteem at a single point in time. It has limited insight into change, cannot find cause-and-effect inferences, and cannot explore developmental trends.

Future research should employ longitudinal studies designed to delve deeper into cause-and-effect relationships and observe changes over time.

2.9 Conclusions

Acknowledging these current contexts in literature and gaps, this present study seeks to provide a better understanding how time spent, frequency, and Instagram usage patterns influence young adults', particularly university students, body image and self-esteem. Lastly, this current study also aims to understand whether body image does influence self-esteem among UNIMAS students.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter explains in detail how the study was carried out. In this study, questionnaires are distributed to investigate the influence of Instagram usage on body image perception and self-esteem, and the relationship between body image perception and self-esteem among undergraduate students in UNIMAS. This chapter will include the design of the study, the population and sample, the instruments of study, and the data analysis procedure. At the end of this chapter, a summary will be presented.

3.1 Research Design

This study employed a positivist research philosophy commonly associated with experiments and quantitative research. Positivism assumes that what is being studied can only be done objectively, and can be measured, and it should not be from researchers' own personalized view (Phair & Warren, 2021). Positivism asserts the importance of empiricism, objectivity, and the scientific method in understanding and explaining phenomena (Phair & Warren, 2021). Positivism favors the scientific method which always initiates research based on theories and subsequently gathers data to confirm or question the existing theory employing standardized instruments and statistical analyses, adjusting past findings as necessary. Subsequently, the researchers will derive objectives and produce generalizable conclusions. In this study, positivism enabled the researcher to use statistical techniques studying the influence of Instagram usage on body image and self-esteem as the data will be collected quantitatively.

Aligned with positivity research philosophy, quantitative methods were utilized for this study. According to Babbie (2010), quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon. Numerical data are collected through various methods and then, statistically analysed to accumulate the data, compare it, or show relationships among the data (Sreekumar, 2023). Quantitative research exhibits potential in generalizing findings to a broader population (Arabaine, 2023). Through gathering data from a representative sample of users, this approach offers insights that are applicable to a larger demographic. The nature of this study is hypotheses testing as the study aims to explain the influence and the relationship between manipulative variables, and dependent variables. This study's hypotheses intended to enhance understanding of the influence and the relationship of Instagram usage (independent variable) and body image perception, and self-esteem (dependent variables). Therefore, quantitative approaches allow researcher to analyse the data statistically.

The research design used in this study was cross-sectional design. A cross-sectional study is a research design where data is gathered from numerous individuals at a specific moment (Cherry, 2022). The selection of a cross-sectional survey for this study stemmed from its data collection strength, where information is gathered at a specific moment in time. This design helps prevented and minimized the time required for data collection.

For data collection, a quantitative survey was distributed to the research participants who fulfil the research criteria. Quantitative survey focuses on collecting numerical data to describe and analyses a phenomenon. Quantitative survey uses structured questionnaires or surveys with predetermined questions, often employing closed-ended formats like multiple-choice or Likert scales (Creswell & Creswell,

2018). In this research, existing questionnaires were used to investigate the effect of Instagram usage on body image and self-esteem among university students. The questionnaires used are well researched questionnaires, hence, the validity and the reliability are easy to determine. Furthermore, this survey design was chosen due to ethical considerations in which the participants were informed earlier about the study's purpose, procedures, and potential risks before agreeing to participate. Lastly, this design was chosen due to its cost-efficient characteristics as the survey is using online platform to be conducted.

3.2 Population and Sample

3.2.1 Sampling Technique

Convenience sampling was chosen for this study, representing a non-random sampling approach. This technique selects participants based on specific criteria, including easy accessibility, participant availability, geographical proximity, and an individual's willingness to take part in the study (Etikan et al., 2016). The target population consisted of undergraduate students at Universiti Malaysia Sarawak (UNIMAS). Convenience sampling was conducted for this research due to the challenges associated with obtaining a comprehensive list of all UNIMAS students and the limited resources available for this study. Using convenience sampling allows the researchers to collect data quickly and easily, especially the entire population is hard to access. Furthermore, this sampling technique was employed because of time constraints and this study sampling is cost-effective.

Young adults that are currently doing an undergraduate study in University Malaysia Sarawak (UNIMAS) was involved as the population of this study. According to UNIMAS Official Website (2023), there are 17163 undergraduate students in

UNIMAS. Based on sample size calculators that are using Krejcie and Morgan (1970) formula, the sample size for a population consists of 17000 people are 376. Hence, the researcher needs to distribute the questionnaire to 376 willing and readily available undergraduate students in UNIMAS as the sampling technique used is convenience sampling. However, due to time constraints, there were only 165 respondents for this study.

3.3 Instruments

Self-reported questionnaire method was utilized as the research tool. Questionnaire was chosen to be this study's research tool because of the cost-effectiveness, convenience for respondents, and ease of data acquisition. 3 other questionnaires from past studies were utilized in this study; Passive and Active Use Measure, Body Shape Questionnaire-8c, and Rosenberg's Self-esteem Scale. In addition to these, few questions that were asking the participants how many hours and how frequently they open their Instagram account daily were included.

The questionnaires were divided into four sections which adapted from past research. For the first section, section A, researcher focused on the demographic of the participants. Section A consists of the participants' name, gender, age, year of study, and faculty. Demographic information is one of the important parts of questionnaire because it allows researchers to better understand certain background characteristics of the research participants.

3.3.1 Instagram Usage

Section B consisted of questions to assess the frequency of Instagram usage among the participants. In this section, respondents first self-reported whether they had

an Instagram account. If they had an account, they were required to report on average how many hours daily they spent on Instagram and how many times a day they opened their account (Alfonso-Fuertes et al., 2022). The influence of Instagram on body image and self-esteem was further assessed by whether the respondents a passive or active Instagram user. This was measured using Passive and Active Use Measure (PAUM) by Gerson et al. (2017) which had been adapted by Trifiro and Prena (2021) to reflect Instagram activities. This assessment consisted of 10 questions and the respondents were required to rate how frequently they perform certain activities such as posting photos, commenting on other users' photos, and checking to see what someone else is doing. This assessment was divided into 2 sections to assess whether the respondents are active or passive Instagram user. A five-point Likert scale was adopted for this section, ranging from 1= Never to 5= Very Frequently. The reliability score for this instrument ranged from Cronbach's $\alpha = .73$ to Cronbach's $\alpha = .81$ (Trifiro & Prena, 2021; Gerson et al., 2017). This indicated that PAUM scale consistently measured the same underlying construct (active vs. passive Instagram use) across different populations and contexts.

3.3.2 Body Image Perception (Body Shape Questionnaire)

In the next section, which is section C, respondents body image perception was measured with Body Shape Questionnaire-8c by Cooper et. al. (1986). Body Shape Questionnaire was originally a 34-question questionnaire, but many researchers believed it is a long questionnaire and it is not practical. Hence, a brief version of this questionnaire was published by Evans and Dolan in 1993 (Welch et al., 2012). Body Shape Questionnaire-8c consisted of 8 self-reported items used to assess concerns about body image. 6-point Likert scale was used for this assessment in which respondents needed to rate 1 for never, 2 for rarely, 3 for sometimes, 4 for often, 5 for very often,

and 6 for always. Higher scores on the BSQ indicated greater body dissatisfaction. The reliability score for this instrument ranged from Cronbach's $\alpha = .87$ to Cronbach's $\alpha = .95$ (Evans & Dolan, 1993; Welch et al., 2012). This indicated that Body Shape Questionnaire 8c (BSQ-8c) demonstrated good reliability in various study populations.

3.3.3 Self-esteem (Rosenberg's Self-esteem Scale)

The last section, which is section D, consisted of Rosenberg Self-esteem Scale (Rosenberg, 1965) to measure the respondents' level of self-esteem. Rosenberg's Self-esteem Scale contained 10 items of general feelings respondents have for themselves. The research participants were required to self-report their agreement with 10 statements on a five-point Likert-type scale, ranged from 1 for "Strongly Disagree" to 5 for "Strongly Agree." The items included "On the whole, I am satisfied with myself" and "At times I think I am no good at all.". The reliability score for this instrument ranged from Cronbach's $\alpha = .77$ to Cronbach's $\alpha = .88$ (Rosenberg, 1965; Tinakon & Nahathai, 2012). The test-retest reliability of this instrument over a 2-week period shows excellent stability, with correlations of .85 and .88 (Rosenberg, 2006).

3.4 Procedures

Participants of this study was recruited through voluntary participation and the criteria for participants to join this study is they had to be currently enrolled as full-time undergraduate students at UNIMAS. The questionnaire of this study was distributed to any UNIMAS students who are readily available and willing to take part in this study. The questionnaire was distributed in the form of Google Form and distributed online. To maximize availability, a QR code was prepared for UNIMAS students to scan to access the Google Form while the researcher goes around various locations within the

university such as the library, cafeteria, and faculties lobby. For this study, about 165 respondents were involved in this study. Respondents need be in the age range of 18-26 as this age range fall under the category of young adults. This is important because researcher aims to study the influence of Instagram usage on body image and self-esteem among young adults in the setting of University Malaysia Sarawak.

Data input was screened because it helps researchers identify missing data to minimize errors in data entry. Hence, the first step to ensure no question will be left with no answer, researcher turned on the “Required” setting for all questions in the Google form questionnaire. This can avoid respondents from deliberately not answering the question. After data entry has been completed, the questionnaires negative questions were reversed by using the reverse code of Social Sciences Statistical Packages (SPSS). This is to ensure all questions in SPSS are positive and relevant.

3.5 Ethics

This research adhered to the ethical principles and guidelines set forth by the academic and research community. The privacy, anonymity, and confidentiality of the participants for this study was strictly maintained. All participants were provided with informed consent, which comprehensively outline the research's objectives, procedures, potential risks, and benefits. Participation in the study was entirely voluntary, and individuals retained the right to withdraw at any point without facing any consequences. The gathered data was exclusively serving research purposes and was securely stored to safeguard the confidentiality of participants' identities. The results of this research were presented in a consolidated and anonymized format, guaranteeing the confidentiality of individual participants. The researcher is committed to conducting

this study with the utmost respect for ethical considerations and ensuring the well-being and rights of all participants involved.

3.6 Data Collection

The information for this research study was gathered online through the utilization of Google Forms. Ethical approval had been obtained to ensure participant rights and privacy are protected. A sample of UNIMAS undergraduate students was invited to participate in the survey. The survey questionnaire was distributed online, and the participants accessed and completed it using Google Forms. The questionnaire covered topics related to Instagram usage, body image perception, and self-esteem. Participants had the flexibility to complete the survey at their convenience, without any specific timeframe imposed. This data collection procedure followed ethical guidelines, allowing for a convenient and anonymous survey experience for UNIMAS undergraduate students, while providing valuable insights into the influence of Instagram usage on body image perception and self-esteem.

3.7 Data Analysis Procedure

The data collected from respondents were collected and analysed using version 29.0 of the IBM Statistical Packages for Social Sciences (SPSS). The analysis included descriptive data and inferential data. SPSS was utilised to construct charts to analyse data collected. In summary, the researcher used descriptive analysis to analyse the demographic content and inferential analysis to analyse the rest of the data collected.

3.7.1 Descriptive Data Analysis

Descriptives statistics were measured through frequencies, dispersions, mean, graphs, and chart. This involved analysis of demographic data such as age, gender, year of study, faculty, and BMI.

3.7.2 Inferential Data Analysis

This study used inferential statistics to analyse data collected. Inferential statistics made inferences by using the data collected from the population. The data was screened first to ensure the validity of the data collected. The following are inferential statistics use for the research:

Table 1

Statistical Tests

Research Hypothesis	Types of Tests
There is a significant relationship between the usage of Instagram and students' body image perception.	Multiple Regression
There is a significant relationship between the usage of Instagram and self-esteem.	Multiple Regression
There is a significant relationship between students' body image perception and self-esteem.	Spearman's Rank Correlation
There is a significant difference in body image perception between males and females.	Independent T-test
There is a significant difference in self-esteem level between males and females.	Independent T-test

This research study employed Multiple regression tests to analyse the relationship between Instagram usage variables (time spent on Instagram daily, active usage, and passive usage) and both body image and self-esteem. Multiple regression is a statistical technique that models the relationship between a dependent variable and two or more independent variables. The independent variable (Instagram usage variables) was used to predict the value of the dependent variable (body image and self-esteem). The dependent variables needed to be a continuous variable.

Spearman's rank correlation is a non-parametric measure of the strength and direction of association between two ranked variables. Spearman's rank correlation evaluates how well the relationship between two variables can be described using a monotonic function. Spearman's rank correlation does not assume that the data are normally distributed. It works with ordinal data or continuous data that have been converted to ranks. In this research study, Spearman's rank correlation was used to analyze the relationship between the influence of Instagram usage on body image perception and self-esteem. It was also used to analyze the relationship between body image perception and self-esteem. The coefficient (ρ) was used to analyze the strength of the correlation between the variables. Value of coefficient (ρ) and the strength of the relationship were shown below:

Table 2

Spearman's Rank Correlation, ρ value

Coefficient Value, ρ	Strength of Relationship
≥ 0.70	Very strong relationship

0.40-0.69	Strong relationship
0.30-0.39	Moderate relationship
0.20-0.29	Weak relationship
0.01-0.19	No or negligible relationship

Independent T-test was utilized to ascertain whether there was a statistically significant difference between the mean of two sets of score. It compares the means for two different independent groups. In this research study, independent T-tests were used to determine if there was a statistically significant difference in body image perception and self-esteem between Instagram users and non-users. A $p\text{-value} > 0.05$ indicates that there is no significant difference between the groups while a $p\text{-value} < 0.05$ indicates that there is a significant difference between the two groups.

3.8 Summary

Overall, this chapter discussed in detail the methodology, research design, population sample, the setting of the study, research instruments, data collection method and data analysis used to execute this research. This chapter also include the reliability of the instruments and the ethics study.

CHAPTER 4

FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter showed the findings of the survey including the demographic data of the participants, inferential analysis and the discussion.

4.1 Demographic Data

In this study, descriptive data was used to describe the data of the demographic profile of the respondents. The frequency distribution and percentage of respondents' demographic background such as gender, age, race, faculty, year of study, do they own an Instagram account, and average time spent on Instagram daily were examined and displayed in the form of table and charts.

Table 3

Demographic Profile of Respondents

Characteristic		Frequency	Percentage (%)
Gender	Male	63	38.2
	Female	102	61.8
Age	19-22 years old	122	73.9
	23-26 years old	40	24.2
	27-30 years old	2	1.2
	31 years old and above	1	0.6

Race	Malay	54	32.7
	Chinese	31	18.8
	Indian	4	2.4
	Bumiputera Sarawak	63	38.2
	Bumiputera Sabah	13	7.9
Faculty	FEB	13	7.9
	FSSH	20	12.1
	FCSHD	47	28.5
	FENG	21	12.7
	FRST	20	12.1
	FBE	0	0
	FMHS	10	6.1
	FELC	12	7.3
	FACA	6	3.6
	FCSIT	16	9.7
Year of Study	Year 1	51	30.9
	Year 2	35	21.2
	Year 3	70	42.4
	Year 4	9	5.5
Own an	Yes	154	93.3
Instagram	No	11	6.7
Account			

Average time	0 minutes	13	7.9
spent on	Less than 1 hour	57	34.5
Instagram Daily	1 hour to 2 hours	49	29.7
	2 hours to 3 hours	23	13.9
	More than 3 hours	23	13.9

4.1.1 Gender

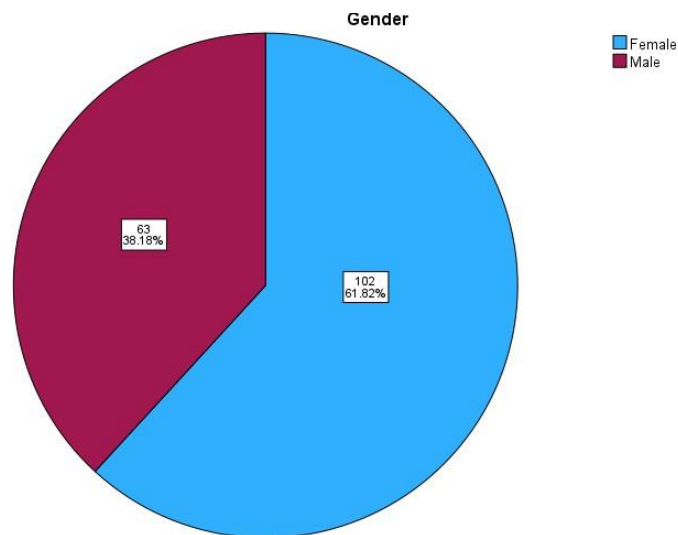
Table 4

Percentage of Respondents' Gender

<i>Gender</i>		
	N	%
Female	102	61.8%
Male	63	38.2%

Figure 2

Gender



This study managed to get 165 survey respondents. In this study, 102 of the respondents are female and 63 of the respondents are male. This showed that the 61.82% of the respondents are female and 38.16% of the respondents are male. Based on this, the male to female respondent ratio is 1:1.62. This reflected that there are more female student respondents than male student respondents. The distribution of gender is shown in Figure 2.

4.1.2 Age

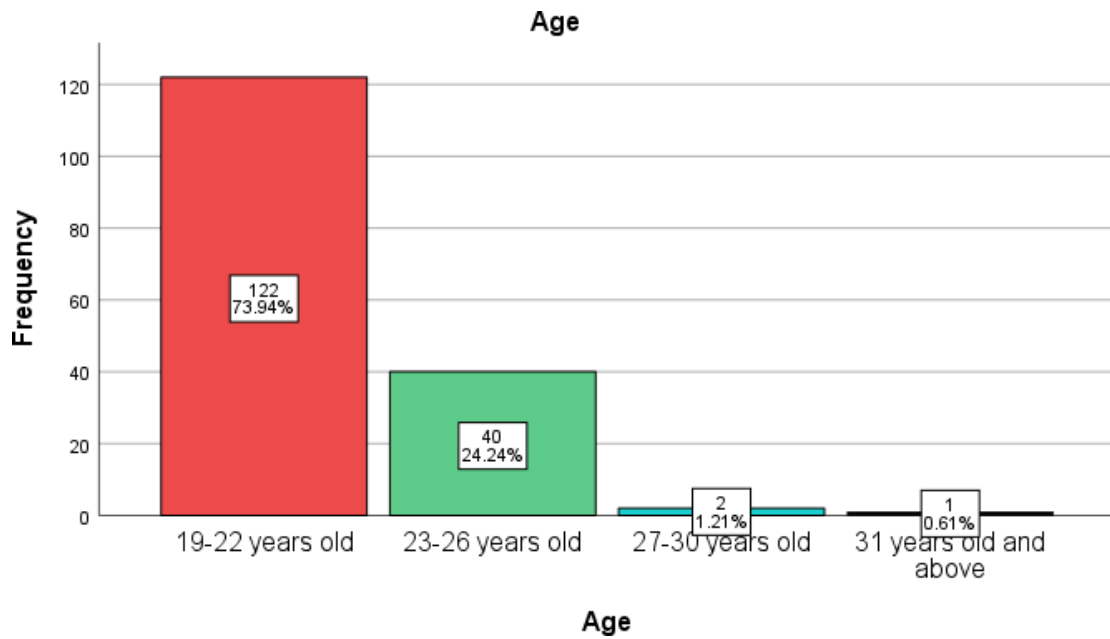
Table 5

Respondents' Age Distribution

<i>Age</i>		
	N	%
19-22 years old	122	73.9%
23-26 years old	40	24.2%
27-30 years old	2	1.2%
31 years old and above	1	0.6%

Figure 3

Age



Based on Figure 3, majority of the respondents are 19 to 22 years old with 122 respondents which is 73.94% of the respondents. This followed by 40 respondents with the age range of 23 to 26 years old (24.24%), 2 respondents around the age of 27 to 30 years old (1.21%), and only 1 participant that are 31 years old and above (0.61%). This showed that undergraduate students are mostly around the age of 19 to 26 years old. This is aligned with the age range of young adult.

4.1.3 Race

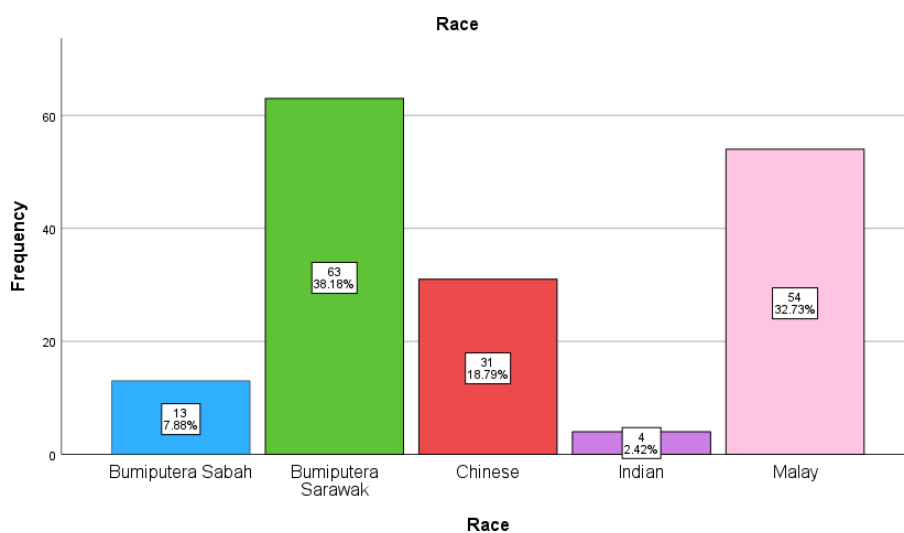
Table 6

Respondents' Race Distribution

<i>Race</i>		
	N	%
Bumiputera Sabah	13	7.9%
Bumiputera Sarawak	63	38.2%
Chinese	31	18.8%
Indian	4	2.4%
Malay	54	32.7%

Figure 4

Race



Based on Figure 4, 63 respondents are Bumiputera Sarawak, 54 of the respondents are Malay, 31 of the respondents are Chinese, 13 respondents are Bumiputera Sabah, and only 4 Indian respondents. This indicates that this study's

participants are 38.16% Bumiputera Sarawak, 32.73% Malay, 18.79% Chinese, 7.88% Bumiputera Sabah, and 2.42% Indian.

4.1.4 Faculty

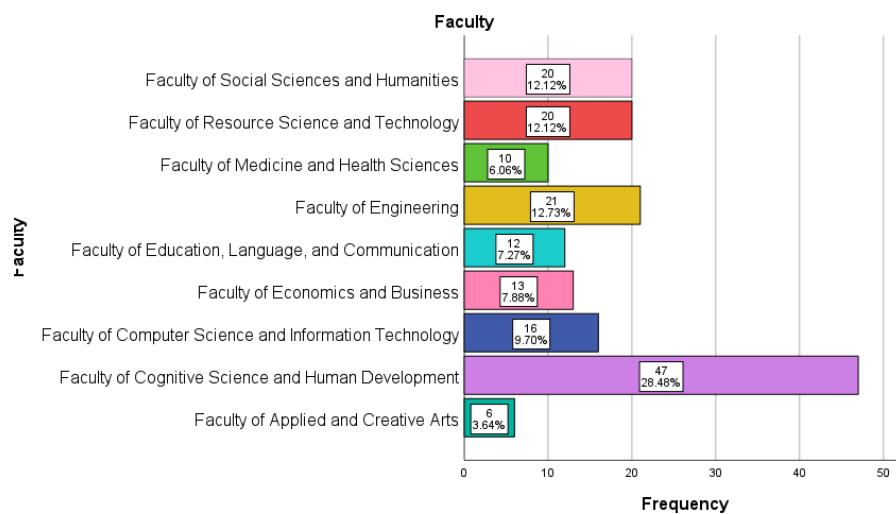
Table 7

Faculty Distribution of the Respondents

<i>Faculty</i>	N	%
Faculty of Applied and Creative Arts	6	3.6%
Faculty of Cognitive Science and Human Development	47	28.5%
Faculty of Computer Science and Information Technology	16	9.7%
Faculty of Economics and Business	13	7.9%
Faculty of Education, Language, and Communication	12	7.3%
Faculty of Engineering	21	12.7%
Faculty of Medicine and Health Sciences	10	6.1%
Faculty of Resource Science and Technology	20	12.1%
Faculty of Social Sciences and Humanities	20	12.1%

Figure 5

Faculty



According to Figure 5, 47 respondents are from Faculty of Cognitive Science and Human Development (FCSHD), 21 respondents from Faculty of Engineering (FENG), 20 each from Faculty of Social Sciences and Humanities (FSSH) and Faculty of Resource Science and Technology (FRST), 16 from Faculty of Computer Science and Information Technology (FCSIT), 13 from Faculty of Economic and Business (FEB), 12 from Faculty of Education, Language, and Communication (FELC), 10 from Faculty of Medicine and Health Sciences (FMHS), and 6 from Faculty of Applied and Creative Art. This shown that the respondents come from multiple faculties and majored in different studies.

4.1.5 Instagram Account

Table 8

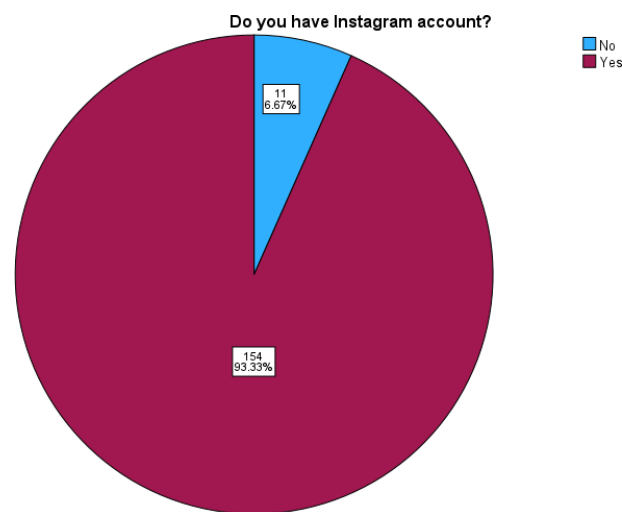
Instagram Users and Non-Users

Do you have Instagram account?

	N	%
No	11	6.7%
Yes	154	93.3%

Figure 6

Frequency of Instagram Users and Non-users among Respondents



Based on Figure 6, out of 165 respondents, only 11 respondents which is 6.67% of the respondents does not own an Instagram account. The other 154 respondents (93.33%) owned an Instagram account. This indicates that majority of UNIMAS undergraduate students owned an Instagram account.

4.1.6 Average Time Spent on Instagram Daily

Table 9

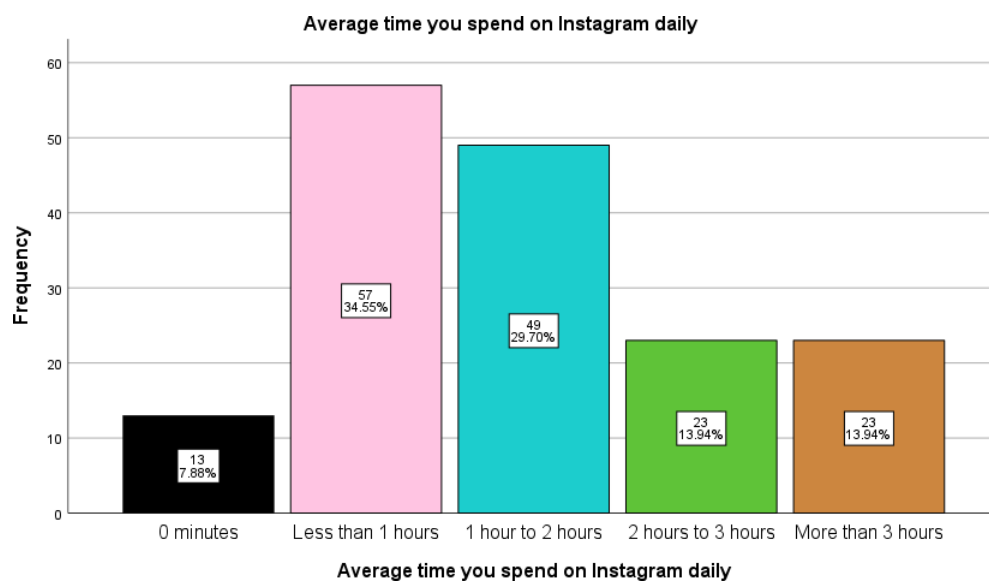
Average Time Spent on Instagram Daily

Average time you spend on Instagram daily

	N	%
0 minutes	13	7.9%
Less than 1 hours	57	34.5%
1 hour to 2 hours	49	29.7%
2 hours to 3 hours	23	13.9%
More than 3 hours	23	13.9%

Figure 7

Average Time Spent on Instagram Daily



Based on Figure 7, 13 respondents (7.88%) spent 0 minute on Instagram daily, 57 respondents (34.55%) spent less than 1 hour on Instagram daily, 49 respondents (29.70%) spent 1 hour to 2 hours on Instagram daily, 23 respondents (13.94%) spent 2

to 3 hours daily on Instagram, and 23 more respondents (13.94%) spent more than 3 hours daily on Instagram.

4.2 Descriptive Data

4.2.1 Active Instagram Usage

Table 10

Mean of Active Usage Measurement

<i>Descriptive Statistics</i>				
	N	Sum	Mean	Std. Deviation
How frequent do you post photos to your profile?	165	361	2.19	.921
How frequent do you comment on other users' photos?	165	311	1.88	.851
How frequent do you send direct messages to other users?	165	483	2.93	1.300
How frequent do you tag other users in videos?	165	372	2.25	1.102
How frequent do you browse the newsfeed actively (liking and commenting on other users' posts)?	165	476	2.88	1.246
Valid N (listwise)	165			

Table 11*Overall Mean of Active Usage Measurement**Statistics**Mean_Active*

N	Valid	165
	Missing	0
Mean		2.4279
Std. Deviation		.79139

According to Table 11, the mean rating score of Instagram active usage measurement among UNIMAS undergraduate students is 2.428. This suggests that on average, the students' active usage of Instagram such as posting photos (M=2.190, SD=0.921), commenting (M=1.880, SD=0.851), and sending direct messages to other users (M=2.930, SD= 1.300) is between "rarely" and "sometimes." The standard deviation of active usage among respondents is 0.791 which indicates a moderate level of variability in active Instagram usage among the students. This suggests that there are not that many differences in the respondents' rating of their patterns of usage. This concludes that the average of UNIMAS undergraduate students engaged in active usage less frequently.

4.2.2 Passive Instagram Usage

Table 12

Mean of Passive Usage Measurement

Descriptive Statistics

	N	Sum	Mean	Std. Deviation
How frequent do you check Instagram to see what someone else is up to?	165	520	3.15	1.305
How frequent do you view photos in Instagram?	165	571	3.46	1.247
How frequent do you view videos in Instagram?	165	586	3.55	1.280
How frequent do you browse the newsfeed passively (without liking or commenting on anything)?	165	570	3.45	1.327
How frequent do you looking through your friends' posts?	165	533	3.23	1.281
Valid N (listwise)	165			

Table 13

Overall Mean of Passive Usage Measurement

Statistics

Mean_Passive

N	Valid	165
	Missing	0
Mean		3.3697
Std. Deviation		1.07490

Table 13 showed that the mean rating score of Instagram passive usage measurement among UNIMAS undergraduate students is 3.370. This indicates that on

average, the students' passive usage of Instagram is between "sometimes" and "frequently." The standard deviation of active usage among respondents is 1.075 which suggests a relatively high level of variability in the rating of passive Instagram usage among the respondents. This suggests that there are wide range in the respondents' rating of their patterns of usage. The mean and the standard deviation suggest that the average of UNIMAS students engage in passive Instagram usage (such as scrolling through the feed, viewing posts, and watching stories) more frequently than "sometimes" but not quite at the level of "very frequently." Comparing the mean of active usage and passive usage, it can be concluded that UNIMAS undergraduate students engaged in passive Instagram usage more frequently than active Instagram usage.

4.2.3 Body Image Perception among Undergraduate Students

Table 14

Mean of Body Shape Questionnaire

<i>Descriptive Statistics</i>				
	N	Sum	Mean	Std. Deviation
1. Have you been afraid that you might become fat (or fatter)?	165	614	3.72	1.755
2. Has feeling full (e.g., after eating a large meal) made you feel fat?	165	579	3.51	1.748
3. Has thinking about your shape interfered with your ability to concentrate (e.g., while watching television, reading, listening to conversations)?	165	489	2.96	1.588
4. Have you imagined cutting off fleshy areas of your body?	165	434	2.63	1.802
5. Have you felt excessively large and rounded?	165	499	3.02	1.746
6. Have you thought that you are in the shape you are because you lack self-control	165	555	3.36	1.743
7. Has seeing your reflection (e.g., in a mirror or shop window) made you feel bad about your shape	165	551	3.34	1.658
8. Have you been particularly self-conscious about your shape when in the company of other people	165	573	3.47	1.556
Valid N (listwise)	165			

Table 15

Overall Mean of Body Shape Questionnaire

<i>Statistics</i>		
Body Image		
N	Valid	165
	Missing	0
Mean		3.2530
Std. Deviation		1.37458

The mean for the level of body shape concerns among UNIMAS undergraduate students is 3.253. Based on this mean, on average, UNIMAS students moderately concern about their body shape. The standard deviation of the level of body shape concern among the respondents are 1.375 indicates that the ratings of body shape concerns among respondents vary significantly around this mean. Some students may have low concern, while others might have high concern. This variability suggests that while the average of UNIMAS students have moderate concerns, there are notable groups with both low and high levels of body shape concern. This concluded that the average of UNIMAS undergraduate students is moderately concerned about their body image.

4.2.4 Self-esteem Level among UNIMAS students

Table 16

Mean of Rosenberg Self-Esteem Scale

<i>Descriptive Statistics</i>				
	N	Sum	Mean	Std. Deviation
1. On the whole, I am satisfied with myself.	165	481	2.92	.760
2. At times I think I am no good at all.	165	420	2.55	.859
3. I feel that I have a number of good qualities.	165	485	2.94	.786
4. I am able to do things as well as most other people.	165	497	3.01	.781
5. I feel I do not have much to be proud of.	165	441	2.67	.891
6. I certainly feel useless at times.	165	414	2.51	.954
7. I feel that I'm a person of worth, at least on an equal plane with others.	165	484	2.93	.734
8. I wish I could have more respect for myself.	165	278	1.68	.739
9. All in all, I am inclined to feel that I am a failure.	165	460	2.79	.889
10. I take a positive attitude toward myself.	165	520	3.15	.746
Valid N (listwise)	165			

Table 17

Overall Mean of Rosenberg Self-Esteem Scale

<i>Statistics</i>		
Self esteem		
N	Valid	165
	Missing	0
Mean		2.7152
Std. Deviation		.51355

Table 17 shows the mean for the level of self-esteem among UNIMAS undergraduate students is 2.715. This suggests that, on average, the UNIMAS students have a moderately positive self-esteem. The standard deviation for the level of self-esteem among UNIMAS students is 0.514. This relatively low standard deviation indicates that the responses are clustered closely around the mean score of 2.715. Hence, it can be inferred that the students generally show a moderate to somewhat positive level of self-esteem, but not extremely high and this self-esteem level is consistent across the group.

4.3 Main Findings

4.3.1 The Effect of Instagram Usage on Body Image Perception.

H_{1a}: There is a significant effect of Instagram usage on body image perception.

Table 18

Model Summary of Multiple Regression for the Instagram Usage Variables and Body Image

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.328 ^a	.108	.091	1.31040	.108	6.486	3	161	<.001

^a. Predictors: (Constant), Passive Usage, Average time you spend on Instagram daily, Active Usage

Table 19

Coefficients Table for The Relationship between Instagram Usage Variables and Body Image

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.683	.370		4.546	<.001	.952	2.415
	Average time you spend on Instagram daily	.105	.106	.089	.994	.322	-.104	.314
	Active Usage	.271	.177	.156	1.533	.127	-.078	.620
	Passive Usage	.180	.134	.140	1.341	.182	-.085	.444

^a. Dependent Variable: Body Image

Table 20

Bootstrap Coefficients Table

Bootstrap for Coefficients

Model		B	Bootstrap ^a				95% Confidence Interval	
			Bias	Std. Error	Sig. (2-tailed)		Lower	Upper
1	(Constant)	1.683	-.012	.390	.006		.784	2.274
	Average time you spend on Instagram daily	.105	-.001	.103	.259		-.113	.332
	Active Usage	.271	.003	.169	.133		-.141	.594
	Passive Usage	.180	-.003	.147	.235		-.104	.487

^a. Unless otherwise noted, bootstrap results are based on 165 bootstrap samples

Table 18 shows that the multiple regression analysis revealed combination of average time spent on Instagram daily, active Instagram usage, and passive Instagram usage accounted for a significant portion of the variance in body image scores, $R^2 = 0.108$, $F(3,161) = 6.486$, $p < 0.001$. This indicates that, collectively, these Instagram usage variables significantly impact body image perception of UNIMAS undergraduate

students. Hence, the hypothesis is accepted. There is a significant effect of Instagram usage on body image perception. This suggests that when Instagram usage increases, body image concern increases. However, when examining the individual predictors, none were found to significantly contribute to the model. Specifically, average time spent on Instagram daily did not predict body image scores, $B=0.105$, $p=0.322$. Similarly, active Instagram usage, $B=0.271$, $p=0.127$, and passive Instagram usage, $B=0.180$, $p=0.182$, were not significant predictors of body image. These results suggest that as Instagram use increases, body image concerns also tend to increase, but since the individual predictors are not significant, researcher cannot pinpoint exactly what kind of Instagram activity is most influential

4.3.2 The Relationship between the Usage of Instagram and Self-Esteem

H_{1b}: There is a significant effect of Instagram usage on self-esteem.

Table 21

Model Summary of Multiple Regression for the Instagram Usage Variables and Self-Esteem

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.256 ^a	.066	.048	.50104	.066	3.764	3	161	.012	1.920

^a. Predictors: (Constant), Mean_Passive, Average time you spend on Instagram daily, Mean_Active

^b. Dependent Variable: Rosenberg_Mean

Table 22

Coefficients Table for The Relationship between Instagram Usage Variables and Self-Esteem

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.118	.142		22.018	<.001	2.838	3.397
	Average time you spend on Instagram daily	-.043	.040	-.097	-1.059	.291	-.123	.037
	Active Usage	.037	.068	.056	.540	.590	-.097	.170
	Passive Usage	-.109	.051	-.227	-2.122	.035	-.210	-.008

^a. Dependent Variable: Self esteem

Table 23

Bootstrap Coefficients Table

Bootstrap for Coefficients

Model		B	Bootstrap ^a				95% Confidence Interval	
			Bias	Std. Error	Sig. (2-tailed)		Lower	Upper
1	(Constant)	3.118	.019	.144	.006		2.834	3.459
	Average time you spend on Instagram daily	-.043	-.008	.042	.277		-.138	.029
	Active Usage	.037	.003	.057	.572		-.072	.149
	Passive Usage	-.109	-9.229E-5	.052	.048		-.222	-.013

^a. Unless otherwise noted, bootstrap results are based on 165 bootstrap samples

Table 21 and Table 22 shows the analysis of the multiple regression on the combination of average time spent on Instagram daily, active Instagram usage, and passive Instagram usage accounted for a significant portion of the variance in UNIMAS undergraduate students' self-esteem scores, $R^2 = 0.066$, $F(3, 161) = 3.764$, $p = 0.012$. Hence, the hypothesis is accepted. There is a significant effect of Instagram usage on self-esteem. However, when examining the individual predictors, only passive

Instagram usage was found to significantly contribute to the model ($B = -0.109$, $p = 0.035$). Specifically, average time spent on Instagram daily did not predict self-esteem scores ($B = -0.043$, $p = 0.291$), nor did active Instagram usage ($B = 0.037$, $p = 0.590$). The significant negative coefficient ($B = -0.109$, $p = 0.035$) for passive Instagram usage suggests that higher frequency of passive usage is associated with lower self-esteem. This means that as students engage more frequently in passive activities on Instagram, such as scrolling through feeds, viewing posts, and watching stories, their self-esteem tends to be lower. While the overall combination of Instagram usage variables is related to the level of self-esteem, passive Instagram usage is the only individual predictor that significantly predicts lower self-esteem among undergraduate students.

4.3.3 The Relationship between Students' Body Image Perception and Self-Esteem.

H₂: There is a significant relationship between body image perception and self-esteem.

Table 24

Descriptive Table of Body Shape Concern and Self-esteem Level's Mean

<i>Descriptive Statistics</i>			
	Mean	Std. Deviation	N
Body Image	3.2530	1.37458	165
Self esteem	2.7152	.51355	165

Table 25*Correlation between Body Image Perception and Self-Esteem*

Correlations

			Body Image	Self esteem
Spearman's rho	Body Image	Correlation Coefficient	1.000	-.383 ^{***}
		Sig. (2-tailed)	.	<.001
		N	165	165
	Self esteem	Correlation Coefficient	-.383 ^{***}	1.000
		Sig. (2-tailed)	<.001	.
		N	165	165

^{***}. Correlation is significant at the 0.01 level (2-tailed).

The result of the Spearman's rank correlation analysis of the relationship between body image perception and self-esteem level among UNIMAS undergraduate students suggest that there is a moderate negative correlation between body image perception and the level of self-esteem ($\rho = -0.383$, $N = 165$, $p < 0.001$). Since $p < 0.05$, the hypothesis is accepted. This indicate that there is a moderate negative but significant relationship between body image perception of UNIMAS undergraduate students and their self-esteem level. The moderate negative correlation suggests that the lower the students' self-esteem, the higher the concern about body image.

4.3.4 The Differences in Body Image Perception between Males and Females

H₃: There is a significant difference in body image perception between males and females.

Table 26*Mean Comparison of Male and Female's Body Image Concern**Group Statistics*

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Body Image	Male	63	3.0119	1.38281	.17422
	Female	102	3.4020	1.35484	.13415

Table 27*Independent T-test Results in Body Image Perception between Males and Females.**Independent Samples Test*

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Body Image	Equal variances assumed	.000	.983	-1.783	163	.038	.077	-.39006	.21882	-.82213	.04202
	Equal variances not assumed			-1.774	129.394	.039	.078	-.39006	.21988	-.82508	.04497

Table 27 indicated the results of the independent t-test when equal variances were assumed, whereby the mean levels of body image concerns for both males and females were calculated and compared. From the table above, females seemed to show more concern towards their body image ($M=3.402$, $SD=1.355$) compared to males ($M=3.012$, $SD=1.383$).

Since there was a small difference in the mean levels of body image concern between males and females, plus the p value was bigger than 0.05 level of significance ($t(163) = -1.783$, $p = 0.077$), the hypothesis is rejected. There is no significance difference in body image perception between genders was concluded.

4.3.4 The Differences in Self-Esteem Level between Males and Females

H₄: There is a significant difference in self-esteem level between males and females.

Table 28

Mean Comparison of Male and Female's Self-Esteem Level

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Self esteem	Male	63	2.7143	.48455	.06105
	Female	102	2.7157	.53302	.05278

Table 29

Independent T-test Results in Self-Esteem Level between Males and Females.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
Self esteem	Equal variances assumed	.669	.415	-.017	163	.493	.986	-.00140	.08254	-.16439	.16159
	Equal variances not assumed			-.017	140.970	.493	.986	-.00140	.08070	-.16094	.15814

Table 29 indicated the results of the independent t-test when equal variances were assumed, whereby the means of self-esteem levels for both males and females were calculated and compared. From the table above, the mean of the self-esteem levels of female students' is only slightly higher (M=2.7157, SD=0.533) compared to males (M=2.7143, SD=0.485).

Since there was a very small difference in the mean levels of self-esteem between males and females, plus the p value was bigger than 0.05 level of significance ($t(163) = -0.017$, $p = 0.986$), the hypothesis is rejected. There is no significance difference in self-esteem levels between genders was concluded.

4.4 Discussion

4.4.1 The Effect of Instagram Usage on Body Image and Self-Esteem

The results tabulated in sections 4.3.1 and 4.3.2 showed a correlation between Instagram usage and both body image perception and self-esteem. Specifically, in this study, the researcher focused on three variables of Instagram usage: average time spent on Instagram daily, active usage, and passive usage. The reported result implied that combined effect of these variables on Instagram usage is significant in predicting body image concerns and self-esteem level among undergraduate students in UNIMAS. This finding is supported by multiple studies which found that Instagram usage has been positively associated with body image concerns and body dissatisfaction (Fardouly et al., 2017, Pedalino & Camerini, 2022, Ozimek et al., 2023). Furthermore, Fagundes et al. (2020) found that there is a negative correlation between Instagram use intensity and self-esteem.

This significant relationship between Instagram usage variables and body image aligns with the concept of self-objectification theory, where increased engagement with Instagram leads users to internalize these standards and view themselves as objects subject to external evaluation (Feltman & Szymanski, 2017). Instagram usage has been correlated with increased self-objectification, which is subsequently connected to issues with body image and dissatisfaction with one's body (Fardouly et al., 2017, Pedalino &

Camerini, 2022, Ozimek et al., 2023). This process was reflected in this study with the correlation ($r=0.328$) found between overall Instagram usage and body image concerns, indicating that increment in Instagram usage lead to increasing concerns on body image.

Next, while the overall Instagram usage variable was significantly correlated with self-esteem levels, individual predictors like time spent on Instagram, active usage, and passive usage showed varying effects. In current study, though there are no statistically significant relationship between time spent daily on Instagram, active usage and self-esteem levels, passive usage, characterized by browsing without interacting, have a significant negative correlation with self-esteem, as it often leads to increased social comparison and feelings of inadequacy. This finding is supported by Fagundes et al. (2020) and Verduyn et al. (2016), which noted that passive engagement with social media can reduce self-esteem due to the lack of positive reinforcement and increased exposure to idealized images.

These findings highlight the significance of understanding the diversity of Instagram usage pattern. While general Instagram usage is linked to negative outcomes like poor body image and low self-esteem, the type of engagement plays a crucial role. Hence, the influence of each engagement needs to be studied more in depth to understand its impact on body image and self-esteem. Additionally, educating users about the curated nature of social media content and encouraging critical thinking about the images they consume may help reduce the psychological impact of Instagram usage. Finally, given the relatively low explanatory power of the model, it is evident that further research is needed to identify other significant factors contributing to body image and self-esteem among Instagram users.

4.4.2 Relationship Between Body Image and Self-Esteem

This study aims to investigate the relationship between body image perception and self-esteem among UNIMAS undergraduate students. Based on the result shown in section 4.3.3, this study found that there is a significant weak negative relationship between UNIMAS undergraduate students' body image and their self-esteem. This result suggested that as students' concerns about body image increase, their self-esteem tends to decrease, but the relationship is not strong. The weak correlation suggests that there are likely other factors influencing self-esteem and body image that were not considered in the study.

Similar to this study, a study done by Saranya et al. (2022) also found a negative significant relationship between body image and self-esteem among the respondents. This study found that as body image score increases, self-esteem decreases and vice versa. One justifiable explanation by the researchers was that when someone is overly concerned about their body image, they start to feel bad and refuse to take care of themselves. As their concern for their body image increases, they may develop negative thoughts toward themselves which make them more sensitive toward others' perceptions and the way other people treat them. Being overly anxious about others' perceptions leads them to avoid social situations and limit their social relationships. All these factors combined make them emotionally vulnerable and highly self-conscious and it negatively impacts their self-worth and self-confidence, leading to low self-esteem (Saranya et al., 2022). Furthermore, young adults who struggle with self-worth may develop unhealthy attitudes towards their bodies, leading to the adoption of extreme dieting, exercise habits, or even the development of eating disorders (Aparicio-Martinez et al., 2019; Dziewa et al., 2023).

Moreover, higher body image concerns can lead to body dissatisfaction. This is because the more the individual is concerned about their body, the more they focus on their perceived flaws and compared themselves to others. Individuals may develop body image distortions the more they focus on their perceived flaws, and this causes body dissatisfaction. In addition, Wang et al. (2019) stated that comparing appearance and body image with others potentially contribute to body dissatisfaction and body image disturbance. According to Macêdo Uchôa et al. (2020), body dissatisfaction is associated with low self-esteem in students. Hence, higher concern on body image causes body dissatisfaction which leads to lower self-esteem.

In conclusion, this study highlights a significant, although weak, negative relationship between body image perception and self-esteem among UNIMAS undergraduate students. The findings are consistent with prior research, indicating that increasing concerns about body image are associated with decreased self-esteem. This relationship highlighted the importance of addressing body image concerns as part of interventions aimed at promoting well-being among students. Lastly, future studies should explore additional factors that may influence the relationship between body image perception and self-esteem.

4.4.3 Gender Differences

The current study aims to investigate gender differences in body image perception and self-esteem level among UNIMAS undergraduate students. Based on the result shown in section 4.3.4 and 4.3.5, this study found that there were no significant gender differences in body image perception and self-esteem among male and female students in UNIMAS.

Based on the result in section 4.3.4, despite the lack of statistically significant differences, the data reveal some noteworthy trends. Female students show more concern about their body image compared to male students which indicates that female students may feel more dissatisfaction towards their bodies compared to male students. This is similar to various studies that found that women have higher body dissatisfaction compared to male (Fischetti et al., 2019; Quittkat et al., 2019; Gualdi-Russo et al., 2022). However, the mean differences between the male and female levels of body image concern are small and the p-value is bigger than 0.05, suggesting that the differences are not statistically significant. This indicated that both male and female students at UNIMAS experience body image concerns to a similar extent, challenging the common stereotype that only female students are preoccupied with body image issues. To the best of the researcher's knowledge, despite extensive literature review on body image issues, there is a lack of research explicitly indicating the absence of significant gender differences in body image concerns. Several factors might explain the lack of significant gender differences found in this study. One potential explanation could be the cultural and social context at UNIMAS promotes an environment that emphasizes individuality and self-acceptance more than traditional gender norms regarding appearance. Another possibility is that societal trends are shifting, with men becoming more concerned about body image than in the past due to social media exposure, and with women being more accepting of a wide range of body images aligned with the body positivity movement, opposing the traditional beauty standard (Cohen et al., 2019). Lastly, the sample size might not be large and balanced enough to detect small but meaningful differences between genders. Future studies with larger samples could provide more definitive conclusions.

Next, when examining self-esteem levels, both male and female students reported similar levels of self-esteem. Based on the result in section 4.3.5, the mean differences in self-esteem levels between genders were very small. There were no statistically significant differences reported on the differences in self-esteem levels between male and female students. This finding is supported by multiple studies which also found that there is no significant difference in self-esteem levels between male and female students (Fagundes et al.,2020; Khalaf et al.,2021). Conversely, this study contradicts various previous research indicating that women often report lower self-esteem compared to men (Pop et al.,2022; Magee & Upenieks, 2019). However, gender differences may vary across cultures and ethnicities. No significant gender differences in self-esteem levels among students may be due to the inclusive and supportive environment at UNIMAS, which provides equal opportunities for academic and personal growth, fostering similar self-esteem levels in both genders. Moreover, modern societal trends toward gender equality may also play a role. As traditional gender roles become less rigid, both males and females may experience a wider range of acceptable behaviors and self-perceptions, leading to more balanced self-esteem levels.

In conclusion, this study found no significant gender differences in body image perception and self-esteem levels among UNIMAS undergraduate students. While female students exhibited slightly more concern about body image, these differences were not statistically significant. Similarly, self-esteem levels showed no significant variation between genders. These findings challenge stereotypes and suggest that UNIMAS fosters an environment promoting equality, individuality, and self-acceptance, contributing to balanced self-perceptions across genders. Future research with larger and balanced samples could provide more conclusive insights into these

dynamics, considering the evolving societal trends towards gender equality and body positivity movements.

4.5 Conclusion

In this study, 61.82% of the respondents are female and 38.16% of the respondents are male. Majority of the respondents are age between 19 to 22 years old. The respondents are from diverse ethnic background and different faculty which make it easier to generalise the result of the study to undergraduate UNIMAS students. From this research, it was found that out of 165 students, 11 students do not have Instagram accounts. Furthermore, more students spent less than 1 hour on Instagram (34.55%) followed by 29.70% students spent 1 hour to 2 hours on Instagram daily, 13.94% spent 2 to 3 hours daily and more than 3 hours daily on Instagram respectively. As for the main findings, firstly, this study found that there is significant relationship between Instagram usage variables (time spent daily on Instagram, active usage, passive usage) and both body image and self-esteem. Secondly, this study found that there is a significant negative correlation between body image and self-esteem which suggest that as body image concerns increase, self-esteem level will decrease, and vice versa. Lastly, this study found that there are no significant gender differences in body image perception and self-esteem level.

CHAPTER 5

LIMITATION, IMPLICATION, RECOMMENDATION AND CONCLUSION

5.0 Introduction

This chapter discussed the limitations, implications, recommendations, and the conclusions of this research study. Limitations of a study refer to the potential weaknesses, constraints, or challenges encountered during the research process that may impact the interpretation, generalization, or validity of the study's findings. Hence, recommendations for future research are mentioned to improve the limitations of the current research.

5.1 Limitation of Study

There are several limitations to the current study. Firstly, as this study employed a self-reported questionnaire, it can produce bias and inaccurate self-assessment. Participants might have under-reported or over-reported their Instagram usage, body image concerns, and self-esteem levels. Self-reporting is subjective and can be influenced by factors such as social desirability bias, where participants may respond in a manner they believe is more socially acceptable or favorable (Salters-Pedneault, 2023). This can lead to distortions in the data, as individuals might downplay negative experiences or exaggerate positive ones. Additionally, memory recall bias can affect the accuracy of the responses. Participants may not accurately remember the frequency or duration of their Instagram usage, or the intensity of their body image concerns and self-esteem fluctuations. This recall inaccuracy can result in data that does not truly reflect participants' behaviors and attitudes. Hence, the usage of self-reported

questionnaire suggest that while it can provide valuable insight, the findings should be interpreted with caution.

Secondly, the sample has an unequal gender distribution (102 females and 63 males), which could potentially skew the results and affect the generalizability of the findings. This imbalance may introduce a bias in the analysis, as the over representation of females might overshadow the experiences and perspectives of males. The imbalanced ratio may limit the ability to detect significant gender differences. With a smaller sample size of males, statistical comparisons between genders may lack sufficient power, potentially leading to errors where real differences are not detected. Additionally, the unequal distribution raises concerns about the external validity of the study. Findings based predominantly on female participants may not be applicable to the broader population, where gender distribution is more balanced. This limitation hinders the study's ability to provide comprehensive insights and may restrict the applicability of the conclusions to real-world settings.

The last limitation of this study is that this study employed a cross-sectional design. Cross-sectional design only captures data at a specific moment which limit this study from establishing causality. This limitation means that while the study can identify associations between Instagram usage, body image, and self-esteem, it cannot determine whether Instagram usage causes changes in body image and self-esteem or if individuals with certain body image concerns and self-esteem levels are more likely to use Instagram in particular ways. The inability to establish temporal relationships is a significant drawback. For example, it remains unclear whether increased Instagram usage leads to heightened body image concerns and lower self-esteem, or if individuals with pre-existing body image issues and low self-esteem are drawn to Instagram more frequently. This ambiguity makes it difficult to develop targeted interventions or

recommendations based on the study's findings. Moreover, the cross-sectional nature of the study means that it cannot study the potential long-term effects of Instagram usage as body image and self-esteem are dynamic constructs that can change over time due to various factors. Thus, longitudinal studies are more suitable to study the long-term influence of Instagram usage on body image and self-esteem. To conclude, this design limits the understanding of how Instagram usage impacts body image and self-esteem.

In conclusion, the study's reliance on self-reported questionnaires, unequal gender distribution, and cross-sectional design present significant limitations. Self-reported data may be biased and inaccurate, affecting the reliability of the findings. The gender imbalance skews results and limits generalizability, while the cross-sectional design prevents establishing causality and understanding long-term effects. Future research should address these limitations by incorporating objective measures, ensuring balanced gender representation, and employing longitudinal designs to provide more robust and comprehensive insights into the impact of Instagram usage on body image and self-esteem.

5.2 Implications of Study

This study provides a new insight for the effect of Instagram usage on body image and self-esteem among undergraduate students in UNIMAS. This study found that Instagram usage does affect body image and self-esteem. In addition, this study also found that students' body image concern is negatively correlated with self-esteem which indicates that the more one is concerned about their body image, the lower their self-esteem. These findings have significant implications. They contribute to the existing body of literature on the psychological effects of social media, particularly Instagram, on young adults. The identified negative correlation between body image concern and self-esteem supports theories suggesting that Instagram can influence body dissatisfaction, subsequently impacting self-worth. Secondly, this study also found that there are not necessarily gender differences in body image perception and self-esteem level. This suggests that the impact of Instagram on body image and self-esteem may be more universal than previously thought, affecting both male and female students similarly. These findings challenge the commonly held notion that issues related to body image and self-esteem are predominantly female concerns, highlighting the need for inclusive interventions and support systems that address the experiences of all genders. Moreover, this finding can guide future research directions. Researchers might focus on identifying the specific aspects of Instagram usage that contribute to body image and self-esteem issues in both genders, leading to more targeted and effective interventions. Thirdly, this study can increase awareness and understanding of the relationship between Instagram usage, body image, and self-esteem among UNIMAS undergraduate students. Moreover, this insight is crucial for mental health professionals working with university students. Understanding the influence of Instagram on body image and self-esteem can guide the development of targeted interventions aimed at

mitigating these negative effects. Programs focusing on promoting digital literacy, self-acceptance, and critical engagement with social media content could be highly beneficial.

In conclusion, this study findings had helped researchers and public to gain a better view of the importance of understanding the impact of Instagram usage affecting individuals body image perception and self-esteem for their own well-being.

5.3 Recommendations

To overcome the limitations of this study, future researchers who wish to conduct a similar study should do a longitudinal study as the longitudinal study will track changes over time and provide more accurate data on how Instagram usage impacts body image and self-esteem. This design allows researchers to observe the sequence of events and establish causality, determining whether increased Instagram usage leads to changes in body image and self-esteem or if pre-existing conditions influence the pattern of Instagram usage habits. By capturing data at multiple time points, longitudinal studies can reveal long-term effects and trends that cross-sectional studies cannot.

Secondly, future research should recruit a more gender-balanced sample of participants to establish the differences in gender perceptions of body image and self-esteem. A balanced gender distribution is important for accurately identifying and understanding the differences in gender perceptions of body image and self-esteem. With a more equal representation of males and females, statistical comparisons between genders will have greater power, reducing the risk of Type II errors (when a study fails

to detect a true effect or difference that actually exists) and ensuring that the findings are more generalize and reflective of both genders' experiences (Bhandari, 2021).

Thirdly, future research should employ random sampling techniques and include a more diverse participant pool for better generalization. Random sampling reduces selection bias and ensures that the sample is representative of the larger population. Including participants from various backgrounds, such as different age groups, ethnicity, and socioeconomic statuses, will enhance the external validity of the study. This diversity allows for a more comprehensive understanding of how Instagram usage affects body image and self-esteem across different segments of the population.

Lastly, it is recommended that future researchers delve deeper into identifying and analysing potential mediating factors that may impact the relationship between Instagram usage, body image, and self-esteem. Mediating factors, such as social comparison tendencies, personality traits, and offline social support, can provide insights into the mechanisms underlying the observed associations. By exploring these mediators, researchers can develop more targeted interventions and strategies to reduce the negative effects of Instagram on body image and self-esteem.

In summary, future research can overcome the limitations of the current study by adopting a longitudinal design, ensuring a gender-balanced and diverse sample, employing random sampling techniques, and investigating potential mediating factors. These improvements will lead to more robust, reliable, and comprehensive insights into the impact of Instagram usage on body image and self-esteem.

5.4 Conclusion

The current study reveals that Instagram usage such as time spent daily on Instagram, active, and passive usage does affect UNIMAS undergraduate students' body image and self-esteem. Furthermore, it was found that the more the individual is concerned about their body image, the lower their self-esteem. Thus, these study findings encourage academic institutions to start raising awareness among their students regarding digital literacy and organize events that will help students develop a positive body image and increase their self-esteem. However, this study does not find any differences in body image perception and self-esteem levels among male and female students. Hence, more studies regarding gender differences in body image perception and self-esteem level should be conducted.

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APPENDIX A
RAW SPSS OUTPUTS

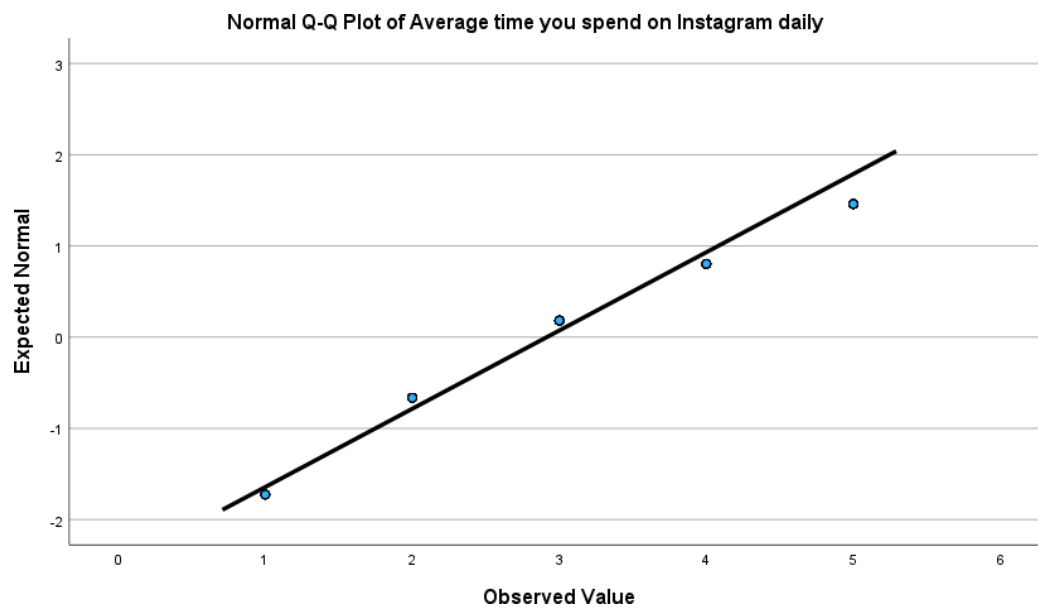
Normality Test

Tests of Normality

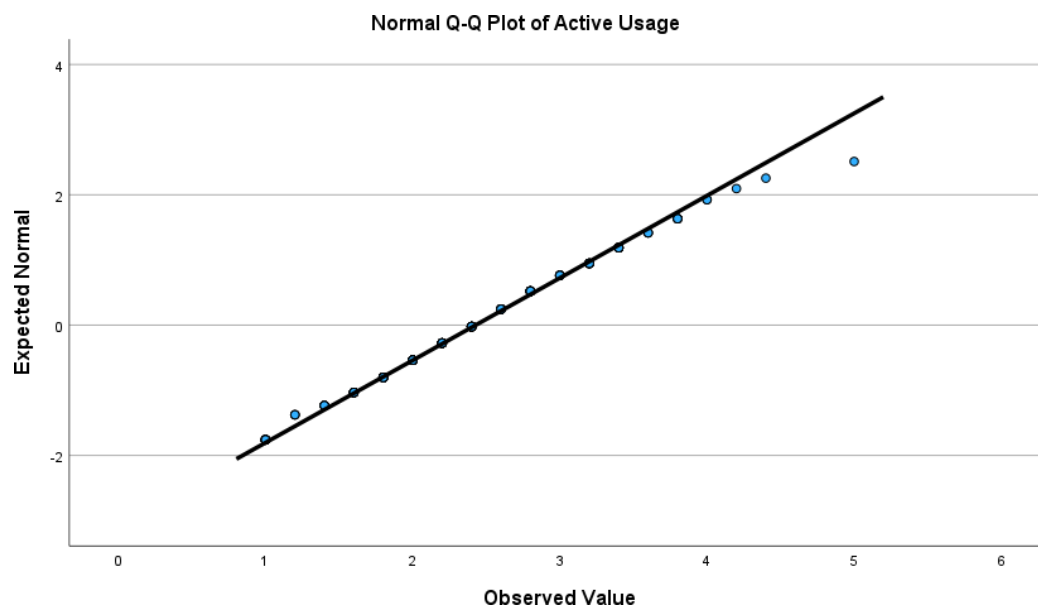
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Average time you spend on Instagram daily	.208	165	<.001	.890	165	<.001
Active Usage	.071	165	.043	.981	165	.021
Passive Usage	.093	165	.001	.954	165	<.001
Body Image	.079	165	.013	.961	165	<.001
Self esteem	.069	165	.056	.986	165	.104

a. Lilliefors Significance Correction

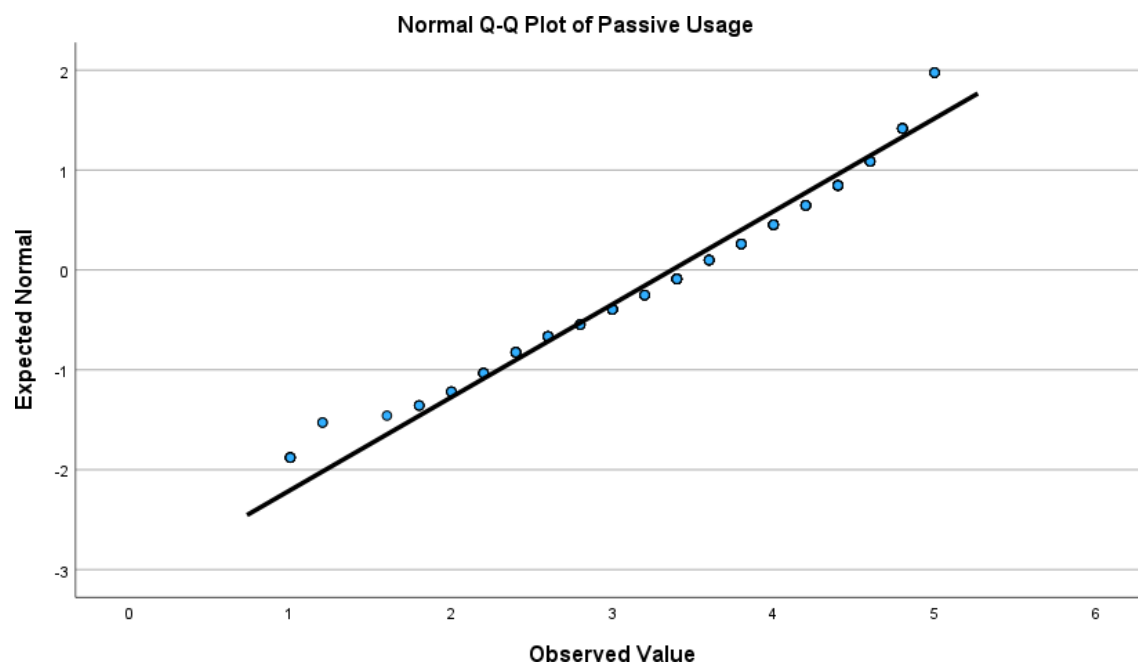
Q-Q Plot Average Time Spent Daily on Instagram



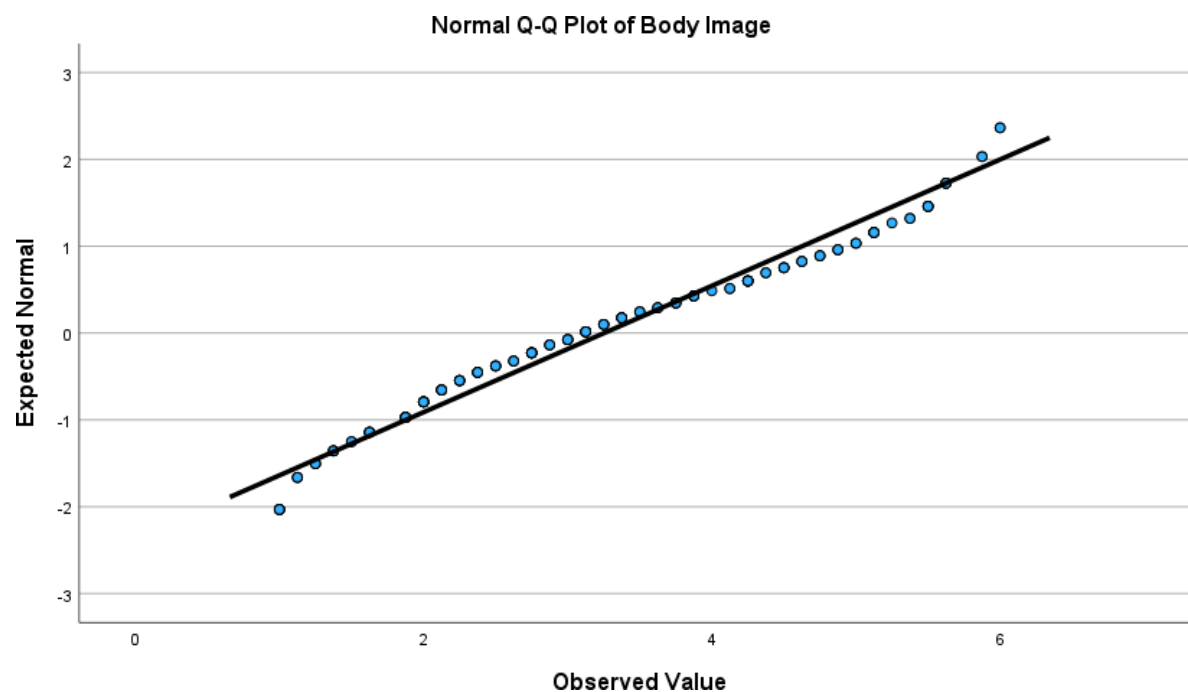
Q-Q PLOT ACTIVE USAGE



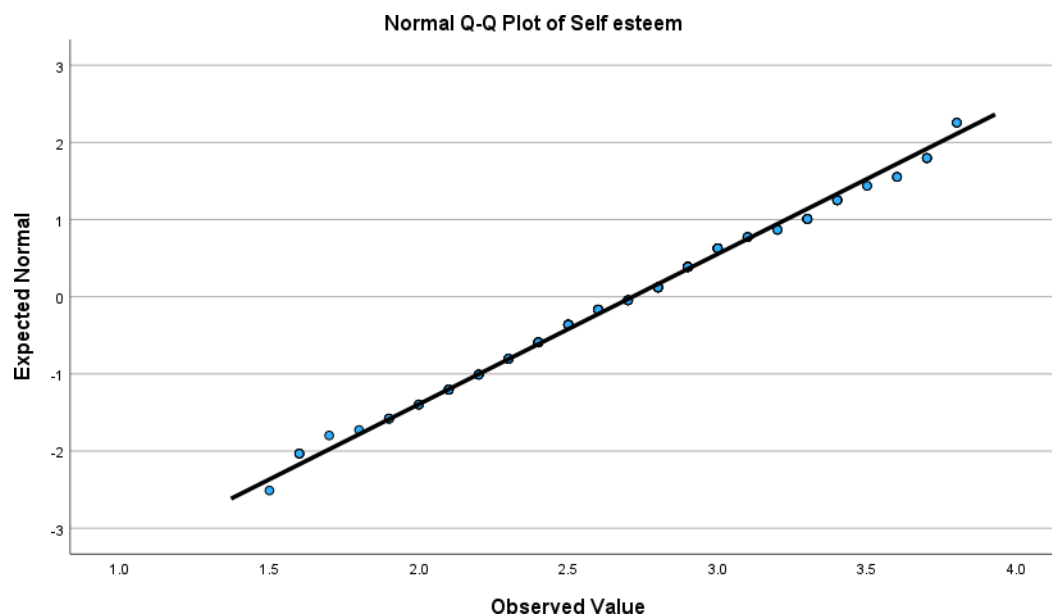
Q-Q PLOT PASSIVE USAGE



Q-Q PLOT BODY IMAGE



Q-Q PLOT SELF-ESTEEM



BODY IMAGE

Correlation of Instagram Usage Variables and Body Image Concern

Correlations

Pearson Correlation	Body Image	Body Image	1.000
		Average time you spend on Instagram daily	.239
		Active Usage	.292
		Passive Usage	.291
	Average time you spend on Instagram daily	Body Image	.239
		Average time you spend on Instagram daily	1.000
		Active Usage	.486
		Passive Usage	.529

Sig. (1-tailed)	Active Usage	Body Image	.292
		Average time you spend on Instagram daily	.486
		Active Usage	1.000
		Passive Usage	.662
	Passive Usage	Body Image	.291
		Average time you spend on Instagram daily	.529
		Active Usage	.662
		Passive Usage	1.000
	Body Image	Body Image	.
		Average time you spend on Instagram daily	.001
		Active Usage	.000
		Passive Usage	.000
	Average time you spend on Instagram daily	Body Image	.001
		Average time you spend on Instagram daily	.
		Active Usage	.000
		Passive Usage	.000
	Active Usage	Body Image	.000
		Average time you spend on Instagram daily	.000
		Active Usage	.
		Passive Usage	.000

	Passive Usage	Body Image	.000
		Average time you spend on Instagram daily	.000
		Active Usage	.000
		Passive Usage	.
N	Body Image	Body Image	165
		Average time you spend on Instagram daily	165
		Active Usage	165
		Passive Usage	165
	Average time you spend on Instagram daily	Body Image	165
		Average time you spend on Instagram daily	165
		Active Usage	165
		Passive Usage	165
	Active Usage	Body Image	165
		Average time you spend on Instagram daily	165
		Active Usage	165
		Passive Usage	165
	Passive Usage	Body Image	165
		Average time you spend on Instagram daily	165
		Active Usage	165
		Passive Usage	165

Bootstrap for Pearson Correlation ^a	Bias	Body Image	Body Image	.000
			Average time you spend on Instagram daily	-.003
			Active Usage	-.002
			Passive Usage	-.001
		Average time you spend on Instagram daily	Body Image	-.003
			Average time you spend on Instagram daily	.000
			Active Usage	.002
			Passive Usage	.001
		Active Usage	Body Image	-.002
			Average time you spend on Instagram daily	.002
			Active Usage	.000
			Passive Usage	-.003
		Passive Usage	Body Image	-.001
			Average time you spend on Instagram daily	.001
			Active Usage	-.003
			Passive Usage	.000
	Std. Error	Body Image	Body Image	.000
			Average time you spend on Instagram daily	.072
			Active Usage	.072
			Passive Usage	.077

			Average time you spend on Instagram daily	Body Image	.072
				Average time you spend on Instagram daily	.000
				Active Usage	.072
				Passive Usage	.068
			Active Usage	Body Image	.072
				Average time you spend on Instagram daily	.072
				Active Usage	.000
				Passive Usage	.046
			Passive Usage	Body Image	.077
				Average time you spend on Instagram daily	.068
				Active Usage	.046
				Passive Usage	.000
95% Confidence Interval	Lower	Body Image		Body Image	1.000
				Average time you spend on Instagram daily	.068
				Active Usage	.157
				Passive Usage	.173
		Average time you spend on Instagram daily		Body Image	.068
				Average time you spend on Instagram daily	1.000
				Active Usage	.358
				Passive Usage	.385

Upper	Active Usage	Body Image	.157
		Average time you spend on Instagram daily	.358
		Active Usage	1.000
		Passive Usage	.563
	Passive Usage	Body Image	.173
		Average time you spend on Instagram daily	.385
		Active Usage	.563
		Passive Usage	1.000
	Body Image	Body Image	1.000
		Average time you spend on Instagram daily	.366
		Active Usage	.454
		Passive Usage	.456
	Average time you spend on Instagram daily	Body Image	.366
		Average time you spend on Instagram daily	1.000
		Active Usage	.631
		Passive Usage	.654
	Active Usage	Body Image	.454
		Average time you spend on Instagram daily	.631
		Active Usage	1.000
		Passive Usage	.742

Passive Usage	Body Image	.456
	Average time you spend on Instagram daily	.654
	Active Usage	.742
	Passive Usage	1.000

a. Unless otherwise noted, bootstrap results are based on 165 bootstrap samples

MULTIPLE REGRESSION ANOVA TABLE

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.414	3	11.138	6.486	<.001 ^b
	Residual	276.459	161	1.717		
	Total	309.873	164			

a. Dependent Variable: Body Image

b. Predictors: (Constant), Passive Usage, Average time you spend on Instagram daily, Active Usage

SELF-ESTEEM

Correlation of Instagram usage variables and Self-Esteem

Correlations

Pearson Correlation	Self esteem	Self esteem	1.000
		Average time you spend on Instagram daily	-.190
		Active Usage	-.142
		Passive Usage	-.242
	Average time you spend on Instagram daily	Self esteem	-.190
		Average time you spend on Instagram daily	1.000
		Active Usage	.486
		Passive Usage	.529
	Active Usage	Self esteem	-.142
		Average time you spend on Instagram daily	.486
		Active Usage	1.000
		Passive Usage	.662
	Passive Usage	Self esteem	-.242
		Average time you spend on Instagram daily	.529
		Active Usage	.662
		Passive Usage	1.000
Sig. (1-tailed)	Self esteem	Self esteem	.

		Average time you spend on Instagram daily	.007
		Active Usage	.035
		Passive Usage	.001
Average time you spend on Instagram daily	Self esteem		.007
	Average time you spend on Instagram daily		.
	Active Usage		.000
	Passive Usage		.000
Active Usage	Self esteem		.035
	Average time you spend on Instagram daily		.000
	Active Usage		.
	Passive Usage		.000
Passive Usage	Self esteem		.001
	Average time you spend on Instagram daily		.000
	Active Usage		.000
	Passive Usage		.
N	Self esteem	Self esteem	165
		Average time you spend on Instagram daily	165
		Active Usage	165
		Passive Usage	165
		Self esteem	165

Bootstrap for Pearson Correlation ^a	Bias	Self esteem	Average time you spend on Instagram daily	165
			Active Usage	165
			Passive Usage	165
			Active Usage	165
			Self esteem	165
			Average time you spend on Instagram daily	165
			Active Usage	165
			Passive Usage	165
			Passive Usage	165
			Self esteem	165
			Average time you spend on Instagram daily	165
			Active Usage	165
			Passive Usage	165
			Self esteem	.000
			Average time you spend on Instagram daily	-.018
			Active Usage	-.006
			Passive Usage	-.009
			Average time you spend on Instagram daily	-.018
			Average time you spend on Instagram daily	.000
			Active Usage	.009
			Passive Usage	.009
			Active Usage	-.006

		Average time you spend on Instagram daily	.009
		Active Usage	.000
		Passive Usage	.004
	Passive Usage	Self esteem	-.009
		Average time you spend on Instagram daily	.009
		Active Usage	.004
		Passive Usage	.000
Std. Error	Self esteem	Self esteem	.000
		Average time you spend on Instagram daily	.083
		Active Usage	.074
		Passive Usage	.081
	Average time you spend on Instagram daily	Self esteem	.083
		Average time you spend on Instagram daily	.000
		Active Usage	.070
		Passive Usage	.059
	Active Usage	Self esteem	.074
		Average time you spend on Instagram daily	.070
		Active Usage	.000
		Passive Usage	.041
	Passive Usage	Self esteem	.081

				Average time you spend on Instagram daily	.059
				Active Usage	.041
				Passive Usage	.000
95% Confidence Interval	Lower	Self esteem	Self esteem	Self esteem	1.000
				Average time you spend on Instagram daily	-.377
				Active Usage	-.293
				Passive Usage	-.417
			Average time you spend on Instagram daily	Self esteem	-.377
				Average time you spend on Instagram daily	1.000
				Active Usage	.354
				Passive Usage	.403
			Active Usage	Self esteem	-.293
				Average time you spend on Instagram daily	.354
				Active Usage	1.000
				Passive Usage	.571
			Passive Usage	Self esteem	-.417
				Average time you spend on Instagram daily	.403
				Active Usage	.571
				Passive Usage	1.000
		Self esteem	Self esteem	Self esteem	1.000

Upper		Average time you spend on Instagram daily	-.029
		Active Usage	.008
		Passive Usage	-.085
	Average time you spend on Instagram daily	Self esteem	-.029
		Average time you spend on Instagram daily	1.000
		Active Usage	.627
		Passive Usage	.644
	Active Usage	Self esteem	.008
		Average time you spend on Instagram daily	.627
		Active Usage	1.000
		Passive Usage	.733
	Passive Usage	Self esteem	-.085
		Average time you spend on Instagram daily	.644
		Active Usage	.733
		Passive Usage	1.000

a. Unless otherwise noted, bootstrap results are based on 165 bootstrap samples

Multiple Regression ANOVA Table

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.835	3	.945	3.764	.012 ^b
	Residual	40.417	161	.251		
	Total	43.252	164			

a. Dependent Variable: Self esteem

b. Predictors: (Constant), Passive Usage, Average time you spend on Instagram daily, Active Usage

APPENDIX B

MATERIALS/INSTRUMENT

Questionnaire

7/6/24, 1:33 AM Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-Esteem Among UNIMAS Undergraduate Students

Greetings!

I am Angelina Jalu Anak Peter (77830) year 3 Psychology student from Faculty of Cognitive Science and Human Development (FCSHD) of University Malaysia Sarawak (UNIMAS). I am currently conducting a Final Year Project (FYP) on understanding the Influence of Instagram Usage on Body Image Perception and Self-Esteem Among UNIMAS Undergraduate Students.

Purpose of study: To understand the influence of Instagram usage on UNIMAS Undergraduate Students' body image perception and self-esteem.

This questionnaire consists of 3 sections

Section A: Demographic Information

Section B: Instagram Usage (Active and Passive Usage Measurement)

Section C: Body Shape Questionnaire-8c (BSQ-8C)

Section D: Rosenberg Self-Esteem Scale

Please answer **ALL** the questions provided, which should take around 15 to 20 minutes to complete. All data collected will be kept strictly confidential, accessible only to the research team, and used for academic purposes only. Your cooperation and participation in completing this study are greatly appreciated. Thank you.

If you have any inquiries or need further information, please feel free to contact us through (**Email: 77830@siswa.unimas.my/ Contact No: 01125125048**)

* Indicates required question

1. Email *

7/6/24, 1:33 AM

Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

2. **ELECTRONIC INFORMED CONSENT FORM**

*

(BORANG PERSETUJUAN/KEIZINAN PESERTA ELEKTRONIK)

By clicking on the "agree" button indicates that:

(Dengan menekan butang "setuju", saya mengesahkan bahawa):

1. I have been read and understood the information for the above study. *(Saya telah membaca dan memahami segala maklumat maklumat tentang penyelidikan di atas).*

2. I have sufficient time to consider participation in the study. *(Saya telah diberikan masa yang secukupnya untuk mempertimbangkan penyertaan saya dalam penyelidikan ini).*

3. I understand that my participation is voluntary, and I can freely withdraw my participation from the study without giving a reason. I understand the risks and benefits related to my participation in the study. *(Saya juga faham bahawa penyertaan saya adalah secara sukarela dan dapat ditarik balik bila-bila masa saya berfikir menarik diri daripada penyelidikan ini tanpa harus memberikan alasan. Saya juga memahami tentang risiko dan manfaat penyelidikan ini).*

4. While information gained in this study, it may be used in a conference presentation and may also be published in a journal article, I will not be identified. Information concerning me will remain strictly confidential. *(Kajian ini boleh dibentangkan di persidangan dan kajian ini juga boleh diterbitkan didalam jurnal, dengan syarat diri saya tidak akan dikenal pasti. Maklumat mengenai diri saya akan disimpan secara sulit).*

5. I understand that study investigators, qualified monitors and auditors, the sponsor or its affiliates, and governmental or regulatory authorities, have direct access to my record in order to make sure that the study is conducted correctly, and the data are recorded correctly. All personal details will be treated as STRICTLY CONFIDENTIAL. *(Saya faham bahawa penyelidik, pemantau dan juruaudit terlatih, pihak penaja atau gabungannya, dan pihak berkuasa kerajaan atau undang-undang, mempunyai akses langsung dan boleh menyemak laporan saya bagi memastikan penyelidikan ini dijalankan dengan betul dan data direkodkan dengan betul. Segala maklumat dan data peribadi akan dianggap sebagai SULIT.)*

Mark only one oval.

<https://docs.google.com/forms/d/1f3S5ilw9ogexFtMqJSMRgSeYdDvK7OccxJklbyTswYY/edit>

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7/6/24, 1:33 AM

Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

☐ Agree

Section A: Demographic Information

3. Gender *

Mark only one oval.☐ Male☐ Female

4. Race *

Mark only one oval.☐ Malay☐ Chinese☐ Indian☐ Bumiputera Sarawak☐ Bumiputera Sabah☐ Other: _____

5. Age *

Mark only one oval.☐ 19-22 years old☐ 23-26 years old☐ 27-30 years old☐ 31 years old and above

7/6/24, 1:33 AM

Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

6. Faculty *

Dropdown

Mark only one oval.

- ☐ Faculty of Economics and Business
- ☐ Faculty of Social Sciences and Humanities
- ☐ Faculty of Cognitive Science and Human Development
- ☐ Faculty of Engineering
- ☐ Faculty of Resource Science and Technology
- ☐ Faculty of Built Environment
- ☐ Faculty of Medicine and Health Sciences
- ☐ Faculty of Education, Language, and Communication
- ☐ Faculty of Applied and Creative Arts
- ☐ Faculty of Computer Science and Information Technology

7. Year of Study *

Mark only one oval.

- ☐ Year 1
- ☐ Year 2
- ☐ Year 3
- ☐ Year 4
- ☐ Year 5
- ☐ Other: _____

8. CGPA *

Mark only one oval.

- ☐ 4.00 - 3.50
- ☐ 3.49 - 3.00
- ☐ 2.99 - 2.50
- ☐ 2.49 and below

7/6/24, 1:33 AM

Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

Section B: Instagram Usage (Passive and Active Usage Measure)

Please respond to each of the following statements based on the scale below:

1 – Never

2 – Rarely

3 – Sometimes

4 – Somewhat frequently

5 – Very frequently

9. Do you have Instagram account? *

Mark only one oval.

☐ Yes☐ No

10. Average time you spend on Instagram daily *

Mark only one oval.

☐ 0 minutes☐ Less than 1 hours☐ 1 hour to 2 hours☐ 2 hours to 3 hours☐ More than 3 hours

11. How frequent do you post photos to your profile? *

Mark only one oval.

1 2 3 4 5

Never ☐ ☐ ☐ ☐ ☐ Very Frequently

7/6/24, 1:33 AM Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

12. How frequent do you comment on other users' photos? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

13. How frequent do you send direct messages to other users? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

14. How frequent do you tag other users in videos? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

15. How frequent do you browse the newsfeed actively (liking and commenting on other users' posts)? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

7/6/24, 1:33 AM

Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

16. How frequent do you check Instagram to see what someone else is up to? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

17. How frequent do you view photos in Instagram? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

18. How frequent do you view videos in Instagram? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

19. How frequent do you browse the newsfeed passively (without liking or commenting on anything)? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

7/6/24, 1:33 AM Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

20. How frequent do you looking through your friends' posts? *

Mark only one oval.

	1	2	3	4	5	
Never	☐	☐	☐	☐	☐	Very Frequently

Section C: Body Shape Questionnaire (BSQ-8C)

This section is to check how you have been feeling about your appearance over the **PAST FOUR WEEKS**.

Please respond to each of the following statements based on the scale below:

1 – Never

2 – Rarely

3 – Sometimes

4 – Often

5 – Very Often

6 – Always

21. 1. Have you been afraid that you might become fat (or fatter)? *

Mark only one oval.

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

22. 2. Has feeling full (e.g., after eating a large meal) made you feel fat? *

Mark only one oval.

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

7/6/24, 1:33 AM Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

23. 3. Has thinking about your shape interfered with your ability to concentrate (e.g., while watching television, reading, listening to conversations)? *

Mark only one oval.

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

24. 4. Have you imagined cutting off fleshy areas of your body? *

Mark only one oval.

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

25. 5. Have you felt excessively large and round?

Mark only one oval.

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

26. 6. Have you thought that you are in the shape you are because you lack self-control? *

Mark only one oval.

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

7/6/24, 1:33 AM Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

27. 7. Has seeing your reflection (e.g., in a mirror or shop window) made you feel bad about your shape *

Mark only one oval.

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

28. 8. Have you been particularly self-conscious about your shape when in the company of other people *

Mark only one oval.

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

Section D: Rosenberg Self Esteem Scale

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement based on the scale below:

1 - Strongly Disagree

2 - Disagree

3 - Agree

4 - Strongly Agree

29. 1. On the whole, I am satisfied with myself. *

Mark only one oval.

	1	2	3	4	
Strongly Disagree	☐	☐	☐	☐	Strongly Agree

7/6/24, 1:33 AM Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

30. 2. At times I think I am no good at all. *

Mark only one oval.

1 2 3 4

Strongly Disagree ☐ ☐ ☐ ☐ Strongly Agree

31. 3. I feel that I have a number of good qualities. *

Mark only one oval.

1 2 3 4

Strongly Disagree ☐ ☐ ☐ ☐ Strongly Agree

32. 4. I am able to do things as well as most other people. *

Mark only one oval.

1 2 3 4

Strongly Disagree ☐ ☐ ☐ ☐ Strongly Agree

33. 5. I feel I do not have much to be proud of. *

Mark only one oval.

1 2 3 4

Strongly Disagree ☐ ☐ ☐ ☐ Strongly Agree

7/6/24, 1:33 AM Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

34. 6. I certainly feel useless at times. *

Mark only one oval.

1 2 3 4

Strongly ☐ ☐ ☐ ☐ Strongly Agree

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

Mark only one oval.

1 2 3 4

Strongly ☐ ☐ ☐ ☐ Strongly Agree

36. 8. I wish I could have more respect for myself. *

Mark only one oval.

1 2 3 4

Strongly ☐ ☐ ☐ ☐ Strongly Agree

37. 9. All in all, I am inclined to feel that I am a failure. *

Mark only one oval.

1 2 3 4

Strongly ☐ ☐ ☐ ☐ Strongly Agree

7/6/24, 1:33 AM Why I Don't Look Like Them? Understanding the Influence of Instagram Usage on Body Image Perception and Self-EsteemAm...

38. 10. I take a positive attitude toward myself. *

Mark only one oval.

1	2	3	4
Stro	☐	☐	☐
			Strongly Agree

Thank you for participating in this study. Your cooperation is much appreciated



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