# Are you inspired or desirous of others on social media?

The influence of content characteristics with visual cues and masculinity traits towards social comparison, subjective well-being and intended posting behavior.

Student Name: Bella Octavina

Student Number: 524907

Supervisor: Dr. Lijie Zheng

Master Media Studies - Media, Culture & Society Erasmus School of History, Culture and Communication Erasmus University Rotterdam

Master's Thesis *June 2021* 

#### ABSTRACT

The use of social networking sites has enabled users to access the lives of others online. For long, the extensive use of social media was found to lead to negative subjective well-being, as comparing oneself with others have become easier with the existence of various social networking sites. Several aspects of social media have affected on an individual's well-being, including as well, the contents users are exposed to. By using the stimulus-organism-response method, this study explores the effects of images with content characteristics such as single-person photo, group photo, object photo, portraits of family, career and money, on an individual's social comparison and subjective wellbeing, leading to a possible behavioral response in intended posting behavior. To analyze the effects, a quantitative method approach was implemented using an experimental survey approach with the sample of Indonesian male Instagram users. Results showed that visual cues with a single-person photo have more effect on social comparison compared to the other visual cues and masculinity traits. Although a single-person photo is found to have more influence on social comparison, the group photos have a higher likelihood to be shared online. Whilst masculinity trait did not have much influence on social comparison, when it came to posting intention and posting frequency, masculinity traits of family and career seem to have more likeliness to be shared. Whereas traits portraying money had the least interest to be shared, even though contents that portray money is the most common image seen online. When taking into account the psychological state of the individual, those who engage in social comparison will likely have a lower satisfaction towards life. Furthermore, one's satisfaction towards life does not influence posting frequency, only the affective aspect of the individual influences the intended posting frequency, meaning, the happier the individual the more often they would share certain content online. Thus, it can be concluded that specific types of content influences social comparison more than others, however, although not all content influences social comparison, some can be considered as an inspiration as participants find they would likely to post something similar.

<u>KEYWORDS:</u> Social comparison, subjective well-being, Instagram, posting behavior, posting frequency.

# Table of Contents

ABSTRACT	2
1. INTRODUCTION	5
2. THEORY	11
2.1 STIMULUS ORGANISM RESPONSE MODEL	11
2.2 CONTENT EXPOSURE	12
2.2.1 VISUAL CUES	13
2.2.2 MASCULINITY TRAIT	13
2.3 INTENDED POSTING BEHAVIOR	14
2.3.1 POSTING INTENTION	14
2.3.2 INTENDED POSTING FREQUENCY	15
2.4 SOCIAL COMPARISON ORIENTATION	16
2.5 SUBJECTIVE WELL-BEING	20
2.5.1 LIFE SATISFACTION	21
2.5.2 POSITIVE AND NEGATIVE AFFECT	22
2.6 SUMMARY OF HYPOTHESIS	24
2.7 CONCEPTUAL MODEL	25
3. METHOD	26
3.1 RESEARCH DESIGN	26
3.2 SAMPLING	31
3.3 MEASUREMENTS	32
3.4 LIMITATIONS, VALIDITY AND RELIABILITY OF THE SURVEY	36
3.5 ETHICAL CONSIDERATION	36
4. RESULTS	38
4.1 SAMPLE	38
4.2 RELIABILITY OF MEASUREMENT	38
4.3 CONTENT CHARACTERISTICS AND SOCIAL COMPARISON	42
4.4 SOCIAL COMPARISON INFLUENCES SUBJECTIVE WELL-BEING	43
4.5 SUBJECTIVE WELL-BEING INFLUENCES POSTING INTENTION	44
4.6 SUBJECTIVE WELL-BEING INFLUENCES POSTING FREQUENCY	45
4.7 SUMMARY OF REJECTED AND ACCEPTED HYPOTHESES	46
5. CONCLUSION	49
5.1 DISCUSSION	49
5.2 FINDINGS	51

# Are you inspired or desirous of others on social media?

5.2.1 THE RELATION BETWEEN CONTENT CHARACTERISTICS AND SOCIAL COMPARISON	51
5.2.2 THE EFFECTS OF SOCIAL COMPARISON WITH SUBJECTIVE WELL-BEING	53
5.2.3 THE RELATION OF SUBJECTIVE WELL-BEING WITH INTENDED POSTING BEHAVIOR	54
5.3 LIMITATIONS	55
5.4 SUGGESTIONS FOR FUTURE RESEARCH	57
REFERENCES	59
APPENDIX A. QUESTIONNAIRE (TRANSLATED)	68
APPENDIX B. SPSS OUTPUT	84

#### 1. Introduction

The development of the web 2.0 has increased the usage of social networking sites (SNS). With these communication platforms becoming further ubiquitous and is effortlessly accessible by users, SNS has become one of the most used communication tools for all ages, gender, nationalities and religious beliefs (Pittman & Reich, 2015). It has also attracted scholarly attention as it is described to be an effective tool for self-expression and connection with individuals and group networks (Barnett, 2011). With the existence of various SNSs, individuals are able to create online identities, and by creating those identities, they are able to share personal information, as well as access other people's information creating further exposure of SNS contents (Tiggemann & Anderberg, 2020). Previous studies around social media exposing other people's lifestyle have suggested these platforms may play a role in creating appearance standards and perceived social norms (Cohen, Fardouly, Newton-John & Slater, 2019).

The growing usage of SNSs has certainly created several aspects for scholars to observe. One of which is on the effects of SNS usage towards its users' well-being. For instance, Rae and Lonborg (2015) conducted a study on the association of Facebook with users' well-being and found that users who accessed Facebook with a purpose to maintain relationship has a higher level of subjective well-being in comparison to those who use Facebook to create new relationships. Another research by Liu and Yu (2013) found that though the usage of Facebook has no direct effect towards the user's well-being, conversely, it enabled the users to obtain social support. Verduyn et al. (2017) also found evidence of a positive impact on users' well-being based on how active individuals are on social media, and that the support received from sites such as Facebook may reduce depression symptoms specifically towards its female participants.

Previous research on the effects of the use of SNSs towards its users have been explored through several aspects, such as the time spent on social media (Huang, 2017), the number of friends (Tong, Heide & Langwell, 2008) as well as images that are presented on these platform (Veirman, Cauberghe & Hudders, 2017). However, to further explore the effects of social media on its users, a study on the type contents that are uploaded on social media should also be highlighted. Although social media includes features such as the "like" button or "share" button, it should also be taken into consideration that it may depend on the content that are being uploaded to social media, specifically photo contents on Instagram.

Instagram was created in 2010 with its focus on the visual-based elements (Pittman &

Reich, 2016). Although Facebook and Instagram may have similarities in terms of sharing visual details, what makes Instagram an interesting platform to analyze is its focus on the image content quality. Aside to the multiple filters than can be used to enhance their images (Zappavigna, 2016), users also focus on their self-presentations (Lup, Trub & Rosenthal, 2015) from the content that are being shared, as the content is usually curated to be fulfilling for the person who are uploading it.

Scrolling through Instagram certainly has its consequences, which was mostly discovered in the area of body dissatisfaction (Bergmans, 2020; Cohen et al., 2019; Fardouly et al., 2018). However, not all images shared on Instagram are images that emphasizes on someone's body image. A research by Hu et al. (2014) on what we share on Instagram found several categories of images that are shared on Instagram such friends, food, gadgets, selfie, activities, pets and fashion. Since the coding was done manually the study examined images uploaded by 50 users, the study concluded that these are the types of photos that are shared on Instagram. Similar to Facebook, viewing these types of images may have an effect in terms of satisfaction towards life (Lee, 2020) and could precipitate a sense of comparing oneself to others (Gallinari, 2018). Therefore, further research should be conducted on the impacts of Instagram's contents, comparable to the attention that is given to research about Facebook and other social media platforms. Gaining a deeper understanding, specifically on viewing other users Instagram content, is important to find insights about social, cultural, usage behavior and well-being.

Several studies related to content were mostly associated with its effects on women. Amongst the few is a study by Tiggemann and Anderberg (2020) on the effects of images of "Instagram vs reality" on women's social comparison and body image. The study suggests that by viewing the "reality" version of an Instagram image can potentially boost women's satisfaction towards their own bodies. Similarly, a study on the relation between online social support with body image by Aristantya and Helmi (2019) suggests that the higher the online social support the higher the level of body image satisfaction will be in adolescents. Similarly, another study by (Freed, 2017) about the effect of exposure towards images on Instagram towards body dissatisfaction found that pictures that included friends and activities were most likely to receive positive feelings, whereas images of celebrity created a negative feeling.

Although several studies of the effects of SNS were popularly related with its influence on women, a study by Holland and Tiggemann (2016) suggests that men are likely to be

influenced by social media just as women do. As men are also influenced by what the media exposes to them, such as images of a muscular and lean body which could result in body dissatisfaction (Gültzow et al., 2020).

In addition to that, past research also suggests a different effect of SNS use based on the users' cultural background and demographics. For example, Cho and Park (2011) examines the SNS use between Korean students from a leading Korean private university with U.S students from a large public university and found several differences such as the type of friends on SNSs, where the friends list of Korean participants comprised mostly of those they have communicated with on an offline setting, whereas the U.S participants has a larger variety of people on the friends list from close friends to acquaintances. Other studies have also shown that cultural differences in terms of individualism and collectivism influences their attitudes (Chen, 1995) which also implies on a digital setting. To create a deeper focus on the effects of social media, this paper will focus specifically on the collectivism culture of solely one country, Indonesia.

The number of social media users in Indonesia make it interesting to study, as the amount of people who uses social media take up to 170 million people which is equivalent to 61.8% of the total population of Indonesia (Kemp, 2021), of those over 88 million people are users of Instagram (Statista, 2021). Furthermore, the ages that dominate the number of Instagram users are 18–34-years old at 36.1% and 25-34-years old sit at 31.9% (Statista, 2021). With the growing amount of Instagram users in Indonesia, Indonesian scholars have also studied the impact of Instagram towards its Indonesian user, such as the relation of self-esteem and body image with online self-presentations of Instagram users (Rozika & Ramdhani, 2016) and the effects of Instagram towards the body image of Indonesian adolescence (Aristantya & Helmi, 2019). Aside to the focus on body image, the phenomena of adolescence using social media to shape their identity (Ayun, 2015) and using Instagram to create social existence (Mahendra, 2017) also sheds light to the reality of uploading images as a behavior of pride and luxury for self-representation.

To steer away from photos that only portray an ideal body image, this study will focus on the fact that people use social media as an archive to store memories, therefore, photos of everyday life can largely be found on Instagram. In line with the photo characteristics found by Hu et al. (2014), we also look into visual cues that are posts with human faces which is commonly uploaded online (Bakhshi, Shamma, & Gilbert 2014) and things in life that are considered important and masculine by Asian males (Ng et al., 2008). A considerable

number of images that include characteristics of these masculinity traits can also be found on Instagram.

What people upload on their profiles are certainly pieces of information that are displayed to receive a certain impression (Hong et al., 2012), and the subjection of certain images that portray certain characteristics may lead to comparison between the viewer and the photo owner, which may also lead to negative outcomes concerning the users' subjective well-being. The effects of viewing certain images may influence each individual differently, as mentioned before, the influence of social comparison can impact the user into either two directions, up or down (Festinger, 1954). Several research has been conducted to understand the posting behavior individuals on social media (Oh & Syn, 2015; Zhang & Baker, 2018), however, not much have been explored its relation with Instagram users. With the number of images that are posted on Instagram, it becomes a question whether these images also play a role in deciding what users would upload on their profile.

Although previous scholars have studied the effects of exposure to contents on Facebook, it is important to analyze the effects of Instagram as the current constant growing social media platform to further add into the scientific relevance of this research. In an attempt to further understand the impacts of Instagram towards society, this study focuses on the relation between the aspects of social media use: exposure towards content that portray visual cues and masculinity traits, with an individual's social comparison orientation and subjective well-being which will then prompt behavioral response in the form of posting behavior. Furthermore, adding to existing literature and further support existing theories, this present study is conducted through a quantitative research method with an experimental survey approach to answer the following research question:

To what extent does content characteristics portraying visual cues and masculinity traits influence the frequency and similarities in content posting behavior on Instagram through social comparison and subjective well-being, amongst Indonesian men?

A stimulus-organism-response (S-O-R) theory may be a useful framework to determine and understand what types of content on Instagram can influence an individual in terms of inspiration where the response would be the desire to post something similar to other or a feeling of desirous of other's life on social media reflected by their likelihood to engage in social comparison.

Content has become one of the points to give attention for analyzing the effects of SNS usage. The content characteristics which are masculinity traits and visual cue will act as the stimulus for this study. The study specifically uses these content characteristics to ensure the use of contents that can typically be found on Instagram specifically towards its Indonesian users. Furthermore, each content characteristics will be divided into three categories. Visual cues will include images of a single-person photo, group photo and object photo, whereas masculinity traits will include images of family, career and money.

The response expected in this study is related to the usage of the SNS itself. In terms of intention to post similar images and the possible posting frequency. For example, a study by Zhang and Baker (2018) found that people post photos of food, not only because they want to share but also inspired by others who post images of food. Similarly, the findings of photo characteristics by Hu et al. (2014) indicates that people post things that are similar to others' posts, which is possibly caused by also viewing similar contents.

Within the S-O-R method, the organism in this study will be the individual's social comparison orientation and their subjective well-being. Previous studies have highlighted the psychological effects of the usage of Instagram. Such as the possibility to engage in social comparison from viewing content, as people believe others have it better than themselves and also the individual's subjective well-being; whether being exposed to certain contents will create a sense of dissatisfaction towards life or may trigger a negative response.

It will not only add valuable insights onto the relation between social media content and behavior, but also lets us learn more about how social media effects the users and the consequences that might arise onto one's posting behavior. By conducting research around the effects of social media towards men, it is hoped that the result from this study will become a valuable addition to current existing literatures. The results will not only aim to assist users and social media marketers into understanding the best way to approach Indonesian men on Instagram, but also find the relation between seeing other people's contents and posting similar contents.

The structure of this thesis will be divided into several chapters as stated below:

**Chapter 1** discusses the main idea of the thesis, which includes a brief background on the research topic as well as the research question, social and scientific relevance.

**Chapter 2** provides an overview of the theory behind the research topic, including also previous research on the effects of social media on social comparison and

# Are you inspired or desirous of others on social media?

- subjective wellbeing and highlights on the importance of focusing on certain content characteristics. This chapter also includes the hypotheses for this thesis.
- **Chapter 3** provides justification for the research method used. Including in it the research design, sample, and measurements, as well as detailed progress from data gathering to data analysis. This chapter also includes explanation of the validity and reliability for each measurement.
- **Chapter 4** presents the result of the data analysis that were conducted based on the hypothesis mentioned on chapter 2.
- **Chapter 5** discusses the results of the data analysis, and whether the hypotheses are considered accepted or rejected. This chapter will also include discussion points as well as limitations of the study.

# 2. Theory

Before the rise of digital media, people interacted with others that are close to them on an offline setting. People did not know what was happening in other people's lives unless it was told to them. However, since the growing age of digital media, it created an easy access to send, receive and view information from not only people we know, but also others located anywhere around the globe (Pittman & Reich, 2015). This phenomenon has prompt plenty of literature to study the effects that may arise from the usage of such digital media.

Previous research on digital media mainly focused on SNSs such as Facebook—being one of the pioneers and having dominated the social media landscape for a certain period of time (Kemp, 2019), however recently, Instagram has gained researchers attention as one of the fastest growing social media platforms that focuses on the use of visual aids such as photos and videos. There are multiple types of contents available on Instagram, although scholars have analyzed the effects of content portraying an ideal body image, other types of contents should also receive similar attention on how it could engage user's social comparison and subjective well-being.

Therefore, to understand the influence of certain content characteristics towards social comparison and subjective well-being amongst men who use Instagram, this study will implement the use of the stimulus-organism-response model, as well as theories on social comparison orientation and subjective well-being.

#### 2.1 Stimulus Organism Response model

The stimulus-organism-response (S-O-R) model is typically used in a psychology environment and has been widely used to explain the links between inputs, processes and outputs. Specifically, how a certain stimulus (S) can influence an individual (O) to generate a behavioral response (R). The "organism" in the model refers to the individual's internal psychological state such as their feelings, emotions and thinking and mediates the relationship between the stimulus and the response (Woodworth, 1929). It is believed that an individual's surroundings, which acts as a stimulus may influence their internal state and therefore have an effect on the individual's response. Gao and Bai (2014) also mention that the action of an individual is affected by the operation of a stimulus.

Previous research has implemented the use of the S-O-R model in behavioral settings such as consumer behavior and tourist behavior. Furthermore, the S-O-R model has also been implemented in several research for online user behavior. Therefore, this model may be

the best fit for the current study as it also focuses on the response generated by individuals after exposure to certain content characteristics found on Instagram. This model will also help in uncovering the links between content characteristics with an individual's social comparison orientation and subjective well-being, as well as the links between social comparison orientation, and subjective well-being with an individual's posting behavior on Instagram.

# 2.2 Content exposure

Content can be defined as a communication medium that is used to distribute information from a sender to potential receivers (Schreiner, Fischer & Riedl, 2019) Media has always shown different types of contents in the form of print, audio, visual, etc. With the growth of social media, different kinds of contents are easily distributed and received. Typically, the number of interactions with certain contents displayed on social media has become an indicator of the content's success (Schreiner, Fischer & Riedl, 2019). Supported by the many built-in functions on SNSs such as likes, comments, sharing and posting, a higher number in these sections may lead to positive effects on content in a business level (Ha et al., 2016). At a personal level, these may cause a different emotional response, which can also be found in certain contents that are shared. For instance, a study by Lin and Utz (2016) found that users may have an emotional response either positively in the form of happiness or negatively in the form of envy, when browsing through Facebook.

Studies focused the exposure of contents on platforms such as Facebook, has examined the impacts on its users' uses and gratification (Sheldon & Bryant, 2015), information sharing (Ghaisani, Handayani & Munajat, 2017), social anxiety (Jiang & Ngien, 2020), self-esteem (Jan, Soomro & Ahmad, 2017), social comparison (Vogel et al., 2014) and depressive symptoms (Nesi & Prinstein, 2015; Gaol et al., 2017). However, these studies have yet focused on the content characteristics itself.

When discussing content characteristics, most studies have focused on one of the five appeals which includes informational content, entertainment content, transformational content such as contents that addresses the individual's self-esteem and desires, transactional content such as marketing strategies and emotional contents that evoke feelings (Kim & Yang, 2017). In the case of this study, we discuss particularly about the element of the message being sent through the content and the context it may have (Schreiner, Fischer & Riedl, 2019). For that, we will specifically discuss the usage of photos on social media as

several studies have found that photo content will perform better on social media. In this case, the photo content will be divided into two characteristics, visual cues and masculinity traits.

#### 2.2.1 Visual cues

It is important to understand there are various types of photos that are distributed online. A study on a number of Instagram feed mentions that the most common photo categories on Instagram consists of those portraying self-portraits, friends, activities, food, pets, etc., (Hu, Manikonda & Kambhampati, 2014). Hu, Manikonda and Kambhampati (2014) also found that self-portrait and photos with friends are the most popular categories. In addition to that, one of the most shared photos are images that include faces of humans (Bakhshi, Shamma, & Gilbert 2014). Faces has become an important social cognition as it displays feelings through expressions (Darwin, 1998).

Visual cues itself involves features in a content that shapes impression of the content creator (Hong et al, 2012), in this case it refers to the objects and subjects included within the photo, such as people, activities and items (Hu, Manikonda & Kambhampati, 2014). Furthermore, Nielsen Norman Group observed that users engage more with photos that include real people (Nielsen, 2010). Previous study also mentioned a difference in influence of a self-portrait or a photo with one person in frame and group pictures (Kramer et al., 2017).

#### 2.2.2 Masculinity trait

Masculinity is usually referred to as a "set of attributes, behaviors, and roles that generally associated with boys and men" (Merdeka & Kumoro, 2018, p.109). Masculinity is also considered to describe the characteristics of the male gender. Generally speaking, a man's masculinity is typically displayed by their physical image, their emotions, intelligence, personality, etc. (Chafetz, 1978 as cited in Merdeka & Kumoro, 2018). The characteristic of masculinity is considered broad and may have different implications based on culture.

A study by Ng et al. (2008) on the Asian men's attitudes to life events and sexuality asked men what they consider to be masculine and found that there are several aspects that are considered to be important to the male identity amongst Asian men. The traits that were highly rated by Asian men were family, career and money. The research was conducted

across several Asian countries, and although the ranks between family, career and money differ between each country, these three traits remain as the traits with the highest value. When the research was conducted amongst North and South American men, the result suggested that having honor and being in control is more important than career and financial stability. Taking the findings of this research into account, the current study will implement the masculinity trait into the content characteristics that may be posted by men on Instagram.

There are a variety of photos uploaded online, each with different purposes and style. With over 40 billion photos on Instagram since its conception, it might be difficult to categorize the types of photos uploaded. Aside to photos of individuals, this study will also focus on photos that are not related to body image but rather the aspects of life that are considered important in order to explore a different perspective, especially with the target participants coming from a collective culture.

#### 2.3 Intended posting behavior

Aside to the photo's characteristics that are posted online, several scholars have also explored photo posting behaviors on social media. Most studies have focused on the motivation behind posting content online in order to understand posting behavior. For instance, Lee, Lee, Moon and Sung (2015) found that one of the most popular motives of uploading photos on social media is to record daily activities and have social media act as an archive. For long, individuals have made it a habit of capturing memories of their lives and sharing those memories online. Zhang (2019) mentions an extrinsic and intrinsic motive behind photo-sharing on social media. Extrinsic meaning goal-oriented, such as improvement of skills and personal status, and intrinsic as in enjoyment and mutual benefits with others. To further elaborate on the intended posting behavior, this study will focus on the posting intention and the intended posting frequency.

#### 2.3.1 Posting intention

A study on viewing and uploading photos on social media done by Oeldorf-Hirsch and Sundar (2016) suggest that those behavior were motivated as social pleasing in comparison to personal needs. It is interesting to explore the behavior of posting photos as it is highly regarded as an activity that is familiar on the digital setting compared to real life (Zhang & Baker, 2018). Zhang and Baker (2018) also emphasized that an individual's subjective norm may or may not influence their posting behavior on social media, however, it is also worth

mentioning that individuals have certain intentions when posting photos or information online. For instance, a study by Sheldon (2012) found that some people share nutrition-related contents not only to improve ones' health but also to share and give knowledge for others who may need it.

Similarly, a study on food sharing conducted by Zhang and Baker (2018) discussed the trends of posting photos of food on an online setting. Considering the amount of people that upload photos of food, in the research respondents were asked how likely they would also upload pictures of food and found that 93.6% of the participants would upload food related contents to "share an experience". The food photo sharing phenomena could also be caused by mimicry, which is a psychological term that refers to adapting another person's behavior unconsciously and unwillingly (Kurzius, 2015). Which can also be connected to how contents generated and exposed by social media users can influence other people to post something similar.

## 2.3.2 Intended posting frequency

Another aspect of posting behavior is the posting frequencies. Although scholars have studied the frequency of users posting on social media, not much have explored the content that are being posted frequently, much less the association between users' well-being with their online posting frequencies. A recent study by Teo and Lee (2016) have studied the association between posting behavior with users' well-being and have suggested that young adults show a positive correlation between posting online with life satisfaction. It is also suggested that young adults spend more time posting compared to mature adults due to the number of friends that they have compared to those at a much mature age. However, the study did not differentiate between men and women.

Although men and women have several differences in social media usage behavior such as the use of profile pictures for impression management by women compared to men, in terms of posting, both genders were positively linked to emotions (Rollero, Daniele & Tartaglia, 2019). Furthermore, men tend to use SNSs as a platform to share their opinions as well as experimenting with the contents they upload on social media (Rollero, Daniele & Tartaglia, 2019). In addition to that, men are found likely to post more frequently than women. Hence this paper will explore men's posting behavior and posting frequencies, specifically in relation to the exposure of certain content characteristics used within this study.

#### 2.4 Social comparison Orientation

As human beings, the fundamental drive to compare oneself with others is always at one's fingertips. Whether to find inspiration (Lockwood & Kunda, 1997), to evaluate oneself (Festinger, 1954) or to fulfill affiliated needs (Schachter, 1959), it enables us to engage in social comparison. Social comparison itself can be described as a comparative judgement to others due to particular contents and social stimuli (Kruglanski & Mayseless, 1990). Social comparison has can also be identified as a psychological process of evaluating oneself with others based on the information they receive (Corcoran et al., 2011). According to the Social Comparison Theory, individuals are able to acquire information about oneself through comparing with those who are seemingly recognized to be better than oneself (Festinger, 1954).

Social comparison may lead to two levels of comparison orientation, upward (lower) and downward (higher) comparison (Gibbons & Buunk, 1999). In an upward comparison orientation, an individual may believe the other person of having it better in certain dimensions, whereas the opposite would mean a downward comparison orientation (Verduyn et al., 2017). Similarly, Gibbons and Buunk (1999) also concluded that people who frequently compared themselves to others were less satisfied with their lives compared to those who rarely engages with social comparison with others. An individual who experiences an upward social comparison or frequently engages in social comparison, may be prone to negative effects on mood (De Vries et al., 2018) negative emotions (Taylor & Shelley, 1993), and envy (Smith & Kim, 2007). There emotional contagion can become a candidate in processing content on social media.

On a cultural level, social comparison is more likely to occur in an environment that values interdependent construal and group connection compared to cultures that values independent construal and standing alone (Baldwin & Mussweiler, 2018). The characteristics of a collective culture includes creating groups and accessing ones status with those of the other groups, which would explain why the collective culture may be prone to a higher social comparison orientation (Baldwin & Mussweiler 2018), furthermore, engagement with social comparison are stronger when motives for self-improvements are noticed (White, 2005).

Information of others is needed in order to create a comparison. With the layout and easy access to use social media, it has become the perfect setting for social comparison to take action, even without the users realizing it (Mullin 2017; Verduyn et al., 2017). Social

media has made comparing one's life with others easier, particularly through viewing contents of others' personal characteristics such as personality, success and emotions (Vogel et al., 2014).

SNSs has definitely become a place for people to visit, not only to interact with others but also to know how others are doing which further prompts social comparison as individuals begin to evaluate themselves (Lee, 2014). For example, Facebook gives the ability for users to upload images that are usually an exaggeration of ones' life to gain "likes" and comments from other users (Lee, 2020). The exaggeration of one's content may lead to people believing that other users seem to be happier and more successful than themselves (Chou & Edge, 2012). Which also implies that noticing other people's social media content would spontaneously result in social comparison (Gilbert et al., 1995).

There are also several reasons why social media may stimulate social comparison, first being in the form of numbers of friend counts, likes and comments which are more noticeable than it is in real life (Appel, Gerlach, & Crusius, 2016). And second, the constant seeking of information of others through photos and statuses may result in social comparison as information of such are easier and quicker to obtain than in real life (Tiggemann & Miller, 2010). Furthermore, due to the idealized contents that are uploaded on social media, several studies have confirmed that social media is likely to lead to an upward social comparison (Vogel et al., 2014; Wang et al., 2017), especially since people believe others on social media have a happier and better life than themselves (Chou & Edge, 2012).

Recently, scholars who studied the effects on the usage of Facebook have shown that upward social comparison is positively correlated with an individual's satisfaction towards life, whereas the opposite, downward social comparison is correlated negatively with satisfaction towards life (Mai-Ly et al., 2014). Despite several research that suggests negative emotions due to viewing others' social media contents, the individual themselves are in control on how they perceive the content. Gibbons (1986) found that individuals who seem to have a better trait than oneself have become the target of comparison, as these people are viewed to provide useful information for users to create improvement towards oneself. Which is also supported by previous study that implies people who want to improve themselves, may purposefully engage in an upward social comparison (Corcoran et al., 2011). This also means that by viewing other people's success and happiness, one would likely to be inspired to achieve similar results (Yang, 2015). Similarly on Instagram, study suggests that social comparison that occur from the usage of Instagram may lead to positive

outcomes such as greater inspiration (Meler & Schafer, 2018) as studies have also shown that social comparison is mediated by the effect of image exposure on Instagram (Brown & Tiggemann, 2016; Tiggemann & Zacardo, 2015).

Examining the effect of using Instagram towards an individual through social comparison is essential as Instagram has become a popular social networking site for all gender and ages. This study also hypothesizes that the potential to promote social comparison on Instagram lies within the content that are being shared, as suggested through the study of social media's subjective well-being affect by Wirtz et al. (2020). Therefore, with the aim to understand which type of content have the most impact on social comparison, this research will utilize two content characteristics: visual cues and masculinity traits, which will be explained further in the paper. Furthermore, Wirtz et al. (2020) also found that through the viewing of images and updates of others online will promote upward social comparison which will undermine the individual's subjective well-being.

A study by Brown and Tiggemann (2016) have found that the effect of images exposed on Instagram for its users are mediated by social comparison. Although previous research mainly discusses about the comparison that happens when viewing body images on social media; however, images that portrays an idealized body is not the only content exposed to individuals on SNSs. As mentioned earlier, social media can also be used as an archive of memories, therefore a wide array of content can be found on social media, therefore the use of everyday photos is important in this study.

The premise of this model is that certain content on social media can prompt social comparison, which may also lead to emotional response and reflecting ones' own life. To emphasize on the content, the use of photos with visual cues that feature pictures of human beings will be used within the study. Types of photos that include objects and subjects or visual cues in this case, will be divided into three categories: a single-person photo, a group photo and a photo of objects with no faces. Since being in a group is an important aspect of the collective culture (Baldwin & Mussweiler, 2018), photos that include a group of people may have a different effect on users. Therefore, the first hypothesis will be:

H1a: Social comparison is positively influenced by portraits of a single-person photo.

H1b: Social comparison is positively influenced by portraits of a group of people in frame.

H1c: Social comparison is significantly influenced by portraits of an object in frame.

In relation to the social comparison theory, people have the intrinsic drive to compare themselves to others (Festinger, 1945), which has now made easy with the connection with people whom we are psychologically close with through SNSs. In some domains, social comparison seems to be more important compared to others. Because the main target sample are men that come from a collective culture, it is important to include content features that depicts images of certain things that are considered valuable to males such the masculinity traits that feature family, 'having a good job' or career and 'having lots of money' (Ng et al., 2008). It is believed that these traits may prompt social comparison is the use of characteristics that are found as an important trait for several Asian men throughout several Asian countries were considered necessary.

Furthermore, a research on luxury lifestyles have found that an upward social comparison occurs when exposed to peer's contents that portray an affluent lifestyle (De Vierman, Cauberghe & Hudders 2017). Luxury has been associated with expression of wealth and income which also means the portrayal of "having lots of money" and "having a good job". Income and occupational status have become a domain that is meaningful for certain people, as it puts emphasis on their social status compared to others. Each individual might have different values towards wealth, however, those who consider important to compare oneself with others' domain, will engage in social comparison higher than those who don't.

In the context of family, Indonesia being a collective culture, social comparison is more likely to be more prominent, as it further affects cultures that adopt collectivism more compared to individualism (Baldwin & Mussweiler, 2018). Based on previous literatures, the following hypotheses has been constructed:

H2a: Social comparison is negatively influenced by content of the family masculinity trait

H2b: Social comparison is negatively influenced by content of the career masculinity trait.

H2c: Social comparison is negatively influenced by content of the money masculinity trait.

The implementation of content characteristics of visual cues which includes singleperson photo, group photo and object photo and masculinity traits which includes family, career and money in this research creates a further complex situation for this study. In order to explore to what extent these two content characteristics correlate, an interaction effect will be conducted.

H3: Content characteristics of Masculinity traits and visual cues have an interaction effect.

## 2.5 Subjective well-being

Well-being refers to a general outcome of a psychological feature. Previous studies suggests that well-being consists of two components, the hedonic component which is usually known as the subjective well-being and eudaimonia components also known as the psychological well-being (Waterman, 1993). Although subjective and psychological well-being are suggested to be highly related, this paper will focus specifically on subjective well-being. The term Subjective Well-Being was first introduced by Diener (1984) as an attempt to identify the psychological field of an individual's evaluation towards life through cognitive judgement and affective reactions. Subjective well-being also refers to the individual's self-evaluation that has potentially risen from their experiences that usually include happiness, positive and negative affect and life satisfaction (Stutzer & Frey, 2010).

Subjective well-being comprises of several dimensions; however, they are primarily divided into two: affective well-being which refers to the emotions, moods and feelings, and cognitive well-being which refers to life satisfaction (Diener et al., 1999). Diener (2006) also mentions that an individual's subjective well-being considers not only the individual's current level of happiness, but also their satisfaction towards life. The subjective well-being has become an object of study between scholars and has become one of the most studied variables in behavior science. Specifically with its relations to effects on media. Media since its rise has portrayed images of ideal situations that may affect the viewers well-being (Hobza & Walker, 2017). Included within the study of well-being is body image and overall satisfaction (Haferkamp & Kramer, 2011). Recent studies also focus on how exposure to media content impacts social comparison and its relation to the individual's subjective well-being (Gerson, Plagnol & Corr, 2016).

The increase SNS use has gained several questions regarding how these sites may impact one's well-being based on the specific platform (Kross et al., 2013), the amount of time spent browsing (Huang, 2017), the number of friends (Tong, Heide & Langwell, 2008), or the content that are exposed (Veirman, Cauberghe & Hudders, 2017), as viewing another person's life which we believe to be better than ours may lower one's satisfaction towards life. An experiment by (Verduyn et al., 2017) was conducted to calculate the different levels

of subjective well-being by those using Facebook and those who stopped using Facebook for a week and found that the group who spent the week without Facebook reported a higher level of affective and cognitive subjective well-being. Whereas its counter condition showed a lower level of affective and cognitive subjective well-being. Their longitudinal design also indicated an 8% decrease of the participant's subjective well-being when spending a significant amount of time on the platform, implying that the usage of Facebook influences the individual's subjective well-being than the other way around. A study by Kross et al. (2013) also found that the use of Facebook undermines the subjective well-being of young adults' overtime.

Other research has also proven a strong relationship between social media and user's subjective well-being (Jan, Soomro & Ahmad, 2017; Wirtz et al., 2021), including the positive effects through interpersonal relationships (Liu & Yu, 2013) as well as supportive interaction (Oh et al., 2013). However, previous experimental studies have been consistent in determining that the use of SNSs may lead to lower well-beings (Wirtz et al., 2021). Wirtz et al. (2021) also mentions that upwardly comparing oneself to the carefully controlled image of others on social media would undermine the subjective well-being as several images convey a favorable impression for personal image, which consequences in a false conclusion that others have a more positive experience than oneself. As quoted from Wirtz et al. (2021) "social comparison produced both more negative affect and less positive affect" on the subjective well-being (p. 14).

While social interaction and connection is the main characteristics of SNSs, it should be noted that each SNS has its own features and uniqueness, which would mean the effects of it on an individual's subjective well-being may differ per platform. Most study mentioned, analyzes the effect of social media use towards subjective well-being for users of the social media platform, Facebook (Chou & Edge, 2012; Oh et al., 2013), due to the covariates of the research, several conflicting results were found. Typically, a study on the effects of SNS use focuses only on the cognitive aspect which is only life satisfaction. However, several research have suggested that by analyzing both the cognitive and affective aspect may produce a stronger data, therefore, this study will look into both the cognitive aspect which is life satisfaction and the affective aspect which is the positive and negative affect.

#### 2.5.1 Life satisfaction

Satisfaction has a definition to make or do enough. Satisfaction with ones' life means

the fulfilment of ones' wants and desires (Sousa & Lyubomirsky, 2001). Therefore, life satisfaction can be described as an individual's emotional response and the overall assessments of their own life (Diener et al., 1999). In current studies, life satisfaction has been used as a way to calculate an individual's subjective well-being. Though subjective well-being comprises of a cognitive and affective aspect, it is important to separate the two in terms of data collecting. As part of the cognitive aspect, life satisfaction is a judgmental process in which an individual evaluates their overall life based on their own standards, as each individual may have their own set of criteria for life satisfaction (Pavot & Diener, 2009), which also means it includes a long-term perspective. Whereas the affective aspect of the subjective well-being is typically an immediate response to a current condition and has a short duration (Pavot & Diener, 2009).

With the advancement of technology, people have opted from face-to-face communication to communicating through computer mediated programs, of which includes SNSs. Several studies have explored the effects of this communication process to ones' life satisfaction and suggested that the use of SNSs has the ability to enhance ones' subjective well-being and generate a positive impact towards life satisfaction (Liu & LaRose, 2008). Similarly, a study by (Lee, 2020) also found that Facebook users' life satisfaction increased when an upward comparison is engaged, and social support is found on the site. Another study by Oh et al. (2013) also found that the use of online social networks enhances life satisfaction when social support was included. Despite an upward social comparison having a positive reaction, Lee (2020) also suggests that the more the upward comparison happens, the lower the life satisfaction will be. This inconsistency also supports the findings that the link between social media use and life satisfaction is more nuanced and can possibly be depend on gender of the data itself (Orben et al., 2019).

#### 2.5.2 Positive and negative affect

Our own happiness can be prompt as a response from seeing other people's happiness, which may also impact an individuals' well-being (Gable, Reis, Impett & Asher, 2004), especially since a positive reaction towards others' happiness leads to a positive emotion (Royzman & Rozin, 2006). Watson and Clark (1984) have found that the positive affect and negative affect are an independent construct and is related to an individual's overall mood. Positive affect includes pleasant emotions and events, and the opposite for negative affect. In relation to social comparison, previous studies have mentioned that a decrease of positive

affect will occur when an individual engages in an upward social comparison (Bazner, Bromer, Hammelstein & Meyer, 2006). The affective aspect of an individual is also important to judge ones' life satisfaction (Kong, Gong, Sajjad, Yang & Zhao, 2019). People who experience a positive affect more than the negative affect is more likely to have a higher life satisfaction (Zeidner et al., 2012), and people with a higher positive affect are usually more energetic, engaging and optimistic which results in a feeling of more satisfaction towards life (Greetham, Hurlin, Osborne & Linley, 2011). Furthermore, this thesis will examine the possible relation of positive and negative affect with social comparison orientation through the exposure of certain content characteristics.

Comparing oneself to the lives of those on social media may create an effect on one's subjective well-being, specifically a negative evaluation due to the curated images that are uploaded on the profile of others. Studies have shown that those who engage with more social comparison may result in a lower subjective well-being score, however this may differ for each person.

This study will focus on two aspects of subjective well-being, the cognitive aspect and the affective aspect. The cognitive aspect will be in the form of life satisfaction, whereas the affective aspect will include the positive and negative emotional response. The exposure of certain contents that enables users to engage in a higher social comparison may have an effect on the individual's life satisfaction and emotional response especially when they are viewing photos that portray a better life than they do.

H4a: Social comparison influences the participants' life satisfaction negatively.

H4b: Social comparison influences the participants' positive and negative affect negatively.

Oeldorf-Hirsch and Sundar (2016) found that uploading photos on social media were mostly motivated by social pleasing compared to personal needs. Other studies have also mentioned that by sharing photos online creates a positive effect towards life satisfaction, specifically in young adults (Teo & Lee, 2016). Previous scholars also found Instagram and life satisfaction to have a negative relationship, however, in this research, we look further into life satisfaction as the predictor to posting photos on Instagram, specifically similar photos used within this research. Aside to that, individuals have long enjoy using social media as a tool to collect memories and to share emotions with others, therefor the following hypothesis were concluded:

H5a: Participants with a higher life satisfaction has greater intention to post similar content.

H5b: Participants with a higher positive affect score has greater intention to post similar contents.

Aside to posting similar content, another aspect of posting behavior that can be explored is the posting frequency. Uploading content on social media is by virtue of the fact it is the way individuals communicate and expresses themselves to their audience (Panek, Nardis & Auverset, 2018). Previous researcher has examined the posting behavior on social media, however, not much have taken into account the types of content people would post and share. Furthermore, some studies have found the relationship between narcissism with frequency to post. However, in the context of this research, we explore into a different psychological aspect, which is the influence that subjective well-being might have towards an individual's posting behavior. Hence, the following hypotheses were concluded:

H6a: Participants with a higher life satisfaction has lower intention to post frequently.

H6b: Participants with a higher positive affect score has greater intention to post frequently.

## 2.6 Summary of hypothesis

In summary, the hypothesis for the current study will include:

H1a: Social comparison is positively influenced by portraits of a single-person photo.

H1b: Social comparison is positively influenced by portraits of a group of people in frame.

H1c: Social comparison is significantly influenced by portraits of an object in frame.

H2a: Social comparison is negatively influenced by content of the family masculinity trait

H2b: Social comparison is negatively influenced by content of the career masculinity trait.

H2c: Social comparison is negatively influenced by content of the money masculinity trait.

H3: Content characteristics of Masculinity traits and visual cues have an interaction effect.

H4a: Social comparison influences the participants' life satisfaction negatively.

H4b: Social comparison influences the participants' positive and negative affect negatively.

H5a: Participants with a higher life satisfaction has greater intention to post similar content.

H5b: Participants with a higher positive affect score has greater intention to post similar contents.

H6a: Participants with a higher life satisfaction has lower intention to post frequently.

H6b: Participants with a higher positive affect score has greater intention to post frequently.

# 2.7 Conceptual model

Figure 2.1 shows the conceptual model underlying the study of this thesis. By using the S-O-R model the content characteristics of visual cue (H1) and masculinity traits (H2) will act as the stimulus which will lead to the organism that includes social comparison, life satisfaction (H4a) and positive and negative affect (H4b). Finally, it is expected that the level of subjective well-being will generate a response of intention to post similar contents (H5) and the frequency of posting similar contents (H6). This theoretical framework was built to create understanding for the predictors of content characteristics, social comparison and subjective well-being.

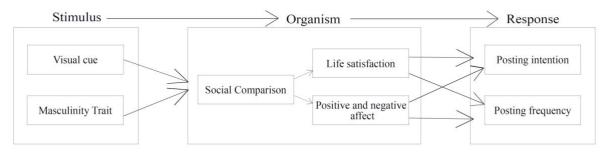


Figure 2.1. Conceptual model using the S-O-R model.

#### 3. Method

This chapter includes justification for the use of a quantitative research method, as well as the research design of implementing an experimental-survey approach. Aside to that, the sample and measurements to answer the research question "To what extent does content characteristics portraying visual cues and masculinity traits influence the frequency and similarities in content posting behavior on Instagram through social comparison and subjective well-being, amongst Indonesian men?" will also be explained within this chapter.

## 3.1 Research design

The presented research question for this study aims to examine the relation between exposure of certain Instagram contents with the user's intended posting behavior through social comparison and subjective wellbeing by implementing the S-O-R method. Therefore, this research intends to analyze a possible relationship between the independent variable with the dependent variable, hence a quantitative approach is considered suitable for this study. Furthermore, this study will implement the use of survey as a method of data collection resulting objective measurements and numerical analysis, which is what quantitative method typically emphasizes on.

With the use of an experimental survey approach, this will be effective to gather data from a large number of respondents with the same method of gathering for all participants (Matthews & Ross, 2010). Due to the deficiency of studies regarding the relation between the content characteristics of Instagram content with the user's intended posting behavior and posting frequency on Instagram, on an experimental setting, the researcher will be able to test the idea in a controlled environment, which is the best way to test the theory. This method will also allow for the dependent variable to be better attributed to most of the independent variable by the exclusion of any external influences (Neuman, 2014). Furthermore, this method will ensure the stimulus connected with the independent variable is measured before the measurement with the dependent variable through a pre-test and further with a manipulation check. In addition to that, previous studies with the concept of Instagram content (Hu, Manikonda & Kambhampati, 2014), Instagram's impact on social comparison (Sheldon & Bryant, 2015; Jiang & Ngien, 2020) and social media's effect on subjective well-being (Wirtz, Tucker, Briggs & Schoemann, 2021) have mainly been conducted through a quantitative method, hence this method is presumably ideal to examine the concepts of this study.

In order to gather a large amount of data in a more efficient way, an online survey was distributed. Surveys are known as a useful tool to gather people's opinions (Matthews & Ross, 2010). Therefore, it was considered an appropriate tool to measure and assist in answering the research question as the experiment itself is to collect and examine people's opinions on how the stimulus effects their intended posting behavior, including discovering which content characteristics may influence the dependent variables. Furthermore, this statistical method will help ensure an accurate presentation of information and observations (Gravetter & Wallnau, 2017). Although surveys have the advantage of collecting large data in a short amount of time and at an inexpensive cost, for online surveys in particular, it also comes with several disadvantages such as the participants' willingness to participate in the questioner. Since participating in the questioner is not mandatory, data is collected only relying on the participants willingness. Furthermore, the accuracy of the answers given by the participants can also be considered as a drawback, as some participants might want to finish quickly, which would ultimately result in providing a perfunctory answer. In addition to that, although the online setting has enabled participants to access the questioner anytime and anywhere, this may also come as a disadvantage as participants can leave anytime during the survey process which could be caused by distraction or a loss of interest in the questions and questionnaire in particular.

Keeping in mind several disadvantages of a questionnaire, when creating a questionnaire, aspects such as aesthetics and question order need to be taken into account in order to attract future participants. A reasonable amount of time must be put into creating and arranging the questions in a logical order such as placing simple questions in the beginning and grouping similar themed questions together. An introduction to mark the start of a survey will also come in useful to enhance the survey flow and to further maximize the response rate. Questions that are too lengthy may become a burden for several participants, therefore it is highly recommended to keep questions short and clear. The overall questionnaire itself must be kept short, logical and is not time consuming. To ensure the flow of the questionnaire was clear, the survey designed for this study was tested on a pilot test. A pilot study is typically done before the wide distribution of the survey and is conducted to ensure there are no spelling errors, any ambiguous questions or other factors that may hinder the completion of the survey (Punch, 2003). The pilot questionnaire was shared to a small sample of the target population in a controlled setting, in which the errors collected were revised according to the pilot test results.

Within the survey itself, participants were asked questions about themselves, their Instagram usage and their attitudes towards aspects of social comparison and subjective well-being which was further divided into life satisfaction and positive and negative affect. As a way to produce meaningful insights from the participants, several criteria were also taken into account. For instance, each participant was given the same set of questions in the same order to ensure a more accurate scientific information collected from the participants. Since the experiment is between-subjects, each participant was given a random stimulus and the stimulus were made sure to be equally divided. By randomly assigning each participant with a condition, it increases the probability of an equal condition distribution. Furthermore, the survey question included several personal aspects of the participant's life such as social comparison, life satisfaction and positive and negative effects. Therefore, the use of valid scales was important to prove the reliability of the data.

The survey was meant for only Indonesian male Instagram users. Since the target were Indonesians, the online survey was provided in Bahasa Indonesia. It was important to ensure the scales were translated from English to Indonesian with similar understanding to decrease the probability of a misunderstanding. The Satisfaction with Life Scale had been previously translated and used by another Indonesian researcher; thus, the previous translation was used for this research. As for the other two scales, the researcher translated each scale from English to Bahasa Indonesia. To confirm the validity of the translation, the researcher then shared the translated Bahasa Indonesia version to another Indonesian and English native speaker to translate back to English. The Bahasa Indonesia to English translation was compared with the original English scales and resulted in similar meanings and interpretation, therefore it was used in the questionnaire. However, in the case of the Positive and Negative Affect Schedule scale, within the questionnaire, the English words were provided in italics next to each Bahasa Indonesia words to ensure a misunderstanding does not occur and to emphasize the meaning of the word as several English words that displays similar meanings tend to be translated into one word in Bahasa Indonesia.

Moreover, it was predicted that the majority of respondents would be those coming from the city center, according to the number of its population. Therefore, on the demographics section of the survey, Indonesia's capital city was combined with cities around it, hence it was written as Jabodetabek also known as Jakarta, Bogor, Depok, Tangerang, Bekasi. This was purposefully done as these cities are connected between one other and the possibility of each individual living in one city and commuting to another on a

daily basis is very likely. In addition to that, it was familiar in the Indonesia setting that these cities were put into one category.

Since the study implemented the S-O-R method, the stimulus consisted of images that feature the content characteristics of visual cues and masculinity traits resulting into nine conditions. The study involved a between-subjects experimental design which includes individual-family, individual-career, individual-money, group-family, group-career, groupmoney, object-family, object-career, object-money. Each condition were a combination of visual cues and masculinity traits. Initially, the stimulus was chosen from the hashtags related to the image, however, in a personal setting most users avoid the use of hashtags on Instagram. The nine conditions were actual photos from real Indonesian Instagram users. The photos were submitted by several people who fit the criteria of the respondents. This process was to ensure the researcher had no bias on the images selected. Once a photo that matches the content characteristics were chosen, the photo owner was asked to give permission to use the photo on the questionnaire by stating "I consent the usage of my (selected) Instagram photo for this questionnaire". Each stimulus gathered three alternative images and was further tested to several participants to choose which fit the criteria the most. Furthermore, the questionnaire provided questions on the photo characteristics for manipulation check.

The final nine conditions consisted of a photo of a man holding a photo of an ultrasound suggesting that he is a father-to-be for the family-individual stimulus. The individual-career condition showcased a photo of a man speaking in front of a crowd wearing a suit. The individual-money condition included a photo of a man next to his car. The group-family condition includes a photo of a small family having fun together. The group-career condition displays a group of individuals in front of a well-known company in Indonesia. The group-money condition included an image of a group of friends on vacation overseas with a helicopter. The object-family condition displays an image of a collection of ultrasound pictures. The object-career condition included an image of an award for best sales. The object-money condition shows a photo of a watch and a car.

After the stimuli collection, a pilot testing phase was conducted to ensure no difficulty or ambiguity in completing the survey (Punch, 2003). The Survey was provided only in Bahasa Indonesia using Qualtrics. When the survey was considered ready to publish, the link to participate in the survey was made available online. To establish a wider population and to boost the process of data collecting, the survey was spread through several

social media platforms such as Instagram, Facebook, Twitter, LinkedIn and also broadcasted on communication apps such as WhatsApp.

Before beginning the questionnaire, participants were welcomed with an introduction where a short explanation of the purpose of the study was mentioned. The introduction also affirmed to the participants that all data will be kept confidential and no sensitive data such as name, phone number or email will be required to fill the questionnaire. Continuing past the introduction section indicates that participants have agreed to participate in the questionnaire. After the introduction section, participants were asked to fill their demographic data which included gender, age, nationality, residence area, occupation and marital status as well as whether they use Instagram or not. During this stage, participants who were women, men who does not use Instagram, men with a foreign nationality, and men under the age of 18 years old were automatically directed to the end of the survey. The first four questions were used as filter questions. Participants who fit the criteria then continued with the survey by viewing the stimuli. Since the stimuli includes nine conditions, each participant was randomly assigned to one of the nine conditions. The survey was followed by the social comparison scale, life satisfaction scale and positive and negative affect schedule scale with a short introduction before each scale. The survey took no longer than 7-minutes to finish.

With online questionnaires, the responses were automatically sent into a computer database. In this case, after the data collection process using Qualtrics, the data was exported from Qualtrics and analyzed using the statistical software SPSS. Using SPSS allowed the process of data to uncover a possible connection between variables. In this case the measurement of to what extent certain content characteristics influences the intended posting behavior through social comparison and the two-components of subjective wellbeing—life satisfaction and positive and negative affect. When the responses were collected, certain problems such as data entry errors or incomplete and missing data fields were found in the database. By using SPSS, data with any missing fields or errors can be deleted to generate the database that best fit with criteria of the study. In this case, data with missing fields were excluded from the final database, aside to that, data entry recorded below one minute were also excluded as it may come from errors or filled in by a computer. After the data cleaning process, the database was ready to be processed using two-way ANOVA and the regression analysis.

By using existing scales, it was important to test the validity of the scales.

Furthermore, to ensure each item were included in the correct group, a factor analysis for the items of each scale were also processed through SPSS.

# 3.2 Sampling

The aim of this study is to explore the effects of certain content characteristics towards male Instagram user's intended posting behavior through social comparison and subjective well-being. That being said, the unit of analysis for this research only focuses on Indonesian male Instagram users. It is highly recommended that the participants are those who have an Instagram account and have accessed Instagram over the past week. The target participants for this study are specifically Indonesian men above the ages of 18 years old. Previous studies largely focused on adolescents and young adults, therefore the large age group focused for this study will expectantly give a broader set of data. A wide range of participants also means the data will include different social statuses as well as different educational background and occupation status. Aside to age, residential area, education background, occupation and marital status were added into the survey as important variables for establishing the degree of representativeness.

This study implemented a non-probability sampling method, where no predefined selection process took place (Sarstedt et al., 2017). Although the use of non-probability sampling may lack in the generalizability and representativeness of the target population, it enabled the researcher to conduct a wide-spread research with ease and at a lower cost. Furthermore, the snowball sampling method, specifically the virtual snowball sampling method, was implemented to recruit participants that fulfill the sampling criteria. Though this method may be quick in finding samples and cost effective, the disadvantages of using the snowball sampling method is the potential bias and margin of error. Meaning the research may only reach out to group of people with similar backgrounds which may generate conclusive results. However, many scholars have recognized the opportunities of using SNSs as a tool to collect data as many believe it can capture the population that is hard to reach, time-efficient, cost friendly and enables the participants to answer the questions according to the questionnaire design (Baltar & Brunet, 2011). The use of SNSs to recruit participants for this study is considered a principal method as the target sample are those who are active SNS users, specifically Instagram users. Furthermore, the questionnaire is conducted online and was accessible using a link, therefore, a virtual snowball sampling was ideal in this situation.

The use of SNSs aided in contacting and recruiting participants for this study. The principal SNS was Instagram, as it was the main object of study, and the target population must be using this specific platform. However, other SNSs such as Facebook, Twitter, LinkedIn and the communication app WhatsApp were also utilized with emphasis on Instagram usage. The sampling criteria itself included (1) Indonesian men, (2) above the age of 18, and (3) uses Instagram. It is expected that the future participants will most likely fit with the sampling criteria due to the fact that the number of active male users on Instagram is similar to its female counterparts. The interest to participate in this experiment also stems from the user's interest in social media. Seeing as though Instagram has become one of the most used social media platforms in Indonesia, participants were presumably motivated to partake in the experiment and survey due to this matter.

The survey was opened for response collection in a total of two weeks. After the data was deemed sufficient, the survey was closed for responses, disabling participants to partake in the survey. The implementation of the snowball sampling method resulted in a quick data collection process as participants that have completed the survey, were asked to share the survey link to their friends, family and acquaintances. However, because the number of participants decreased over time, it was imperative that the publication of the survey was administered every two days. Due to the large size of Indonesia, it was expected that the target participants will be of those residing in large cities, especially Jakarta and the area around it—where most reside.

To obtain statistical analysis, the sample size would need to be a minimum of 270 participants. Ideally a larger number should be achieved, however, with the number of sample size mentioned above, it can be ensured that at the very least 30 participants will be included in each condition. The group is hoped to be large enough to obtain meaningful data in terms of content characteristic exposure and intended posting behavior. During the data cleaning process, there were a number of responses that did not include any information, which was not possible as each question was mandatory to answer. Therefore, these responses were deemed as errors. However, elements such as error, time spent to finish the survey and any missing field made the data clean-up process possible.

#### 3.3 Measurements

*Instagram use.* In order to measure the variable of Instagram usage, at the start of the questionnaire, participants were asked "*Do you use Instagram*?". Furthermore, participants

were asked to self-report the approximate number of days and hours spent Instagram with the questions "how many days in the past week have you been on Instagram?" and "Approximately how many hours a day do you spend on Instagram?". Alongside that, participants were provided with a Passive SNS Use (PSNSU) scale that consisted of 5-point Likert scales (1- completely not true, 5- completely true) in relation to being an active or passive user of Instagram. The scale was used by Chen, Fan, Liu, Zhou and Xie (2016) to assess passive SNS users, however, for this research, the scale has been adapted to focus specifically on the use of Instagram. This scale was used to determine how active each participant is on Instagram. The scale consists of 5 questions which includes questions such as "I am very active on Instagram", "I often comment on friend's posts", and "I often browse Instagram but don't post updates". Items that were reverse-worded were recoded and the mean score was calculated. A higher mean score indicated an active Instagram use.

Content characteristics. A total of nine conditions were used for this research. Each condition consisted of a combination of masculinity traits that are made up of family, career, and money alongside visual cues which includes a single-person photo, group photos and object photos. The images chosen went through submissions from target participants and were pre-tested by using a 5-point Likert scale to determine how well it represented each condition of masculinity trait and visual cue (1- least representative, 5- most representative). The purpose of the pre-test was to obtain consensus whether each photo represented the characteristics of male masculinity – family, career, and money as well as the visual cue – single-person, group, and object. The photos that received the highest rating for each category were presented in the final questionnaire. To further validate the content characteristics of the photo, after viewing each condition, participants were asked to choose the content characteristics that best fit the photo with the question "what characteristics do you see featured in this photo". The content characteristics presented to choose were "family", "career", "money", "single-person photo", "group photo", and "object photo".

Social Comparison Orientation. The participants' comparison orientation was calculated using the Iowa-Netherlands Comparison Orientation Measurement (INCOM) proposed by Gibbons and Buunk (1999). The scale provided statements about the participant's self-comparison with others. As mentioned by (Schneider & Schupp, 2013) the scale itself "enables us to test the existence and strength of individual variability in social comparison and to analyze its causes and consequences for people's lives" (p. 769). In addition to that, the scale is considered useful in the current study as the scale was originally

created as a way to understand and describe how individuals' social comparison differentiates (Schneider & Schupp, 2013). The scale included 11 items that consisted of a 5-point Likert-type scales (1- I disagree strongly, 5- I agree strongly). The 11 items included questions such as "I often compare how my loved ones are doing with how others are doing" and "I always pay a lot of attention to how I do things compared with how others do things". The items provided in the INCOM scale highlighted the comparison between the individual's abilities and opinion with others. Items that were reverse-worded were recoded before the mean calculations. The participants' overall score of social comparison orientation was calculated by computing the items' average scores. Individuals with a higher mean score has the tendency to compare themselves to others, whereas on the opposite, for those with a lower mean score would represent those with low to no comparison orientation.

Life satisfaction. Satisfaction with Life Scale (SWLS) introduced by Diener et al. (1985) was used to measure the participants' life satisfaction. This scale was designed "to assess a person's global judgement of life satisfaction, which is theoretically predicted to depend on a comparison of life circumstances to one's standards" (Pavot & Diener, 2009, p.103). Furthermore, the use of the SWLS is useful in discovering the psychological construct of an individual's life satisfaction through measuring the cognitive aspect of subjective well-being (Pavot & Diener, 2009). The SWLS itself consisted of 5 items that included "In most ways my life is close to my ideal", "The conditions of my life are excellent", and "I am satisfied with my life". The original scale uses a 7-point Likert scale, however in order to maintain consistency with the other scales used within this study, this scale was then adapted into a 5-point Likert scales (1- strongly disagree, 5- strongly agree). The overall life satisfaction level of the participants was calculated by computing the average scores across the items, with higher mean scores meaning satisfied and lower mean scores meaning dissatisfied.

Positive and Negative Affect Schedule. The positive and negative scale was calculated using the Positive and Negative Affect Schedule scale (PANAS) introduced by Watson, Clark and Tellengen (1988). This scale has been widely used to rate an individual's affect and was designed to measure within various contexts including the individual's present, past or general emotions (Tran, 2013). Additionally, in order to measure an individual's subjective well-being, both cognitive and affective aspects must be taken into account. Therefore, instruments with a focus on the affective aspect such as the PANAS scale should be included in order to obtain a broader construct of subjective well-being

(Pavot & Diener, 2009). The PANAS scale consists of 20 items that includes a number of words that describe different feelings and emotions which comprises of 10 items for Positive Affect (PA) such as "interested", and "excited", and 10 items for Negative Affect (NA) such as "distressed", and "upset". PANAS consisted of 5-Likert scale (1- very slightly or not at all, 5- extremely). The PA and NA was calculated by computing the average overall score across items, with higher scores meaning a higher positive affect and a negative affect with a lower score.

Intention to post. Part of the intended posting behavior, intention to post refers to how likely an individual would post content with similar characteristics as the stimulus. This is important to calculate to what degree has the stimulus influenced the individual's behavior. To calculate the intention to post content similar to the stimuli, after viewing the stimuli, the participants were asked the question "on a scale of 1-5, how likely are you to upload a photo similar to the photo shown above anytime soon?" and was provided a 5-point Likert scale (1- very unlikely, 5- extremely likely). The overall score of intend to post was calculated by computing the participants' scores in average. The score will allow us to determine which content characteristics will likely be uploaded by the participants, with a higher mean score implying most likely to post and the opposite for a lower mean score.

Frequency to post. Part of the intended posting behavior, frequency to post refers to how often an individual would post content similar to the characteristics of the stimulus. To calculate how frequent the participants would likely to post a similar image to the stimuli, participants were asked the question "if you have the chance, how often would you post photos similar to the photo shown above?" and was given a 5-point Likert scale (1- very rarely, 5- always). The overall score of the frequency to post was calculated by computing the participants' scores in average. The score will also allow us to determine which content characteristics will likely be uploaded more frequently than others.

Demographic information. Demographic background enables a better understanding of certain background characteristics of the participants. Specifically in this study, participants were asked their age, occupation, marital status, educational degree and their current area of residence. Questions regarding their gender, usage of Instagram and nationality were included at the beginning of the survey as filter questions, in which those who do not fit the criteria of target sample were immediately directed to the end of the survey.

#### 3.4 Limitations, validity and reliability of the survey

When conducting a research, in spite the fact that all measures were taken into account, there is still no perfect research, especially when conducting research related to the psychological aspects of human beings. The validity of the survey may be questioned due to the self-reported responses, as these responses may not be completely true and may be difficult to affirm its validity. However, since the scales used within the current study has been previously tested and used by other scholars, it increases the survey's validity. Similarly in terms of reliability, the use of previously tested scales has increased the reliability of the survey.

However, there are several limitations in the use of existing surveys. When the participants were exposed to the stimulus, it was expected that the responses in social comparison and subjective well-being would be at their current state. However, the questions provided within the scales used terms that specifically mention the general orientation of everyday life of the individual instead of their current state. Since the questions are more general about how often they engage in social comparison as well as life satisfaction and positive and negative affect, therefore, the data collected might not portray specific effects of the stimuli. Which implies that the scales might not be able to measure immediate effect. Nevertheless, it was pointed out within the introduction of the scales that participants must answer the questions based on their current situation or feelings.

Another limitation to mention is the use of the stimulus as each condition might have a different meaning depending on the individual exposed to the image. In order to decrease the ambiguity of the stimulus, each condition was tested before the survey was distributed. Furthermore, an additional question on the characteristics found in the stimulus was included in the survey for further validation of the content characteristics displayed in the stimulus.

The experimental survey designed for the current study was operationalized using reliable tested scales in line with the objective of the research which is the social comparison scale, life satisfaction scale, and the positive and negative affect schedule scales. Though the survey may not be perfect and may have several other limitations specifically in the area of data collecting method and the self-reporting method, this survey is still considered valid and reliable.

## 3.5 Ethical consideration

There were no risks in participating in the current study. The participants were

## Are you inspired or desirous of others on social media?

explicitly informed from the beginning of the questionnaire that no personal information such as name, phone number or emails would be needed. Furthermore, information such as IP address or any information that may hold the true identity of the participants will also be eliminated from the dataset in order to maintain the participant's privacy. By continuing past the introduction page, the participants have agreed and gave consent to partake in the study. Furthermore, after collecting the responses, the database was downloaded directly from Qualtrics and is only available to view by the researcher.

#### 4. Results

The results of the data analysis will be presented in this chapter. A series of data analysis such as multiple regression analysis, hierarchical regression analysis and several two-way ANOVA tests were conducted to calculate the previously mentioned hypotheses.

#### 4.1 Sample

A total of 415 responses were recorded for this research. After the data cleaning, N = 320 were included in further analysis. The data was cleaned to only male Instagram users and had an average age of 30.2 (SD = 5.97). Since the target participants are Indonesian, the participants stated their current whereabouts with the majority of 249 (78%) respondents from Jabodetabek, 23 (7.2%) from Bandung, 13 (4.1%) from Bali, 8 (3%) from Yogyakarta and surprisingly 17 (5.3%) respondents from overseas also contributed a sufficient number of participants. The latest education level received by the participants were 208 (65%) respondents with a bachelor's degree, followed by 45 (14%) with a high school diploma and 34 (11%) with a master's degree. There was a nearly even number in terms of marital status with 152 (48%) respondents already married and 167 (52%) respondents not yet married. The participants' average day spent on Instagram per week was 6.92 days (SD = 1.98) and the average time spent per day was 3 hours (SD = 4.95).

#### 4.2 Reliability of measurement

The scales used for the current study has been previously tested in earlier studies, however, in order to ensure each scale's item were grouped together correctly, a factor analyses were conducted followed by reliability checks for several scales. Before the factor analysis and reliability checks were executed, the a priori was checked which included each scale contained at least three items, the variables are at a continuous level, and an adequate sample size of a minimum 150 sample. The factor analysis for each scale is reported below:

Instagram use. The 5 items which were Likert scale based were entered into factor analysis using the Principal Components extraction with Varimax rotation with fix number of factors (= 1.00), KMO = .66,  $X^2$  (N = 320, 10) = 347.27, p < .001. The resultant model explained 46.7% of the variance in Instagram usage. Items loaded onto one factor with an Eigenvalue > 1.00. The reliability for all items of the unidimensional scale was then tested revealing a Cronbach's  $\alpha$  of .71.

Social comparison orientation. The 11 items which were Likert scale based were entered into factor analysis using the Principal Components extraction with Varimax rotation with fix number of factors (= 2.00), KMO = .78,  $X^2$  (N = 320, 55) = 911.22, p < .001. The resultant model explained 48.1% of the variance in comparison orientation. Factor loadings of individual items onto the three factors found are presented in Table 4.1. The factors found were in accordance with the existing literature. The factors presented were labelled below:

*Ability*. The first factor included six items related to comparing oneself with the ability of others.

*Opinion*. The second factor included four items related to comparing oneself with the opinions of others.

Table 4.1. Factor analyses for scales under social comparison orientation use (N = 320).

Items	Component	
items	Ability	Opinion
Answer each question with which suits you the most.		
I often compare how I am doing socially (e.g., social skills, popularity) with other people.	.78	-
I am not the type of person who compares other with others.	.75	-
I often compare myself with other with respect to what I have accomplished in life.	.75	-
If I want to find out how well I have done something, I compare what I have done with how other have done.	.60	-
I often compare how my loved ones (boy or girlfriend, family members, etc.) are doing with how others are doing.	.60	-
I never consider my situation in life relative to that of other people.	.33	-
I often try to find out what others think who face similar problems as I face.	-	(.81)

I always like to know what others in a similar situation would do.	-	(.79)
If I want to learn more about something, I try to find out what others think about it.	-	(.65)
I often like to talk with other about mutual opinions and experiences.	-	(.59)
I always pay a lot of attention to how I do things compared with how others do things.	-	(.44)
$\mathbb{R}^2$	.31	.17
Cronbach's α	.73	.72

Life satisfaction. The 5 items which were Likert scale based were entered into factor analysis using the Principal Components extraction with Varimax rotation with fix number of factors (= 1.00), KMO = .82,  $X^2$  (N = 320, 10) = 396.90, p < .001. The resultant model explained 53.3% of the variance in life satisfaction. Items loaded onto one factor with an Eigenvalue > 1.00. The reliability for all items of the unidimensional scale was then tested revealing a Cronbach's  $\alpha$  of .77. This indicates that the scale has a good reliability.

Positive and negative affect scale. The scale's reliability consistency demonstrates the range of .86- .90 for the positive affect and .84 - .87 for the negative affect (Watson, Clark & Tellegen, 1988). Participants were asked to rate the scale based on their current emotion after viewing the stimulus. The 20 items which were Likert scale based were entered into factor analysis using the Principal Components extraction with Varimax rotation with fix number of factors (= 2.00), KMO = .89,  $X^2$  (N = 320, 190) = 2023.33, p < .001. The resultant model explained 48% of the variance in positive and negative affect. Factor loading of individual items onto the two factors are found presented in Table 4.2. The factors found were accordance to the labelled scale by Watson, Clark and Tellegen (1988) explained below:

*Positive affect (PA)*. The first factor included ten items related to positive feelings and emotions.

*Negative affect (NA)*. The second factor also included ten items related to negative feelings and emotions.

Table 4.2. Factor analyses for the Positive and Negative Affect Scale (N = 320)

Linna	Component		
Items	PA	NA	
Indicate to what extent you feel this way			
Enthusiastic	.77	-	
Strong	.77	-	
Proud	.74	-	
Active	.74	-	
Inspired	.73	-	
Determined	.71	-	
Excited	.68	-	
Interested	.68	-	
Attentive	.67	-	
Alert	.47	-	
Afraid	-	.74	
Jittery	-	.72	
Upset	-	.71	
Scared	-	.71	
Nervous	-	.67	
Distressed	-	.64	
Ashamed	-	.63	
Guilty	-	.61	
Irritable	-	.56	
Hostile	-	.55	
$\mathbb{R}^2$	.29	.19	

Cronbach's  $\alpha$  .88 .86

#### 4.3 Content characteristics and social comparison

A two-way analysis of variance (ANOVA) was conducted to test the primary hypotheses: examining the relationship between different content characteristics with social comparison and also to conduct an interaction effect between the content characteristics. The social comparison score was the criterion, and the predictors were visual cues and masculinity traits. ANOVA revealed an insignificant interaction between visual cues, masculinity traits and social comparison, F(4,311) = .63, p = .640.

A simple main effects analysis showed that social comparison was more significantly influenced by visual cues (p = .010) than by masculinity traits. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the single-person photo condition (M = 3.07, SD = .54) is significantly different from the group photo condition (M = 2.84, SD = .55). However, the object photo condition (M = 3.00, SD = .55) did not significantly differ from the single-person photo condition.

Based on the results of the ANOVA test, H1a: Social comparison is positively influenced by portraits of an individual person in frame is accepted. However, H1b: Social comparison is positively influenced by portraits of a group of people in frame and H1c: Social comparison is significantly influenced by portraits of an object is rejected.

When it comes to the content characteristics of masculinity traits, all three traits, family, career and money have to significant influence with social comparison. Therefore H2: social comparison is influenced by content of the (a) family, (b) career, and (c) money masculinity trait was rejected. Despite the fact that there was no statistically significant relationship between social comparison and the three masculinity traits, the career trait seems to have a slightly larger effect when combined with the single-person photos and group photos compared to the other traits.

Figure 2 visually represents the relationship between content characteristics and social comparison. From the figure, it can be observed that the visual cue of group photos did not cause the participants to engage in a higher social comparison. However, when it comes to content characteristics with single-person photo and object photos, the social comparison score was higher. Although interesting to find that content characteristic of money has the least effect on social comparison expect when combined with the content characteristics of an object photo, the interaction effect is still found to be slightly insignificant.

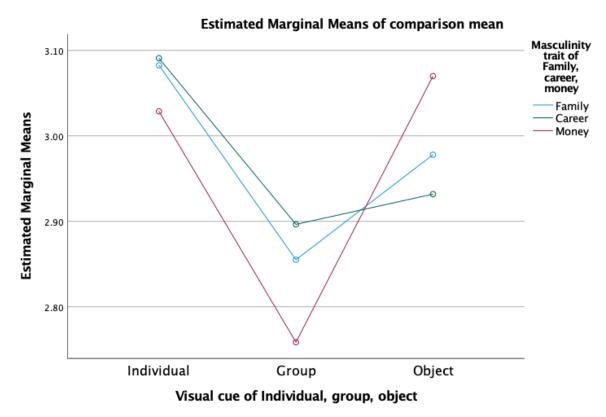


Figure 4.1. Interaction effect between visual cues and masculinity traits

## 4.4 Social comparison influences subjective well-being

In order to test the relation between social comparison and subjective well-being, a regression analysis was conducted with the social comparison score as the predictor with the subjective well-being score separated between life satisfaction and the positive and negative affect score.

When the average social comparison score ( $\beta$  = -.12, p = .032) was used as a predictor, and the life satisfaction score as the criterion, the model reached significance,  $R^2$  = .01, F(1,318) = 4.66, p = .032. This linear regression analysis showed that social comparisons are predictors of life satisfaction. Therefore H4a: life satisfaction is positively influenced by social comparison was accepted.

When the average social comparison score ( $\beta$  = -.11, p = .048) was used as a predictor, and the positive and negative affect score as the criterion, the model reached significance,  $R^2$  = .01, F(1,318) = 3.93, p = .048. The linear regression analysis showed that social comparisons are predictors of positive and negative affect. Therefore H4b: Affective well-being is positively influenced by social comparison was accepted.

## 4.5 Subjective well-being influences posting intention

In order to test the relation between aspects of subjective well-being with posting intention, a regression analysis was conducted with subjective well-being separated into life satisfaction and positive and negative affect as the predictor and the posting intention score as the criterion.

When the average life satisfaction score ( $\beta$  = .12, p = .040) was used as a predictor, the model reached significance,  $R^2$  = .01, F(1,318) = 4.25, p = .040. The linear regression analysis showed that life satisfaction is a predictor of posting intention. Therefore H5a: Posting intention is positively influenced by life satisfaction was accepted.

When the average positive and negative affect score ( $\beta$  = .14, p = .010) was used as a predictor, the model reached significance,  $R^2$  = .02, F(1,318) = 6.76, p = .010. The linear regression analysis showed that positive and negative affect is a predictor of posting intention. Therefore H5b: Posting intention is positively influenced by positive and negative affect was accepted.

Furthermore, in terms of posting intention, several content characteristics were found to have a higher chance of being posted than others. Characteristics with group-family (M = 3.05, SD = 1.20) have the highest chance of posting intention, followed by group-career (M = 2.90, SD = 1.12) and individual-family (M = 2.60, SD = 1.20). Figure 3 visually represents the mean scores of posting intention

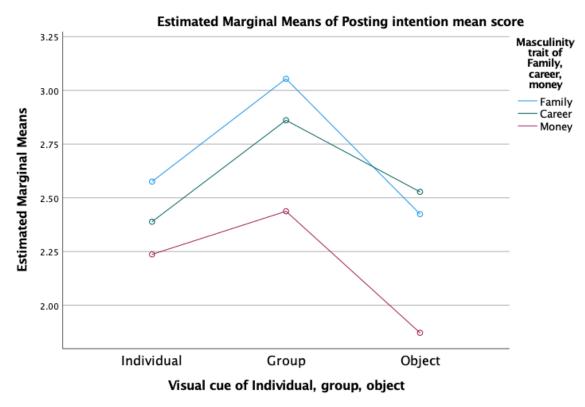


Figure 4.2. Mean scores for intention to post of the content characteristics.

#### 4.6 Subjective well-being influences posting frequency

In order to test relation between subjective well-being and posting frequency, a regression analysis was conducted with subjective well-being separated into life satisfaction and positive and negative affect as the predictor and the posting frequency score as the criterion.

When the average life satisfaction score ( $\beta$  = .07, p = .209) was used as a predictor, the model was not significant,  $R^2$  = .01, F(1,318) = 1.58, p = .209. The linear regression analysis showed that life satisfaction is not a predictor of posting frequency. Therefore H6a: Intended posting frequency is positively influenced by life satisfaction was rejected.

When the average positive and negative affect score ( $\beta$  = .12, p = .036) was used as a predictor, the model was found significant,  $R^2$  = .01, F(1,318) = 4.44, p = .036. The linear regression analysis showed that positive and negative affect is a predictor for intended posting frequency. Therefore H6b: Intended posting frequency is positively influenced by positive and negative affect was accepted.

Similarly, to the posting intention, the posting frequency also shows a lower probability of frequently posting images that contain the characteristics of object-money. Content with a higher probability to be posted frequently appears to be the same with the

intended posting behavior with group-family (M = 2.50, SD = 1.30), followed by group-career (M = 2.31, SD = 1.10) and individual-family (M = 2.30, SD = .80). Figure 4 visually represents the mean scores for posting frequency.

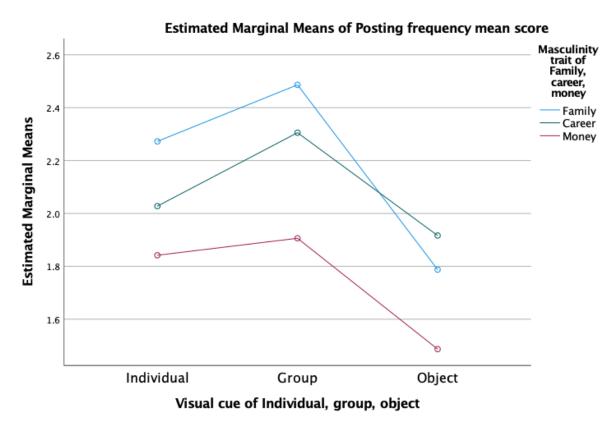


Figure 4.3. Mean scores of posting frequency of content characteristics.

#### 4.7 Summary of rejected and accepted hypotheses

Figure 5 shows the standardized regression coefficients for the relationship between social comparison, subjective well-being and the intended posting behavior.

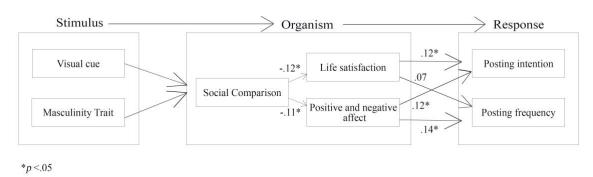


Figure 5. Standardized regression coefficients

The ANOVA test and regression analyses were conducted to verify the hypotheses

formulated from previous studies. The summary of the hypotheses that are accepted and rejected can be found below:

	Hypotheses	Accepted	Partially accepted	Rejected
H1a:	Social comparison is positively influenced by portraits of a single person in frame.	V		
H1b:	Social comparison is positively influenced by portraits of a group of people in frame.			V
H1c:	Social comparison is significantly influenced by portraits of an object in frame.			V
H2a:	Social comparison is negatively influenced by content of the family masculinity trait			V
H2b:	Social comparison is negatively influenced by content of the career masculinity trait.			V
H2c:	Social comparison is negatively influenced by content of the money masculinity trait			V
Н3:	Content characteristics of Masculinity traits and visual cues have an interaction effect.		V	
H4a:	Social comparison influences the participants life satisfaction negatively	V		
H4b:	Social comparison influences the participants positive and negative affect negatively			V
H5a:	Participants with a higher life satisfaction has greater intention to post similar content	V		

# Are you inspired or desirous of others on social media?

H5b:	Participants with a higher positive affect score has greater intention to post similar content	V	
Н6а:	Participants with a higher life satisfaction has lower intention to post frequently		V
H6b:	Participants with a higher positive affect score has greater intention to post frequently	V	

To conclude this chapter, the data collected for this paper has led to several interesting results as some hypotheses were accepted, partially accepted and rejected. The findings of the data analysis of this chapter will be explained in further details on the next chapter.

#### 5. Conclusion

The current study aims to investigate the relationship between exposure of certain content characteristics such as visual cues and masculinity traits, with users' posting intention and posting frequency on Instagram through social comparison and subjective well-being using the S-O-R method. This chapter will discuss the main findings of the research and its implications towards existing theories and studies. Furthermore, the limitations of the research and suggestions for future studies will also be discussed within this chapter.

#### 5.1 Discussion

A total of nine conditions were used as a stimulus in this study. The response aimed were the individual's posting intention and intended posting frequency through their organism which constructed of social comparison and subjective well-being. To conclude, the study did find that several content characteristics influences social comparison and subjective well-being which may also effect the users' posting behavior in terms of intention to post and intended posting frequency on Instagram. The findings further confirm the value of studying the effects of contents on social media with the user's well-being and further with the effects leading these individuals to share contents with similar characteristics on Instagram.

The current study found the content that has a significant effect on an individual to engage in social comparison are photos that contain single-person photos, compared to photos of a group of people or objects in general. Group photos were considered to be the least to influence social comparison. It was interesting to find that by viewing photos of a single person in the photo, participants were more likely to engage in social comparison compared to the other content characteristics. This may be related to Instagram's nature where each person has the ability to create and design their own profile in line with their personality or the personality that they want other people to believe. This may lead individuals to sharing and viewing photos of others as an individual compared to as a group when it comes to the personalized profiles.

Furthermore, although images featuring masculinity traits did not show a significant influence in social comparison, most people found that images of career have a slightly noticeable impact compared to images of family and money. The findings of this study shows that individuals are least impacted by viewing the family of others on Instagram.

However, when it came to intended posting behavior, images that portray the characteristics of family was more likely to be shared by the participants.

In relation to social comparison and subjective well-being. The current study found that the individual's social comparison score influences their subjective well-being. In this case, individuals who has the tendency to compare themselves to others or engage in a higher social comparison may lead to a lower score of life satisfaction, which is in line with several findings from previous literatures. Similarly, the same significant results were found on the effect of social comparison towards the individual's positive and negative affect. A more negative affect would occur to those who engages in a higher social comparison orientation. While those who have a lower social comparison orientation will result in a more positive affect. This concludes the relation of social comparison orientation with an individual's overall subjective well-being. In this case, in can be concluded that when Indonesian men engage in social comparison, it influences their subjective well-being depending on the orientation of their social comparison.

When it comes to posting intention, the current study aimed to find the relation between subjective well-being towards intention to post images with similar content characteristics portrayed in the stimulus mentioned within this study. Subjective well-being appears to have an influence on the intention to post these similar images. Although the influence was not significantly high, it can be assumed that those who have a higher satisfaction towards their life has a higher probability to post similar contents. Likewise, for those with a high positive affect score also has a higher probability to post similar content characteristics online. As for those with a negative affect score, the current study found that a higher negative affect score would prefer not to post something similar or not to post anything in general. However, it is interesting when we look into the results of posting frequency, as life satisfaction is not a significant predictor for posting frequency, whereas a positive affect is a significant predictor for posting frequency. With this finding, it can be concluded that Indonesian men who are Instagram users would post more frequently when they feel emotionally positive, perhaps during a happy event in which they would like to share to others on social media.

Finally, to answer the research question to what extent does content characteristics portraying visual cues and masculinity traits influence the frequency and similarities in content posting behavior on Instagram through social comparison and subjective well-being, amongst Indonesian men? By using the S-O-R method, it can be concluded that only content

characteristics that portray visual cues have an effect on social comparison. Furthermore, social comparison has been revealed to have an effect on the individual's subjective well-being and intended posting behavior despite the fact that the effect is small. Though the research needs to be explored further, the results are hoped to give a comprehensible view into the minds of Indonesian male Instagram users.

## 5.2 Findings

The current study was conducted through a quantitative research method, specifically an experimental survey with an aim to confirm and contribute to existing literatures. Using the S-O-R Method, the study investigated the influence of certain content characteristics towards the individual's social comparison and subjective well-being, and how these may engage in a behavioral response. Furthermore, we explore which direction these exposure and emotional response would influence the individual in terms of intention to post similar contents and intended posting frequency.

#### 5.2.1 The relation between content characteristics and social comparison

Content characteristics in this study is divided into two characteristics which includes visual cues and masculinity traits. Each characteristic resulted in three features, single-person photo, group photo and object photos for visual cues and family, career and money for masculinity traits. The current study tested which content characteristics have more influence on an individual's social comparison. With visual cues, it was found that only photos portraying image with a single-person have a higher probability to influence social comparison. Although object photos came after the single-person photo, it was still found to be insignificant. Furthermore, visual cues portraying group photos were the farthest from influencing an individual to engage in social comparison.

This study expected to find influence from the use of group photos considering the target participants come from a country that has a thick collectivist culture. Although social comparison is more likely to occur in an environment that appreciates group connection (Baldign & Mussweiler, 2018), the findings suggest that photos portraying the visual cue of group photos does not have a significant influence in social comparison. Meanwhile, image of a single-person-photo has more influence perhaps due to the nature of Instagram itself. Furthermore, object photos have more influence compared to group photos. One underlying factor for this may come from the culture itself, since the target sample comes from a

collective culture, viewing photos of people in groups may be something that is considered common. Therefore, viewing content that does not depict multiple people may have more of an effect compared to viewing photos of groups of people, especially a group people that are not familiar.

The lack of difference would demonstrate that certain visual cues such as the images of objects and the images of a groups of people is not a predictor for social comparison when scrolling through Instagram. As mentioned in the previous chapters, social media has become a tool for individuals to create self-presentation (Lup, Trub & Rosenthal, 2015), as it allows them to create personas based on their desirable traits that could not be possible on an offline setting (Gonzales & Hancock, 2011). This may be the underlying factor that influences what others are also looking for when scrolling through social media, and how it influences their social comparison.

Three conditions in the masculinity traits which includes portrayal of family, career and money, did not show any significant influence towards social comparison. It was expected that all three would influence individuals negatively, especially since findings by De Vierman, Cauberghe and Hudders (2017) suggests that the portrayal of an individual's income and luxury may negatively affect one's self-esteem due to social comparison. Although all three images did not pose a significant influence in social comparison, it was discovered that images with the traits of career and money have more impact on participants compared to images with the traits of family. Interestingly however, when it came to the frequency of viewing images, those who viewed the stimulus of object-money expressed that they are often exposed to similar contents online but never want to post something similar to the images of object-money.

Individuals when exposed to images that are exaggerated by the image owner have the tendency to engage in social comparison (Vogel et al., 2014). Social comparison typically leads to an upward or downward social comparison (Festinger, 1984). However, findings in this research suggest that images of masculinity do not influence social comparison. This finding implies that the sample did not find the stimulus too exaggerated for them to engage in social comparison and could possibly mean the sample participants feel they are in the same level as the individuals and the activities portrayed in the stimulus.

When it comes to the interaction effect between the two content characteristics, all conditions were included in an interaction test and found that the interaction was partially significant. The images that specifically portrayed the visual cue of objects are those with

the highest interaction effect, where objects combined with the trait of family spiked and objects combined with career was the lowest.

Furthermore, the insignificant effect of the content characteristics within this study can also originate due to the nature of SNSs itself. Specifically with Instagram, users are able to scroll through their homepage and explore other pages without running out of content to view. This phenomenon could also result in people mindlessly viewing online content without processing every content that are exposed to them.

## 5.2.2 The effects of social comparison with subjective well-being

A study by Brown and Tiggemann (2016) has found that the effect of image exposure on Instagram for users is usually mediated by social comparison. This study expects to find a significant influence between social comparison with life satisfaction and positive and negative affect after the viewing of certain Instagram content. With regards to social comparison as the predictor for life satisfaction, as expected, an individual's social comparison orientation has a significant influence on life satisfaction. Previous theories on social comparison and life satisfaction have been inconsistent with the result, Liu and LaRose (2008) suggests that the use of SNSs may generate a positive impact towards life satisfaction, however, a study by Lee (2020) suggests otherwise, where the more upward comparison happens, the lower the life satisfaction will be. This research has also found that those with a higher social comparison score will have a lower life satisfaction score.

Social comparison has been made easier with the growth usage of SNSs, people have the ability to view other people's life in a click of button. Furthermore, the ability to portray ones' life in a form of audio visual has made it difficult for users to understand what goes on behind the screen. Certainly, this situation has enabled users to think that others' life is better than theirs, which is in line with the result of this study that suggests a lower life satisfaction when engaged with more social comparison. Furthermore, the stimulus used for this research is intended to generate a higher social comparison score, as the photos used may have the tendency for individuals to engage in an upward social comparison.

In terms of positive and negative affect, this study found that an individual's social comparison orientation may influence their positive and negative affect. Similar to the findings for the influence of social comparison towards life satisfaction - individuals who have a higher social comparison score will likely engage in more of a negative affect compared to positive affect. The research results are in accordance with the findings of

Bazner, Bromer, Hammelstein and Meyer (2006) which found that individuals who engage in an upward social comparison will likely decrease in positive affect. The result of this research is also in line with the previous study by Wirtz et al. (2020) that mentioned the effect of social comparison towards subjective well-being in the form of negative affect and positive effect, however, they also mention that social comparison is more likely to influence negative affect compared to positive affect.

## 5.2.3 The relation of subjective well-being with intended posting behavior

Previous studies have focused on several things that may influence an individual's online posting behavior. As mentioned by Lee, Lee, Moon and Sung (2015), the most popular motives to upload photos online is to record daily activities, others have also suggested that social pleasing is another motive to posting online (Oeldorf-Hirsch & Sundar, 2016). Zhang and Baker (2018) emphasized on the individual's subjective norm as being another factor of posting behavior. For that, this research looks into whether an individual's life satisfaction influences their posting intention and found that life satisfaction has a positive influence on posting intention. This supports findings by Teo and Lee (2016) that suggests a positive correlation between posting online with life satisfaction. However, no significant difference was found between age groups, as suggested in findings of Teo and Lee (2016) that the positive correlation can only be found within young adults and the opposite with mature adults.

Contrastingly, when we talk about the influence of life satisfaction and intended posting frequency, this study has found that an individual's life satisfaction does not influence their posting frequency. Based on a study by Panek, Nardis and Auverset (2018), they found that posting frequency is more related to narcissism. This implies that individuals tend to express themselves more to ensure social admiration. With the findings of this study, it can be concluded that although life satisfaction is related to narcissistic, it does not have significant influence how frequently an individual would upload photos online, specifically with similar content characteristics within this study on Instagram.

With the influence of positive and negative affect on posting intention, as expected, it was found that those with a higher positive affect score will be likely to post online content. Several theorists have suggested that an individual's emotion could help create a richer social network and thus contribute to a higher well-being (Salovey et al., 2000). With that in mind, this research has found that individuals with a higher positive affect will more like

post images that are similar to those with the content characteristics explained within this paper.

Although life satisfaction did not influence an individual's posting frequency, however, at a cognitive level, interestingly the positive and negative affect of an individual has a slight significant influence with posting frequency. This research has found that an individual with a higher positive affect may likely post content online more frequently than those who have a higher negative affect. This can be due to the level of happiness the individual is currently experiencing. In line with findings from Teo and Lee (2016), individuals tend to share content online when they have a higher subjective well-being. This would also relate to several research that suggests online social media platforms have become a tool for collecting memories (Zhang, 2019) and uploading daily activities (Lee, Lee, Moon & Sung, 2015), assuming that activities and memories produce positive affect.

Another interesting finding regarding posting frequency is that although visual cues with group photos does not significantly engage users in social comparison, in terms of posting frequency, content characteristics that have multiple people in a photo are more likely to be posted frequently that the other content characteristics. With career being the least likely to be posted frequently, it can be concluded that participants have the tendency to post content that feature an individual's face. Although individuals are more influenced by photos of a single-person in frame, they are more likely to post group photos, which is in line with the collective culture in Indonesia. Furthermore, group photos that feature the trait of family and career have a higher chance to be frequently shared online compared to traits of money.

#### **5.3** Limitations

The current study was conducted with the examination of existing theories and the research method was chosen and conducted based on several methodology that fit best with the topic that is being explored. Nevertheless, like any research, this research also possesses several limitations that should be taken into consideration for future researcher.

As expected, due to the use of the snowball sampling method to gather participants, the majority of sample collected were from those living in the areas of Jakarta, Bogor, Depok, Tangerang and Bekasi also known as Jabodetabek, with the age groups of 24-35 years old dominating the survey sample. This method has made it possible to obtain a large number of samples, however, the distribution of the survey might end it a horizontal

distribution compared to vertical distribution. Meaning, not all population were represented in the data, therefore the data cannot be generalized to represent all regions of Indonesia. However, it should also be taken into account the number of populations residing outside the big cities and how many percent of those population are active Instagram users. Furthermore, since the study was focused on one culture in specific, the data gathered is believed to best represent the thick collectivist culture of Indonesia.

The survey used scales that were proven valid and reliable, several limitations are also found within the survey design. Since the focus of the research were the effects of content characteristics on Instagram, thus the survey only portrayed images that were likely to be seen on Instagram. It should be noted that each individual might have a different interpretation on the image they are seeing. As previous studies would suggest, the usage of captions and hashtags might influence the users as well (Livingston, Holland & Fardouly, 2019), therefore, use of captions to support the images might create a clear context of the image and reduce the misunderstanding of the images. Furthermore, since the experiment focused on Instagram contents, placing the image in an Instagram setting would create a more sense of using Instagram or seeing the image on Instagram. For the current study, the implementation of the images in an Instagram setting wasn't possible due to time constraint.

In line with the theory, an individual's state of subjective well-being might change overtime (Diener et al., 2009). Although the data presented within this research remain valid and reliable, there is no certainty that these findings would not change over time, especially in terms of the nature of SNS itself, as each platforms have different ways of use and the possibility of a new platform taking over Instagram is possible. Furthermore, different age group and statuses could also result in a different outcome.

In terms of the posting intention and posting frequency that is examined within the current study, it is important to note that the posting intentions and frequencies does not always manifest in actual behavior. The aim was to understand which content characteristics influences the participant's behavioral response. Furthermore, this research was focused on the specific content characteristics as it differs from contents that portray body image or images of celebrity. Instead, the stimulus used were photos that has a high visibility rate by Indonesian users when scrolling through Instagram. Therefore, the posting intention and frequencies are related to contents that are similar to the ones presented in this study.

## **5.4 Suggestions for future research**

In spite the limitations of this research, the results presented in the research still possess possibilities to be further developed. In general, the study is in accordance with several findings related to exposure of social media contents towards social comparison and subjective well-being. However, the area of posting behavior and posting frequencies and its relation to the individual's subjective well-being state needs to be explored further. For instance, this research found a significant influence between an individual's positive and negative affect score with their posting intention, perhaps this can be further explored into understand the types of images that are shared in this condition. Similarly, the influence of positive and negative affect score with users' intended posting frequencies could be further explored. Furthermore, a different path on content exposure towards the user's behavioral response could also be explored. Moreover, in relation to previous studies that have discussed the motives behind uploading images on social media, a focus on the content characteristics that are being uploaded should also be put into consideration.

In addition to that, to add a more sense of scrolling through Instagram for the participants, it would then be interesting to portray the conditions in an Instagram setting. Moreover, considering the nature of Instagram itself, users of Instagram are usually provided a caption with the photos that are uploaded. It is assumed that captions will create a better context of the photos. Aside to that, it can be analyzed which influences subjective well-being more in terms of content: the images, the caption, the combination of both or perhaps the number of interactions the content received. In addition to that, since the present study only displayed one condition per participant, it would be ideal to be able to display more than one, so that each participant might be exposed to additional conditions. As each participant might have limited interest in the condition they are exposed to within this research.

By using a quantitative research method, the study relied on the numbers generated by the questionnaire that was distributed to the participants online. However, the scores provided by the participants were mostly self-report which could possibly decrease the reliability of the data. Therefore, to further enhance the outcome of the research, further study should implement a qualitative approach specifically towards the expectations and experiences of individuals using Instagram.

Since the research focused on the population of one country and a specific gender, the male gender, it gave the results a clear and better view on the perspective of content

# Are you inspired or desirous of others on social media?

exposure on social media towards the social comparison and subjective well-being for males in Indonesia. Further research should expand the population and create a comparison between several cultures, in order to further understand whether cultural backgrounds, especially those with an active Instagram use may have different effects.

#### References

- Appel, H., Gerlach, A. L., & Crusius, J. (2016). The interplay between Facebook use, social comparison, envy and depression. *Current Opinion in Psychology*, *9*, 44-49. http://dx.doi.org/10.1016/j.copsyc.2015.10.006
- Aristantya, E., & Helmi, A. (2019). Citra tubuh pada remaja pengguna Instagram [Body image on teens of Instagram]. *Gajahmada Journal of Psychology*, *5*(2), 114-128. http://dx.doi.org/10.22146/gamajop.50624
- Ayun, P.Q. (2015). Fenomena remaja menggunakan media sosial dalam membentuk identitas [Phenomena of teens using social media to create identity]. *Channel*, 3(2), 1-16.
- Baltar, F., & Brunet, I. (2011). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet Research*, 22(1), 57-74. <a href="http://dx.doi.org/10.1108/10662241211199960">http://dx.doi.org/10.1108/10662241211199960</a>
- Barnett, G. (2011). Communication and the evolution of SNS: Cultural convergence perspective. *Journal of Contemporary Eastern Asia, 10*(1), 43-54.

  <a href="http://dx.doi.org/10.17477/jcea.2011.10.1.043">http://dx.doi.org/10.17477/jcea.2011.10.1.043</a>
- Bazner, E., Bromer, P., Hammelstein, P., & Meyer, T.D. (2006). Current and former depression and their relationship to the effect of social comparison processes: Results of an internet based study. *Journal of Affective Disorders*, 93, 97-103. <a href="http://dx.doi.org/10.1016/j.ad.2006.02.017">http://dx.doi.org/10.1016/j.ad.2006.02.017</a>
- Bergmans, R. (2020). The effects of viewing attractive, thin women on Instagram: Investigating the role of realism in young women's body dissatisfaction and appearance comparison.

  (Unpublished master's thesis). Tilburg University, Tilburg, Netherlands.
- Brown, Z., & Tiggemann, M. (2016). Attractive celebrity and peer images on Instagram: Effect on women's mood and body image. *Body Image*, 19, 37-43. http://dx.doi.org/10.1016.j.bodyim.2016.08.007
- Chen, G.M. (1995). Differences in self-disclosure patterns among Americans versus Chinese. *J. Cross-Cult Psychology*, 26, 84-91.
- Chen, W., Fan, C.Y., Liu, Q.X., Zhou, Z.K., & Xie, X.C. (2015). Passive social network site use and subjective well-being: A moderated mediation model. *Computers in Human Behavior*, *64*, 507-514. http://dx.doi.org/10.1016/j.chb.2016.04.038
- Cho, S.E., & Park, H.W. (2013). A qualitative analysis of cross-cultural new media research: SNS use in Asia and the West. *Quality & Quantity*, 47, 2319-2330. http://dx.doi.org/10.1007/s11135-011-9658-z
- Chou, H.T.G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, Behavior, and Social Networking, 15*(2), 117-121.
- Cohen, R., Fardouly, J., Newton-John, T., & Slater, A. (2019). #Bopo on Instagram: An experimental investigation of the effects of viewing body positive content on young women's

- mood and body image. *New Media & Society, 21*(7), 1546-1564. http://dx.doi.org/10.1177/1461444819826530
- Corcoran, K., Crusius, J., & Mussweiler, T. (2011). Social comparison: Motives, standards, and mechanisms. In D. Chadee (Ed.), *The Theories in Psychology*. Hoboken, NJ: Wiley-Blackwell.
- Darwin, C. (1998). *The expression of the emotions in man and animals* (3<sup>rd</sup> ed.). New York: Oxford University Press.
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). How exposure to peers' Portrayal of luxury lifestyles on social media hurts the self. Presented at the 16th ICORIA Annual Conference, Ghent.
- De Vries, D.A., Moller, A.M., Wieringa, M.S., Eigenraam, A.W., & Hamelink, K. (2016). Social comparison as the thief of joy: Emotional consequences of viewing strangers' Instagram posts. *Media Psychology*, 21(2), 222-245. http://dx.doi.org/10.1080/15213269.2016.1267547
- Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95(3), 542-575.
- Diener, E. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302. <a href="http://dx.doi.org/10.1037/0033-2909.125.2.276">http://dx.doi.org/10.1037/0033-2909.125.2.276</a>
- Diener, E. (2006). Guidelines for national indicators of subjective well-being and ill-being. *Applied Research in Quality of Life*, 1, 151-157.
- Festinger, L.A. (1954). A theory of social comparison processes. Human Relations, 7, 117-140.
- Freed, D. (2017). Are you Insta-worthy? A qualitative analysis on the negotiation of Instagram images by college-aged women. (Unpublished master's thesis). University of Florida, Florida, USA.
- Gable, S.L., Reis, H.T., Impett, E.A., & Asher, E.R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87, 228-245.
- Gaol, L.A.L., Mutiara, A.B., Saraswati, N.L., Rahmadini, R., & Hilmah, M.A. (2017). The relationship between social comparison and depressive symptoms among Indonesian Instagram users. Advances in Social Science, Education and Humanities Research, 139.
- Gallinari, E.F. (2018). Facebook: Friend of foe? Exploring the relationship between social media use, social comparison, self-esteem and affect (Bachelor's thesis). Retrieved from <a href="https://vc.bridgew.edu/honors\_proj/287/">https://vc.bridgew.edu/honors\_proj/287/</a>
- Gerson, J., Plagnol, A.C., & Corr, P.J. (2016). Subjective well-being and social media use: Do personality traits moderate the impact of social comparison on Facebook?. *Computers in Human Behavior*, 63, 813-822. http://dx.doi.org/10.1016/j.chb.2016.06.023
- Ghaisani, A.P., Handayani, P.W., & Munajat, Q. (2017). Users' motivation in sharing information on

- social media. Procedia Computer Science, 124, 530-535.
- Gibbons, F.X. (1986). Social comparison and depression: Company's effect on misery. *Journal of Personality and Social Psychology*, 51(1), 140-148.
- Gibbons, F.X., & Buunk, B.P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality and Social Psychology*, 76(1), 129-142.
- Gilbert, D. T., Giesler, R. B., & Morris, K.A. (1995). When comparisons arise. *Journal of Personality and Social Psychology*, 69(2), 227-236. <a href="http://dx.doi.org/10.1037/0022-3514.69.2.227">http://dx.doi.org/10.1037/0022-3514.69.2.227</a>
- Gonzales, A.L., & Hancock, J.T. (2011). Mirror, mirror on my Facebook wall: Effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior, and Social Networking, 14*, 79-83. http://dx.doi.org/10.1089/cyber.2009.0411
- Gravetter, F.J., & Wallnau, L.B. (2013). *Statistics for the behavioral sciences* (9<sup>th</sup> ed.). Boston, MA: Cengage Learning.
- Greetham, D.V., Hurling, R., Osborne, G., & Linley, A. (2011). Social networks and positive and negative affect. *Social and Behavioral Science*, 22, 4-13. http://doi.dx.org/10.1016/j.sbspro.2011.07.051
- Gültzow, T., Guidry, J.P.D., Schneider, F., & Hoving, C. (2020). Male body image portrayals on Instagram. *Cyberpsychology, Behavior, and Social Networking*, 23(5), 281-289. http://dx.doi.org/10.1089/cyber.2019.0368
- Ha, S., Kankanhalli, A., Kishan, J.S., & Huang, K-W. (2016). Does social media marketing really work for online SMEs?: An empirical study. *Proceedings of the 37<sup>th</sup> international conference of information systems (ICIS)*, *Dublin, Ireland*.
- Haferkamp, N., & Kramer, N. (2011). Social comparison 2.0: Examining the effects of online profiles on social-networking sites. *Cyberpsychology, Behavior, and Social Networking, 14*(5), 309-314. http://dx.doi.org/10.1089/cyber.2010.0120
- Hobza, C.L., & Walker, K.E. (2017). What about men? Social comparison and the effects of media images on body and self-esteem. *Psychology of Men & Masculinity*, 8(3), 161-172. http://dx.doi.org/10.1037/1524-92208.3.161
- Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social network sites on body image and disordered eating outcomes. *Body Image*, 7(2016), 100-110. http://dx.doi.org/10.1016/j.bodyim.2016.02.008
- Hong, S., Tandoc, E., Kim, E.A., Kim, B., & Wise, K. (2012). The real you? The role of visual cues and comment congruence in perceptions of social attractiveness from Facebook profiles.
  Cyberpsychology, Behavior, and Social Networking, 15(7), 339-344.
  http://dx.doi.org/10.1089/cyber.2011.0511

- Hu, Y., Manikonda, L., & Kambhampati, S. (2014). What we Instagram: A first analysis of Instagram photo content and user types. *Proceedings of the 8th International Conference on Weblogs and Social Media*, ICWSM 2014, 595-598.
- Huang, C. (2017). Time spent on social network sites and psychological well-being: A meta-analysis. *Cyberpsychology, Behavior, and Social Networking*, 20(6), 346-354.
- Jan, M., Soomro, S. A., & Ahmad, N. (2017) Impact of social media on self-esteem. *European Scientific Journal*, 13(23), 329-341. http://dx.doi.org/10.19044/esj.2017.v13n23p329
- Jiang, S., & Ngien, A. (2020). The effects of Instagram use, social comparison, and self-esteem on social anxiety: A survey study in Singapore. *Social Media + Society*, 6(2), 1-10. http://dx.doi.org/10.1177/2056305120912488
- Kemp, S. (2019). Digital 2019. Retrieved from https://p.widencdn.net/kqy7ii/Digital2019-Report-en
- Kemp, S. (2021, February 11). *Digital 2021: Indonesia*. Retrieved from <a href="https://datareportal.com/reports/digital-2021-indonesia">https://datareportal.com/reports/digital-2021-indonesia</a>
- Kong, F., Gong, X., Sajjad, S., Yang, K., & Zhao, J. (2019). How is emotional intelligence linked to life satisfaction? The mediating role of social support, positive affect and negative affect. *Journal of Happiness Studies*, 20, 2733-2745. http://dx.doi.org/10.1007/s10902-018-00069-4
- Kim, C., & Yang, S-U. (2017). Like, comment, and share on Facebook: How each behavior differs from the other. *Public Relations Review*, 43(2), 441-449. http://dx.doi.org/10.1016/j.pubrev2017.02.006
- Kramer, R. S. S., Young, A. W., Day, M. G., & Burton, A. M. (2017). Robust social categorization emerges from learning the identities of very few faces. *Psychological Review*, *124*, 115–129.
- Kross, E., Verduyn, P., Demiralp, E., Park. J., Lee, D.S., Lin, N., Shablack, H., Jonides, J., & Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. *Plos One*, 8(8).
- Kruglanski, A. W., & Mayseless, O. (1990). Classic and current social comparison research: Expanding the perspective. *Psychological Bulletin*, *108*(2), 195-208.
- Lee, S.Y. (2014). How do people compare themselves with others on social network sites?: The case of Facebook. *Computers in Human Behavior*, *32*, 253-260. http://dx.doi.org/10.1016/j.chb.2013.12.009
- Kurzius, E. (2015). The extraverted chameleon: Personality's effects on mimicry of verbal behavior. *Journal of Individual Difference*, 36(2), 80-86. <a href="http://dx.doi.org/10.1027/1614-0001/a000159">http://dx.doi.org/10.1027/1614-0001/a000159</a>
- Lee, E., Lee, J., Moon, J.H., & Sung, Y. (2015). Pictures speak louder than words: Motivations for using Instagram. *Cyberpsychology, Behavior and Social Networking, 18*(9), 552-556. http://dx.doi.org/10.1089/cyber.2015.0157
- Lee, S.Y. (2020). A study on the effect of comparison with others and social support on life satisfaction of Facebook. *Advances in Journalist and Communication*, 8, 1-15.

## http://dx.doi.org/10.4236/ajc.2020.81001

- Lin, R., & Utz, S. (2015). The emotional responses of browsing Facebook: Happiness, envy, and the role of tie strength. *Computers in Human Behavior*, 52, 29-38. http://dx.doi.org/10.1016/j.chb.2015.04.064
- Liu, X., & LaRose, R. (2008). Does using the Internet make people more satisfied with their lives? The effects of the internet on college students' school life satisfaction. *Computers in Human Behavior*, 39, 413-423. http://dx.doi.org/10.1016/j.chb.2014.08.007
- Liu, C.Y., & Yu, C.P. (2013). Can Facebook use induce well-being?. *Cyberpsychology, Behavior, and Social Networking*, 16(9). https://dx.doi.org/10.1089/cyber.2012.0301
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, 73, 91-103. http://dx.doi.org/10.1037/0022-3514.73.1.91
- Lup, K., Trub, L., & Rosenthal, L. (2015). Instagram #Instasad?: Exploring associations among Instagram use, depressive symptoms, negative social comparison and strangers followed. Cyberpsychology, Behavior, and Social Networking, 18(5), 247-252. <a href="http://dx.doi.org/10.1089/cyber.2014.0560">http://dx.doi.org/10.1089/cyber.2014.0560</a>
- Mahendra, B. (2017). Eksistensi social remaja dalam Instagram (sebuah perspektif komunikasi) [Teen's social existence on Instagram (a communication perspective)]. *Journal Visi Komunikasi*, 6(1), 151-160.
- Mai-ly, N.S., Robert, E.W., & Linda, K.A. (2014). Seeing everyone else's highlight reels: How Facebook usage is linked to depressive symptoms. *Journal of Social and Clinical Psychology*, 33, 701-731. http://dx.doi.org/10.1521/jscp.2014.33.8.701
- Matthews, B. & Ross, L. (2010). Chapter 3: Questionnaires. In B. Matthews & L. Ross, Research methods: A practical guide for the social sciences (pp. 200-217). Harlow: Pearson Education Limited.
- Meler, A., & Schafer, S. (2018). The positive side of social comparison on social network sites: How envy can drive inspiration on Instagram. *Cyberpsychology, Behavior, and Social Networking* 21, 7, 411-417.
- Merdeka, P., & Kumoro, K.A. (2018). Masculinity: Male traits in 1930s portrayed in public enemies. *Journal of Islam and Humanities*, 2(2), 109-129.
- Mullin, A.C. (2017). #Comparison: An examination of social comparison orientation on Instagram as it relates to self-esteem and state anxiety (Bachelor's thesis). Retrieved from https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=2057&context=scripps\_theses
- Nesi, J., & Prinstein, M.K. (2015). Using social media for social comparison and feedback-sharing: Gender and popularity moderate associations with depressive symptoms. *Journal of Abnormal Child Psychology*, 43,1427-1438.

- Neuman, W.L. (2014). *Social research methods: Qualitative and quantitative approaches*. Pearson Education Ltd.
- Ng, C.J., Tan, H.M., & Low, W.Y. (2008). What do Asian men consider as important masculinity attributes? Findings from the Asian Men's Attitude to Life Event and Sexuality (MALES) Study. *Journal of Men's Health*, 5(4), 350-355. <a href="http://dx.doi.org/10.1016/j.jomh.2008.10.005">http://dx.doi.org/10.1016/j.jomh.2008.10.005</a>
- Nielsen, J. (2010). Photos as Web Content. Retrieved from https://www.nngroup.com/articles/photos-as-web-content/
- Oeldorf-Hirsch, A., & Sundar, S.S. (2016). Social and technological motivations for online photo sharing. *Journal of Broadcasting & Electronic Media*, 60(4), 624-642. http://dx.doi.org/10.1080/08838151.2016.1234478
- Oh, H.J., Ozkaya, E., LaRose, R. (2013). How does online social networking enhance life satisfaction? The relationships among online supportive interaction, affect, perceived social support, sense of community, and life satisfaction. *Computers in Human Behavior*, 30, 69-78.
- Oh, S., & Syn, S.Y. (2015). Motivations for sharing information and social support in social media: A comparative analysis of Facebook, Twitter, Delicious, Youtube and Flickr. *Journal of the Association for Information Science and Technology*, 66(10), 2045-2060. http://dx.doi.org/10.1002/asi.23320
- Orben, A., Dienlin, T., & Przybylski, A.K. (2019). Social media's enduring effect on adolescent life satisfaction. *PNAS*, 116(21), 10226-10228. http://dx.doi.org/10.5255/UKDA-SN-6614-12
- Panek, E., Nardis, Y., & Auverset, L. (2018). It's all about me (for us): Facebook post frequency and focus as they relate to narcissism. *Journal of Social Media in Society*, 7(2), 1-17.
- Pavot, W., & Diener, E. (2009). Review of the satisfaction with life scale. *Social Indicators Series* 39. <a href="http://dx.doi.org/10.1007/978-90-481-2354-4-5">http://dx.doi.org/10.1007/978-90-481-2354-4-5</a>
- Pittman, M., & Reich, B. (2015). Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, 62, 155-167. http://dx.doi.org/10.1016/j.chb.2016.03.084
- Punch, K. (2003). *Survey research: The basics* (Essential resources for social research). London: Sage Publications.
- Rae, J., & Lonborg, S. (2015). Do motivations for using Facebook moderate the association between Facebook use and psychological well-being?. *Frontiers in Psychology*, 6(771). http://dx.doi.org/10.3389/fpsyg.2015.00771
- Rollero, C., Daniele, A., & Tartaglia, S. (2019). Do men post and women view? The role of gender, personality and emotions in online social activity. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *13*(1). http://dx.doi.org/10.5817/CP2019-1-1
- Royzman, E.B., Rozin, P. (2006). Limits of symhedonia: The differential role of prior emotional attachment in sympathy and sympathetic joy. *Emotion*, *6*, 82-93.

- Rozika, L.A., & Ramdhani, N. (2016). Hubungan antara harga diri dan body image dengan online self-presentation pada pengguna Instagram [The connection between dignity and body image with online self-presentation of Instagram users]. *Gadjahmada Journal of Psychology*, 2(3), 172-183.
- Salovey, P., Bedell, B. T., Detweiler, J.B., & Meyer, J.D. (2000). Current directions in emotional intelligence research. In M. Lewis & J.M. Haviland (Eds.), *Handbook of Emotions* 2<sup>nd</sup> ed, (pp. 504-520). New York: Guilford Press.
- Sarstedt, M., Bengart, P., Shaltoni, A.M., & Lehmann, S. (2018). The use of sampling methods in advertising research: A gap between theory and practice. *International Journal of Advertising*, 37(4), 650-663.
- Schneider, S.M., & Schupp, J. (2013). Individual differences in social comparison and its consequences for life satisfaction: Introducing a short scale of the Iowa-Netherlands comparison orientation measure. *Social Indicators Research*, 115(2). http://dx.doi.org/10.1007/s11205-012-0227-1
- Schreiner, M., Fischer, T., & Riedl, R. (2019). Impact of content characteristics and emotion on behavioral engagement in social media: Literature review and research agenda. *Electronic Commerce Research*. http://dx.doi.org/10.1007/s10660-019-09353-8
- Sheldon, L. (2012). Nutrition information sharing activities of community college students. *Journal of Nutrition Education and Behavior*, 44(4). http://dx.doi.org/10.1016/j.neb.2012.03.057
- Sheldon, P., & Bryant, K. (2015). Instagram: motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior 58*, 89-97.
- Sousa, L., & Lyubomirsky, S. (2001). Life satisfaction. In J. Worell (Ed.), *Encyclopedia of Women* and Gender: Sex Similarities and Differences and the Impact of Society on Gender, 2, 667-676.
- Smith, R. H., & Kim, S. H. (2007). Comprehending envy. *Psychological Bulletin*, *133*(1), 46-64. http://dx.doi.org/10.1037/0033-2909.133.1.46
- Statista. (2021). *Leading countries based on Instagram audience size as of January 2021*. Retrieved from <a href="https://www.statista.com/statistics/578364/countries-with-most-instagram-users/">https://www.statista.com/statistics/578364/countries-with-most-instagram-users/</a>
- Statista. (2021). *Share of Instagram users in Indonesia as of April 2021, by age group.* Retrieved from <a href="https://www.statista.com/statistics/1078350/share-of-instagram-users-by-age-indonesia/">https://www.statista.com/statistics/1078350/share-of-instagram-users-by-age-indonesia/</a>
- Stutzer, A., & Frey, B.S. (2010). Recent advances in the economics of individual subjective well-being. *Social Research*, 77(2), 679-714.
- Taylor, L. G., & Shelley, E. (1993). Effects of social comparison direction, threat, and self-esteem on affect, self-evaluation, and expected success. *Journal of Personality and Social Psychology*, 64, 708-722. <a href="http://dx.doi.org/10.1037/0022-3514.64.5.708">http://dx.doi.org/10.1037/0022-3514.64.5.708</a>
- Teo, W., & Lee, C.S. (2016, December). Sharing brings happiness?: Effects of sharing in social

- media among adult users. In Morishima A., Rauber A., Liew C. (Eds), *Digital Libraries: Knowledge, Information, and Data in an Open Access Society* (pp. 351-365). http://dx.doi.org/10.1007/978-3-319-49304-6 39
- Tiggemann, M., & Zaccardo, M. (2015). "Exercise to be fit, not skinny": The effect of fitspiration imagery on women's body image. *Body Image*, *15*, 61-67. http://dx.doi.org/10.1016/j.bodyim.2015.06.003
- Tiggemann, M., & Miller, J. (2010). The internet and adolescent girls' weight satisfaction and drive for thinness. *Sex Roles*, 63, 79-90. <a href="http://dx.doi.org/10.1007.S11199-010-9789-Z">http://dx.doi.org/10.1007.S11199-010-9789-Z</a>
- Tiggemann, M., & Anderberg, I. (2020). Social media is not real: The effect of 'Instagram vs reality' images on women's social comparison and body image. *New Media & Society*, 22(12), 2183-2199. http://dx.doi.org/10.1177/1461444819888720
- Tong, S.T., Heide, B.V.D., & Langwell, L. (2008). Too much of a good thing? The relationship between number of friends and interpersonal impressions on Facebook. *Journal of Computer-Mediated Communication*, 13, 531-549. http://dx.doi.org/10.1111/j.1083-6101.2008.00409.x
- Tran, V. (2013). Positive Affect Negative Affect Scale (PANAS). In: Gellman M.D., & Turner J.R. (Eds.) *Encyclopedia of Behavioral Medicine*. <a href="http://dx.doi.org/10.1007/978-1-4419-1005-9\_978">http://dx.doi.org/10.1007/978-1-4419-1005-9\_978</a>
- Verduyn, P., Ybarra, O., Resibois, M., Jonides, J., & Kross, E. (2017). Do social network sites enhance or undermine subjective well-being? A critical review. *Social Issues and Policy Review*, 11(1), 274-302. http://dx.doi.org/10.1111/sipr.120333
- Vogel, E.A., Rose, J.P., Roberts, L.R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, *3*(4), 206-222. https://dx.doi.org/10.1037/ppm0000047
- Wang, R., Yang, F., & Haigh, M.M. (2017). Let me take a selfie: Exploring the psychological effects of posting and viewing selfies and groupies on social media. *Telematics and Informatics*, *34*, 274-283. <a href="http://dx.doi.org/10.1016/j.tele.2016.07.004">http://dx.doi.org/10.1016/j.tele.2016.07.004</a>
- Waterman, A.S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64, 678-691.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- White, K.L. (2005). Culture and social comparison seeking: The role of self-motives. *Pers Soc Psychol Bull*, *31*, 232-242.
- Wirtz, D., Tucker, A., Briggs, C., & Schoemann, A.M. (2021). How and why social media affect subjective well-being: Multi-site use and social comparison as predictors of change across

#### Are you inspired or desirous of others on social media?

- time. *Journal of Happiness Studies*, 22(4), 1673-1691. <a href="http://dx.doi.org/10.1007/s10902-020-00291-z">http://dx.doi.org/10.1007/s10902-020-00291-z</a>
- Woodworth. R.S. (1929). Psychology: A Study of Mental Life. New York: Holt.
- Yang, H.S. (2015). When does relative deprivation occur? Influence of characters' characteristics and audience's personality on upcoming emotions. *Korean Journal of Broadcasting*, 29, 137-171.
- Zappavigna, M. (2016). Social media photography: Construing subjectivity in Instagram images. *Visual Communication*, 15(3), 271-292. http://dx.doi.org/10.1177/1470357216643220
- Zeidner, M., Matthews, G., & Roberts, R.D. (2012). The emotional intelligence, health and well-being nexus: What have we learned and what have we missed? *Applied Psychology: Health and Well-Being*, 4(1), 1-30.
- Zhang, X., & Baker, K. (2018). Application of the theory of planned behavior and uses and gratifications theory to food-related photo-sharing on social media. *Californian Journal of Health Promotion*, 16(1), 91-98. <a href="http://dx.doi.org/10.32398/cjhp.v16i1.2128">http://dx.doi.org/10.32398/cjhp.v16i1.2128</a>
- Zhang, R. (2019). Beyond narcissism: Developing a comprehensive model of motivations for selfie-taking and selfies-posting on social media. [Doctoral dissertation, Bowling Green State University]. http://dx.doi.org/10.13140/RG.2.2.12292.14726