

## **When Scrolling through Instagram, keep your well-being in mind**

The influence of gender traits, Instagram use, motivation and self-objectification on  
Instagram users' well-being

Student Name: Emma Georget  
Student Number: 520038  
Word count: 18304

Supervisor: Dr. Julia Kneer

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

Master's Thesis  
*June 2020*

When scrolling though Instagram, keep your well-being in mind

## ABSTRACT

*Self-objectification, resulting from certain media content and problematic media use may lead to significant negative well-being outcomes among media recipients and media users. The present study sought to contribute to the existing literature regarding this phenomenon while pursuing the recent transition to study gender traits, meaning personality, as valuable predictors of media behaviour. Next to gender traits, Instagram use and the motivations for its use were considered as potential predictors of self-objectification and further of well-being, composed by self-esteem and life satisfaction. This study addressed the following research question: To what extent do gender traits, Instagram use and its motivations, influence self-objectification and thus, together, influence Instagram users' well-being? To answer this question, a quantitative survey was used among an international sample of Instagram users (N = 477). Results showed that gender traits influenced all variables under study, namely Instagram use, motivations for its use, self-objectification, self-esteem and life satisfaction. Findings thus contributed to confirming that gender traits add valuable information when studying media related behaviours and their consequences. Results also revealed that Instagram use and its motivations may indirectly impact self-objectification, while self-objectification was a direct predictor of well-being. It was found that negative masculine traits were significant predictors of documentation and self-promotion motivation use, and later, negatively influenced self-objectification. Further, these gender attributes positively impacted life satisfaction, which was also positively influenced by documentation and self-promotion motivations. Only negative feminine traits were found to have a negative effect on self-esteem, which appeared to also be negatively predicted by self-objectification. However, Instagram use, which was directly impacted by gender traits was found to influence self-objectification and well-being, but to a smaller extent, as it was not found to be a direct predictor. Contrary to what previous theory indicated, the present study interestingly showed that self-objectification had negative effects on self-esteem and positive ones on life satisfaction. Future research may examine whether these two different components of well-being depend on the media content that is primed by media studies. From a media research perspective, this study emphasises the need, in accordance to previous literature, to take into account gender traits as predictors of problematic social media usage and their resulting behaviours.*

**KEYWORDS:** *Gender traits, Instagram use, motivation, self-objectification, well-being*

## Table of Contents

Abstract and key words

Chapter 1. Introduction .....	1
Chapter 2. Theory .....	5
2.1 Gender.....	5
2.2 Uses and gratification theory .....	7
2.3 Self-objectification.....	10
2.4 Well-being.....	13
2.4.1 Self-esteem.....	14
2.4.2 Life satisfaction.....	15
2.5 Hypotheses .....	16
Chapter 3. Method .....	21
3.1 Research design .....	21
3.2 Sampling .....	22
3.3 Sample.....	24
3.4 Measurements .....	24
3.5 Reliability of the measurements.....	25
3.6 Limitations, validity and reliability of the questionnaire.....	30
Chapter 4. Results .....	31
4.1 Impact of gender and gender traits on Instagram use .....	31
4.2 Impact of Instagram use, gender and gender traits on social interaction motivation ....	32
4.3 Impact of Instagram use, gender and gender traits on documentation motivation .....	33
4.4 Impact of Instagram use and gender traits on diversion motivation.....	34
4.5 Impact of Instagram use and gender traits on self-promotion motivation.....	35
4.6 Impact of Instagram use and gender traits on creativity motivation.....	37
4.7 Impact of Instagram use, gender, gender traits and motivations on self-objectification. .....	38

4.8 Impact of Instagram use, gender traits, motivations and self-objectification on self-esteem .....	40
4.9 Impact of Instagram use, gender traits, motivations and self-objectification on life satisfaction .....	42
4.10 Summary of accepted and rejected hypotheses .....	44
Chapter 5. Conclusion.....	46
5.1 Discussion .....	46
5.1.1 Gender traits and Instagram use.....	46
5.1.2 Gender traits, Instagram use and uses and gratification motivations.....	47
5.1.3 Gender traits, Instagram use, motivations and self-objectification.....	50
5.1.4 Gender traits, Instagram use, motivations, self-objectification and self-esteem ....	51
5.1.5 Gender traits, Instagram use, motivations, self-objectification and life satisfaction .....	52
5.2 Limitations .....	53
5.3 Suggestions for future research.....	55
5.4 Summary .....	56
References.....	57
Appendix A. Questionnaire .....	64
Appendix B. SPSS Output .....	78

## **Chapter 1. Introduction**

Social media are now an integral component of young people's life, regardless of their origin or background (Fardouly, Willburger & Vartanian, 2018). As they become increasingly prominent in all aspects of one's life, scholars have started studying the potential negative impacts of social media use (Ho & Ito, 2019; Weinstein, 2018). In the past years, many scholars have studied the potential effects of an intensive usage of social media such as Facebook, Twitter or Instagram (Fardouly & Vartanian, 2016). Weinstein (2018) for instance, has studied the negative influences of social media on young people's well-being. Recent research thus draws upon the acknowledgment that all types of media can play a significant "role in influencing perceived social norms and cultural appearance standards" (Cohen, Fardouly, Newton-John & Slater, 2019, p. 1547). As such standards and appearance-based ideals spread through social media, it is important to examine their consequences.

In the existing literature, issues or problematic behaviours related to social media usage tend to be associated to women (Aparicio-Martínez et al., 2020; Aubrey, 2007). In the past, most research regarding problematic media usage has tended to focus on gender differences, solely based on biological gender (Chen et al., 2017; Weiser, 2000). However, Holland and Tiggemann (2016) have suggested that men as well as women could be influenced by social media usage. They demonstrated that gender was not a moderating factor when it came to the impact of social networking sites (SNSs) on body image and satisfaction (Holland & Tiggemann, 2016). Previously to this research, Schwartz, Grammas, Sutherland, Siffert and Bush-King (2010) showed that men could also experience body concerns such as body dissatisfaction and self-objectification. In fact, men were also found to be targeted by the media and to be influenced by societal messages (Schwartz et al., 2010). It was argued that men are an important part of social media users and that they feel the pressure to achieve masculine norms. Thus, recent scholarship clearly demonstrates that the male population is equally interesting to examine in media studies.

More than biological sex (i.e. gender), recent research regarding media effects and problematic media usage has highlighted the need to consider gender traits as predictors of particular behaviours (Kneer, Franken & Reich, 2019). Gender traits, which can be understood as attributes composing one's personality, may add significant predictive value when analysing social media behaviours and their consequences. In light of recent literature (Ehrenberg, Juckes, White & Walsh, 2008; Kircaburun & Griffiths, 2018; Kneer et al., 2019), it seems reductive to merely analyse individuals according to their biological sex. Biological

sex is not sufficient to look at, as personality traits are more telling than gender to explain and predict attitudes and behaviours on social media platforms.

Instagram particularly, is an interesting platform to analyse as it has gained extreme popularity over the past few years and is used first and foremost for posting and sharing visual content (Fardouly et al., 2018). For instance, more than eighty million images are uploaded to Instagram on a daily basis (Fardouly et al., 2018), indicating that its users are exposed to an increasing visual content every day. The content offered by Instagram however may enable the diffusion of “carefully curated images and promoting the thin-ideal” (Cohen et al., 2019, p. 1547). In other words, Instagram content conveys pictures that carry implicit as well as explicit meanings.

The exposure of such images which carry heavy expectations, especially for women, may lead to self-objectification. The concept of self-objectification was coined by Fredrickson and Roberts (1997) and refers to “the degree to which individuals prioritise their observable physical appearance traits” (Fardouly, Diedrichs, Vartanian & Halliwell, 2015, p. 448). When an individual engages in self-objectification, it means that they view their body from a third-person perspective, focusing on physical attributes. According to Fredrickson and Roberts (1997), the exposure to objectifying media can lead women to view their body as an object. Objectifying media has been understood as media that diffuse messages in which individuals are portrayed as objects (Galdi, Maas & Cadinu, 2014). Some of the content diffused by Instagram may correspond to objectifying media messages and contribute to self-objectification.

The perpetuation of certain images on social media can potentially lead to negative outcomes, especially concerning the well-being of the individuals exposed (Mercurio & Landry, 2008). In line with this argument, Fardouly and Vartanian (2016) have expressed the existence of a relationship between social media use and body image concerns. They suggested that an intensive use of Instagram could significantly drive higher self-objectification among its users, specifically because of the nature of Instagram, which is an image-based social network. It is also important to examine the relationship between social media usage and self-objectification as self-objectification can have negative effects such as depression or anxiety. For instance, Mercurio and Landry (2008) have studied the impact of self-objectification on women’s self-esteem and life satisfaction, demonstrating relations among self-objectification and negative health outcomes.

There is a scientific relevance to research the effects of social media use on self-objectification. In the past years, many scholars have researched self-objectification in

relation to the media, meaning as a behaviour following the exposure of objectifying media. However, as pointed out by Fardouly et al. (2015), most research focused on traditional media, and the little research conducted in relation to social media has mainly been focused on Facebook. It therefore appears that Instagram is worth examining in relation to self-objectification. This particular platform enhances social comparison among peers and convey images which normalise an unrealistic body ideal (Kleemans, Daalmans, Carbaat & Anschütz, 2018). The pressure to perform on Instagram as well as the self-presentation aspect of this social medium could potentially lead to self-objectification. Thus, next to the time spent on Instagram, motives for its use may be salient to predict self-objectification. While recent scholarship studied social media use in relation to self-objectification and its well-being consequences, it often failed to take into consideration the different motivations for Instagram use. The present study argues, by using the uses and gratification theory (Katz, Blumler & Gurevitch, 1974), that motivations could be significant predictors of self-objectification, and further, of well-being. As motivations for Instagram use include motives such as self-presentation, self-promotion, reassurance-seeking or the need for validation (Sheldon & Newman, 2019), they may be salient in explaining the concepts previously mentioned.

Hence, the aim of the present study is to investigate the potential factors that could impact Instagram users' body image, and further their well-being. A few scholars have analysed the relationship between Instagram use and body concerns as well as their negative implications (Fardouly et al., 2018). However, in most cases, their studies only implicated female samples, often aged between eighteen and thirty-five years old. The underlying argument for this choice of sample was that self-objectification is believed to be female issue and that Instagram is particularly popular among young women (Cohen et al., 2019). Nonetheless, self-objectification may be more related to gender traits than it is to biological sex. That is why, there is a relevance to include men as well as women when studying such a phenomenon, and to focus on personality rather than on anatomical attributes. Following this line of argument, the impact of self-objectification on well-being may also be more related to gender traits than sex. In this research, the notion of well-being is composed of both self-esteem, found to be closely linked to well-being (Du, King & Chi, 2017), and life satisfaction, which is believed to be more stable (Diener, Scollon & Lucas, 2009). While self-esteem is related to one's sense of self-worth (Rosenberg, 1989), life satisfaction refers to one's appraisal of quality of life (Gilman & Huebner, 2006).

In order to refine existing theories and to add to the existing literature, the present study is conducted through a quantitative survey used to answer to the following research question:

*To what extent do gender traits, Instagram use and its motivations, influence self-objectification and thus, together, influence Instagram users' well-being?*

In light of the previous arguments, there is a scientific as well as social relevance to study the male population in addition to the female one, and to focus on gender traits rather than on biological sex. As pointed out by existing literature, this study may also hold societal implications as social media can have a significance influence on young adults (Feltman & Szymanski, 2018).

In order to investigate the influence of gender traits, Instagram use and motives for its use on self-objectification, and further on well-being, as composed by self-esteem and life satisfaction, chapter two will give an overview of the previously mentioned concepts. Chapter three will specify the research design of this quantitative study and will explain the different methodological choices made. Chapter four will provide the results following the conduction of the questionnaire and will indicate whether the formulated hypotheses were accepted or rejected. Finally, chapter five will discuss the results found in relation to previous literature. It will propose some avenues for future research, based on the study's limitations, before giving a summary of the results and an answer to the research question.



## **Chapter 2. Theory**

Recent literature has pointed out the need to study media behaviours and its implications in relation to gender traits, and not solely in relation to biological sex (Ehrenberg et al., 2008; Kircaburun & Griffiths, 2018; Kneer et al., 2019). Indeed, problematic media behaviour such as intensive Instagram use, can result in self-objectification, leading to potential negative effects on one's well-being, and may not merely be influenced by biological sex. Although it has been argued that self-objectification was influenced by gender and Instagram usage (Fardouly et al., 2018), this research introduced a new predictor for self-objectification, namely gender traits. Therefore, this research studied the influence of gender traits, Instagram use, and motivations on self-objectification, and together, their impact on well-being. To carry out this study and analyse the impact of these concepts on well-being, previous literature on gender, Instagram use, self-objectification and well-being was used. Theory on uses and gratification (Katz et al., 1974) was also part of this theoretical framework. This theoretical framework was utilised to formulate nine hypotheses, used to answer the research question: to what extent do gender traits, Instagram use and its motivations influence self-objectification, and thus together, influence Instagram users' well-being?

### **2.1 Gender**

Gender can be defined as a product of human thought, social life and culture. In that sense, it is a socially constructed notion that is performed, more than it is inborn. In fact, according to Nair and Selvan (2018, p. 157), "gender is indirectly related to the genetic make-up", meaning that it is not necessarily informed by biological traits such as sex characteristics. In media studies, gender is often used as a predictor for particular media behaviours as it is believed to explain, to a certain extent, media use and its motivations (Chen et al., 2017; Sheldon & Byrant, 2016; Weiser, 2000). For instance, even prior to the emergence of social networks, Weiser (2000) found several gender differences for Internet use. The author demonstrated that men were more driven to use the Internet for entertainment purposes while women used it more for social interaction. In line with Weiser's (2000) work, Chen et al. (2017) found, when examining media addiction, that gender affected the motives for intensive smartphone use. While women were more driven by internal motivations, men were more influenced by external motivations such as social relationships (Chen et al., 2017). When specifically studying Instagram, Sheldon and Byrant (2016) found that gender was the

best predictor of Instagram use, demonstrating that women tended to be more active on Instagram than men.

When investigating gender differences in social media use (Aparicio-Martínez et al., 2020) and in the perpetuation of negative body emotions (Aubrey, 2007), it was found that, while women tend to be more addicted to the use of social media and to be more dissatisfied with their bodies, personality was not taken into account. Although Aparicio-Martínez et al. (2020) stressed the importance of social and psychological factors, in these studies, gender was solely understood as a dichotomous variable, meaning as biological sex.

In relation to the impact of objectifying media, gender differences are more complex to highlight due to the lack of research on the effects of objectifying media on men. It might be due to the fact that objectifying media are mostly believed to target a female audience. According to Vandebosch and Eggermont (2012), traditional as well as new media were found to often focus on women's appearances, continuing with the trend of portraying them as objects. Objectifying media can thus be understood as media that diffuse messages in which individuals, commonly women, are showed and portrayed as objects (Galdi et al., 2014). In objectifying media, individuals' worth is primarily based on their physical features and appearance (Fredrickson & Roberts, 1997). However, as Instagram is a visual-based network, one should not disregard the existence of objectifying pictures and messages targeting men in addition to women (Schwartz et al., 2010).

More specifically, research regarding the issue of self-objectification has been limited to the study of the female population, based on their biological traits (Faleatua, 2018; Fardouly et al., 2015; Fardouly et al. 2018; Kleemans, 2018). Indeed, self-objectification is primarily believed to be a female issue (Cohen et al., 2019). In line with other findings, Fardouly et al. (2018) indicated that the use of social media has a negative influence on women's beliefs and concerns about their physical appearance and body image. In light of previous literature, it becomes apparent that there is a need to study the male population in addition to the female one, and to include gender traits next to biological sex. Indeed, previous research on self-objectification and body concerns related to media use failed to consider male samples, even though scholars such as Holland and Tiggemann (2016) or Schwartz et al. (2010) have demonstrated that men too could be influenced by social media usage.

This research thus argued that there is a need to study both genders to understand media use as well as a need to consider gender traits. This argument concurs with existing studies indicating that there is a need to look at gender traits, defined as personality traits, and

not solely at biological sex when analysing media behaviour and media use (Kneer et al., 2019; Orchard, Fullwood, Galbraith & Morris, 2014). As previously stated, gender identity and the construction of the self is more complex than biological characteristics. While this research still took into account biological sex as a predictor, gender traits were expected to be more informative and to be more accurate predictors of problematic media use. This research thus used the notion of gender traits (Berger & Krahé, 2013) to conceptualise personality, as those traits can be understood as such (Kneer et al., 2019). Gender traits allow to capture the complexity of an individual's personality as the measure of gender identity rely on positive and negative traits (Berger & Krahé, 2013). In line with the work of Berger and Krahé (2013), it was crucial to analyse “the role of negative masculine and feminine aspects of gender identity” (p. 157) as predictors of behaviour.

Gender traits can be either masculine or feminine attributes with positive or negative aspects. Traits like analytical and logical were associated to positive masculine traits, and attributes such as arrogance and harshness were related to negative masculine ones. Attributes such as empathy and sensitiveness were related to positive feminine traits and traits like self-doubting and anxious were associated to negative feminine ones (Berger & Krahé, 2013; Kneer et al., 2019). Thus, in this research, the use of gender traits was expected to produce relevant insights regarding how personality can impact self-objectification on social media, and further, how it can influence Instagram users' well-being.

In sum, there is a growing importance to investigate personality and individual differences rather than biological sex in media studies. This research used gender traits as well as biological sex to better predict self-objectification on Instagram and its potential consequences on well-being.

## **2.2 Uses and gratification theory**

Research on media use and online behaviour indicates that personality as well as gender, understood as biological sex, can be used as predictors for social media use (Muscanell & Guadagno, 2012). It is quite challenging to conceptualise and measure social media usage, notably because of the variety of possible activities and uses (Treem, Dailey, Pierce & Biffl, 2016). Given the complexity of measuring social media use, this research used the uses and gratification framework in order to understand and conceptualise Instagram use. While this framework alone does not represent the only predictor of problematic online behaviour, notably because personality also influences motivations for engaging with media

(Orchard et al., 2014), it still helps explain the different motivations for the use of social networks. Indeed, individuals engage with Instagram content in order to obtain certain gratifications (Kircaburun, Alhabash, Betül Tosuntas & Griffiths, 2018). Hence, it is particularly interesting to apply the uses and gratification theory to this research.

The uses and gratification theory assumes that individuals are active participants in searching for the media that will fulfil their needs (Katz et al., 1974). In their research, Katz et al. (1974) identified five main distinctive needs for media use, namely cognitive needs, affective needs, personal integrative needs, and tension release needs. Thus, motivations play a significant role in the way individuals use media. Because of the multitude of personalities and needs, motivations for Instagram use will significantly differ according to its users. It thus becomes important to adapt Katz et al.'s (1974) research to the new social media environment.

Recent literature concurs to say that it is possible to apply the uses and gratifications framework, indicting users' motivations, to predict social media use (Kircaburun et al., 2018; Smock, Ellison, Lampe & Whon, 2011). According to Kircaburun et al. (2018) the search for gratifications, meaning use motivations, influence the overall usage of a medium. In media studies, several scholars have applied the uses and gratification framework to new social media such as Twitter, Facebook, Snapchat and Instagram, which is of interest for this research. According to Phua, Jin and Kim (2017), each medium's use is accompanied by its own specific motivations. For instance, Phua et al. (2017) hypothesised different motivations for the use of Instagram, such as creativity and social interaction. In line with this study, Sheldon and Byrant (2016) have stressed the importance of understanding the reasons for Instagram use and the gratifications of this use, mainly because Instagram is a fast-growing social network which lacks scholarship compared to other media.

Drawing upon previous research from Sheldon and Byrant (2016), and from Sheldon, Rauschnabel, Antony and Car (2017), Sheldon and Newman (2019) have retained different factors that may explain motivations to use Instagram. They have identified five motives which are essential to this research, namely social interaction, documentation, diversion, self-promotion and creativity. These five factors aim at explaining how Instagram usage arises and is influenced by the motives previously stated. Because the aim of this research is to identify and analyse the predictors of self-objectification online, and to a larger extent of well-being, it seems primordial to briefly discuss these motivations for Instagram use.

While the motives of social interaction, which is defined by the way individual interact to achieve some sense of belonging (Rubin, 1986) and diversion (McQuail, Blumler

& Brown, 1972), which consists in an emotional escape, are not novel to the uses and gratification theory, they are still relevant to the use of new social media (Sheldon & Newman, 2019). What is thus interesting to notice is that Sheldon and Byrant (2016) have identified two new motivations in their research on Instagram use, meaning documentation which is the use of Instagram to store images, and self-promotion which is characterised by a need for validation. Finally, the newest motivation specific to Instagram is creativity, which is related to the mere nature of the visual-based platform.

The study of Sheldon and Newman (2019) is particularly salient for this research as they tested these five motives in relation to reassurance-seeking among young Instagram users. Their results indicated that the need for validation was a driver for an intense use of Instagram and two particular uses, namely creativity and self-promotion (Sheldon & Newman, 2019). Although their research investigated reassurance-seeking rather than other problematic behaviours, reassurance seeking is linked to self-worth and thus related, to a larger extent, to one's mental health and well-being.

Instagram use is very much driven by its users' personality traits and motivations to use the network (Kircaburun et al., 2018). As pointed out by existing literature, the use of social media is not only predicted by one's characteristics but also by one's preferences, needs and motivations. Therefore, what is crucial to point out here, is that the interplay between specific traits and motivations could predict problematic behaviour. Indeed, Kircaburun et al. (2018) found that certain personality factors such as being introverted, or an extensive use of social media would cause problematic use. Drawing upon the study of Kircaburun et al. (2018) analysing problematic social media use, this research used the uses and gratifications theory to explain the influences of self-objectification on Instagram specifically. In short, this research added to the existing literature by using gender traits (Berger & Krahé, 2013) and by narrowing its focus on Instagram.

In the case of this research, the uses and gratification framework was necessary to understand and explain how motivations for Instagram use arise from users' needs. Further, it helped examine how certain gender traits, understood as personality, more than biological sex, were predictors of specific motivations. This framework was then used to understand problematic media usage leading to self-objectification and later to negative effects on one's well-being.

### 2.3 Self-objectification

The concept of self-objectification, which is at the core of this research, is not a novel concern among scholars. In fact, research on self-objectification preceded any form of social media, as the term was coined in the 1990s by Fredrickson and Roberts (1997) throughout their objectification theory. Their objectification theory conceptualised the place of the female body in modern societies and argued that objectification appears to uniquely be a female issue. Indeed, according to Fredrickson and Roberts (1997), men do not seem to experience any kind of sexualised evaluation that would objectify them. However, as their study was carried out well before the rise of new media, their argument must be used sparingly. They argued that, because bodies exist within social and cultural contexts, the female body is often looked and evaluated as an object. Hence, in the occurrence of a woman applying the observer's perspective on her own physical features, it is said that she is engaging in self-objectification. Self-objectification can thus be defined as the following behaviour:

“Valuing one's own body more from a third-person perspective, focusing on observable body attributes (e.g., “How do I look?”), rather than from a first-person perspective, focusing on privileged or non-observable body attributes (e.g., “What am I capable of?” “How do I feel?”. Noll & Fredrickson, 1998, p. 624).

The objectification theory offers a satisfactory understanding of the notion of self-objectification. However, while Fredrickson and Roberts (1997) acknowledged the influence of mass media and their proliferation of objectified images of the female body, they understandably did not account for the impact of new social media on self-objectification. Recent research (Fardouly et al., 2015, Fardouly et al., 2018) has therefore tried to reconcile the concept of self-objectification with the rise of image-sharing social media such as Instagram. In recent studies which build upon the objectification theory (Fredrickson & Roberts, 1997), self-objectification has been defined as an occurrence within the female population who “prioritise their observable physical appearance traits” (Fardouly et al., 2015, p. 448).

Hence, self-objectification can be understood as a widespread phenomenon worth examining as it can potentially harm one's mental health (Fardouly et al., 2015), and thus impact one's well-being (Mercurio & Landry, 2008). It is therefore relevant for this research to form an understanding of the different factors predicting and impacting self-objectification, especially in the context of new social media.

Previous literature on self-objectification concurs to say that there are significant gender differences in self-objectification behaviour (Arroyo, Segrin & Harwood, 2014; Cohen et al., 2019; Fardouly et al., 2015; Fredrickson & Roberts, 1997; Kleemans et al., 2018; Noll & Fredrickson, 1998), primarily because it is believed to be a female issue. Indeed, most scholars have tended to focus on the study of the female population when analysing self-objectification. Among scholars, women, especially young ones, are believed to be the main subjects of self-objectification, notably because of the differences in socialization of boys and girls (Fredrickson & Roberts, 1997). In line with this argument, Fardouly et al. (2015) state that self-objectification is prominent amongst young women because of their portrayal in the media, which is often sexually objectifying. They argue that media often focus on women's physical traits rather than on their personality traits. Moreover, in the age of social media, scholars have found that women with higher social comparison tendencies were more likely to experience body dissatisfaction and self-objectification (Fardouly et al., 2015; Fardouly & Vartanian, 2015; Kleemans et al., 2018). Although all women may potentially be subject to self-objectification, research indicates that feminine traits related to social comparison have negative effect on one's self body-image. Therefore, negative feminine traits such as self-doubting or anxious (Berger & Krahé, 2013) may increase self-objectification behaviours.

Contrary to what Fredrickson and Roberts (1997) stated, self-objectification may not uniquely be a female issue. Scholars such as Schwartz et al. (2010) have studied masculine gender roles and the potential predictors of self-objectification in men. They stressed the need to examine the male population in relation to self-objectification by arguing that male body-image dissatisfaction is a growing issue. In fact, they stated that "men may experience negative body perception when attempting to meet gender role ideals" (Schwartz et al., 2010, p. 211). Their research indicated that low success, power and competition were associated with high self-objectification and that high restrictive affectionate behaviour between men was also a predictor for high-self objectification. In other words, their study shows that negative male traits such as being harsh or ostentatious (Berger & Krahé, 2013) may be predictors for higher self-objectification.

Despite focusing on the male population, the previous mentioned study opened pathways for considering that men as well as women could be affected by self-objectification. Their study also shows that personality traits play a role in one's self-objectification behaviour. Indeed, according to Miner-Rubino, Twenge and Fredrickson (2002, p. 156), "personality may be implicated in the perception of one's body as an object".

Therefore, existing literature demonstrates that certain personality traits, may be better predictors for self-objectification than biological sex.

Next to gender traits, it is necessary to take into account the role of new media, and more specifically image-sharing social media in the development of self-objectification. While a large body of literature has investigated the impact of mass media and their effects on body image (Holland & Tiggemann, 2016), recent scholarship has begun to analyse the effects of new media use (Fardouly et al., 2015; Feltman & Szymanski, 2018).

According to Vandembosch and Eggermont (2012), each medium has been shown to contribute in its own way to the objectification of individuals' bodies. In other words, the impact of Instagram use on self-objectification differs from the impact of mass media on one's body image. Social media, and especially Instagram, differ from mass media in the sense that they are even more an integral part of people's daily routine. They are used to manage and build one's self-presentation (Feltman & Szymanski, 2018). In fact, the effects of Instagram are unique to its use, because of the mere nature of the social media platform. Recent scholarship has thus found that a greater overall use of Instagram lead to higher self-objectification (Fardouly & Vartanian, 2016, Vandembosch & Eggermont, 2012). In fact, the more time an individual spends on Instagram, the more susceptible it is for them to develop body image concerns and greater self-objectification (Fardouly, et al., 2018). In line with previous arguments, Instagram use is a predictor of self-objectification because it is an appearance-focused media platform (Fardouly et al., 2018). Because Instagram use is linked to the constant exposure of images and comments related to these images, it allows a greater emphasis on physical traits, thus leading to higher self-objectification.

Even though Instagram use has been found to be a predictor of self-objectification, it seems important to note that its usage differs from the motivations to use the platform (Feltman & Szymanski, 2018).

Drawing on the uses and gratifications theory, recent scholarship (Sheldon & Byrant, 2016; Sheldon et al., 2017; Sheldon & Newman, 2019) have investigated motives for Instagram use and have highlighted different motives. These motives are, as stated previously, social interaction, documentation, diversion, self-promotion and creativity (Sheldon & Newman, 2019). While Sheldon et al. (2017) found that the kinds of motives behind Instagram use did not vary according to cultural contexts, different forms of gratifications could explain how Instagram is used. Although previous literature does not mention a link between Instagram use motivations and self-objectification, a study by Sheldon and Newman (2019) on Instagram use and its relationship to excessive reassurance-



seeking may inform this research. In fact, their results indicated that self-promotion and creativity motivations were linked to excessive reassurance-seeking, which was found to predict Instagram use, while diversion motivation was related to interpersonal rejection. As reassurance-seeking corresponds to the need of getting others' approval (Joiner, Alfano & Metalsky, 1992), it may be possible to expect that self-promotion motives for Instagram use for instance, may be linked to greater self-objectification. Even though there is no scientific evidence due to the lack of research in this domain, specific motivations for Instagram may be predictors of self-objectification behaviour online. Therefore, it the aim of this research to find out to which extent particular use motivations may influence self-objectification.

In summary, gender traits understood as personality traits (Kneer et al., 2019), Instagram use and certain motivations may influence self-objectification, which, together could have implications for users' well-being.

## **2.4 Well-being**

The increasing penetration of social media is worth studying because of its implications on users' well-being (Schmuck, Karsay, Matthes & Stevic, 2019). Well-being has been a major concern among scholars when analysing social media effects (Ho & Ito, 2019; Weinstein, 2018). According to Weinstein (2018), social media studies tend to describe the notion of well-being as a general outcome related to different psychological features. Well-being is thus related, among other things, to body image and satisfaction (Haferkamp & Krämer, 2011; Meier & Grey, 2014). However, most existing literature concerned with well-being in relation to media use has tended to examine the negative impacts of social comparison and self-presentation (Fan, Deng, Dong, Lin & Wang, 2019; Pang, 2018; Schmuck et al., 2019; Trepte, Dienlin & Reinecke, 2015; Vigil & Wu, 2015; Wilcox & Laird, 2000), rather than self-objectification. Moreover, in spite of the growing number of studies, scholars remain polarised regarding the relationship between social media use and well-being (Weinstein, 2018). That is why, this research investigated the relation between self-objectification, influenced by gender traits, Instagram use and motivations use, on the well-being of its users.

The study of Mercurio and Landry (2008) is particularly salient for this research as the authors analysed the influence of self-objectification on women's self-worth and life-satisfaction. In fact, they argued that self-objectification was worthy of attention as it has "number of cognitive and emotional consequences, including increased body shame,

increased appearance anxiety” (Mercurio & Landry, 2008, p. 458). While conceptualising well-being as composed by self-esteem and life satisfaction, they found that self-objectification negatively impacts one’s life satisfaction through lower self-esteem.

#### **2.4.1 Self-esteem**

Drawing on existing scholarship, self-esteem was considered as an indicator of well-being and understood as a personal judgment of self-worth (Mercurio & Landry, 2008). In other words, self-esteem refers to one’s perception of the self. It indicates the extent to which an individual views their self as worthwhile (Rosenberg, 1989). “Essentially, self-esteem is formed and monitored on the basis of social acceptance, social relationships, and received social feedback” (Schmuck et al., 2019, p. 3). In line with this definition, Michaels, Barr, Roosa and Knight (2007) defined five domains of self-esteem, namely scholastic competence, athletic competence, physical appearance, behavioural conduct and social acceptance. It becomes apparent that the last three domains are particularly salient for this research as they are related to one’s image of the self as well as behaviour and the social self. Indeed, the different aspects of self-esteem are important to keep in mind when trying to understand how social media use and one’s behaviour may impact self-esteem.

According to Mackson, Brochu and Schneider (2019), most existing literature on the topic has tended to focus on the negative consequences of social media, even though some scholars such as Sheldon and Byrant (2016) have highlighted the positive effects of social media such as social interaction and the maintaining of social relationships. When considering the negative influences of social media, it has been found that social media consumption is negatively associated with self-esteem (Ho & Ito, 2019). In other words, it means that an intense exposure to social media content was found to be associated with low self-esteem.

These recent findings concur with previous scholarship which indicates that certain images conveyed by the media could lead to lower self-esteem and satisfaction (Wilcox & Laird, 2000). Because new media are complicit in the perpetuation of unrealistic images (Wilcox & Laird, 2000) and objectifying messages (Vandenbosch & Eggermont, 2012), they may decrease the self-esteem of their recipients. More recently, Meeus, Beullens and Eggermont (2019) have examined the role of social media in building self-esteem and have found that self-presentation and the need for social approval on social media decreased self-esteem. Drawing upon this argument, self-objectification built by excessive Instagram use and specific motivations use, may lead to lower self-esteem. The study of Mackson et al.

(2019) which was specific to Instagram use concurred with previous findings and added that the mere fact of “having an Instagram account may be associated with negative psychological outcomes” (p. 2175).

Therefore, recent research hints that personality, in addition to Instagram use influences, may be related to users’ self-esteem. Certain personality traits might be as well, significant predictors of self-esteem. For instance, Marcionetti and Rossier (2016) found, when studying personality traits in relation to self-esteem, that specific personality traits such as neuroticism or extraversion may have direct effects on one’s self-esteem. Although personality traits were rarely mentioned when examining the association between Instagram use and self-esteem outcomes, scholars such as Mackson et al. (2019) or Meeus et al. (2019) suggested that particular traits or behaviours such as the dependence for social approval or social comparison may negatively impact one’s self-esteem. Therefore, gender traits leading to those specific behaviours, meaning negative feminine traits were believed to negatively influence self-esteem.

#### **2.4.2 Life satisfaction**

While one’s self-esteem can vary based on momentary emotional fluctuations, life satisfaction allows to capture a more general sense of one’s well-being (Diener et al., 2009). Life satisfaction, which can be defined as one’s appraisal of their quality of life based on self-selected criteria, can thus influence one’s behaviour (Gilman & Huebner, 2006). Life satisfaction is therefore one dimension of well-being, worthy of attention, and a key component to look at when examining problematic media behaviours and their effects.

Results about effects of social media use on life satisfaction tend to be polarised among scholars (Pang, 2018). While some research say that an extensive use of social networks could reduce life satisfaction and eventually well-being, research about Facebook notably, has demonstrated a significant correlation between the use of social media and positive outcomes on well-being, despite the relationship being weak (Lee, Chung & Park, 2018). Indeed, the positive correlation between social media use and life satisfaction was explained in the literature by the social interaction motivation. Individuals seeking social connection may use social media networks in order to fulfil their need for social interaction. The mentioned fulfilment may eventually increase their overall life satisfaction (Trepte et al., 2015).

Following this line of argument, Vigil and Wu (2015) found, in spite of the existing literature indicating a positive influence between social media and life satisfaction, that social media use was linked to lower life satisfaction. They attributed this finding to the influence that pictures have on others, especially because of the increased social comparison that social media offer. The results of their research concur with Weinstein's (2018) work stating that social media use decreases life satisfaction.

Life satisfaction following image-based social media use may also be related to the way new media reshaped relationships between individuals by mediating them (Seo & Hyun, 2018). In fact, Seo and Hyun (2018) pointed out that previous research, as well as their own, indicated that individual's life satisfaction was negatively linked to socio-economic comparisons with others. Nonetheless, while Seo and Hyun (2018) indicated that the constant exposure of images on media outlets may influence one's perception of their life, thus impacting life satisfaction, little to nothing was said about body concerns when looking at others' pictures on social media such as Instagram. Other research by Fardouly et al. (2018), Fardouly and Vartanian (2016), and Kleemans et al. (2018) found a significant relationship between social media use and self-objectification, while mentioning potential negative effects of body concerns. Nonetheless, they failed to empirically verify this pathway model.

It is also important to note that previous research, which mainly dealt with Facebook, has only been concerned with gender differences when analysing life-satisfaction in relation to social media use (Vigil & Wu, 2015). Although Vigil and Wu (2015) stressed the fact that men and women engaged in different behaviours when looking at others' pictures, they did not find gender differences related to life satisfaction. Therefore, as Instagram is an image-based social platform which encourages photo sharing, it was crucial, as per the aim of this research, to examine life satisfaction in relation to self-objectification, mediated by gender traits, Instagram use and its motivations.

## **2.5 Hypotheses**

In media studies, gender traits are becoming more and more interesting to understand media use. Indeed, the rising influence of new media has seen the emergence or rather the amplification of certain behaviours such as self-objectification, related to problematic media usage. However, most studies on the impact of social media use on body image and self-objectification more specifically, have primarily been conducted on female samples (Holland & Tiggemann, 2016). There appears to be a need to study male samples as well, as men are

equally subject to experience body image concerns following social media use. Moreover, according to existing scholarship, biological sex might not most accurate predictor of particular online behaviours (Miner-Rubino et al., 2002).

Following the study of Kneer et al. (2019), which sought to extend biological sex findings in relation to problematic media usage, this research aimed to analyse to what extent gender traits influence Instagram behaviour. As biological sex does not seem to predict in an effective way social media behaviour, there is a scientific need and relevance to look into gender traits (Kneer et al., 2019). In fact, this research sought to demonstrate that personality is a better predictor of media use and problematic behaviour related to its use. This aim is supported by the research of Berger and Krahé (2013) who argued that personality is a combination of positive and negative traits. They thus stressed the importance of the role of negative masculine and feminine attributes in addition to positive ones.

Although most research did not find biological sex differences in social media use, recent studies by Thompson and Loughheed (2012) and Sheldon & Byrant (2016) found that women were significantly heavier users of social media than men, sometimes in an unintentional way. Their findings should not be disregarded when studying Instagram use in this research.

Furthermore, there is empirical evidence showing that women were more likely than men to use social media in a problematic way and, in general, spend more time on Instagram than men (Kircaburun et al., 2018, Sheldon & Byrant, 2016). Personality-wise, Kircaburun et al. (2018) found that introversion related to anxiousness and self-doubting individuals with low success were positively related to excessive Instagram use. These personality traits are thus related to both negative masculine and feminine gender traits as conceptualized by Berger and Krahé (2013).

Therefore, biological gender and gender traits were expected to be significant predictors of Instagram use:

H1: Instagram use is positively influenced by (a) biological gender (female), (b) negative feminine traits and (c) negative masculine traits.

The uses and gratification theory indicates that individuals make use of media to satisfy their needs. As argued by Sheldon and Newman (2019), there are five different motives for Instagram use, namely social interaction, documentation, diversion, self-promotion and creativity. This research argued that biological sex and gender traits could add

a predictive value for Instagram use for particular motivations. The research by Kircaburun et al. (2018) demonstrated that women tended to use social media significantly more than men for social interaction and documentation motivations. However, there is no empirical evidence that suggests a particular direction in the relationship between biological sex and diversion, self-promotion and creativity motivations. In terms of personality, extraversion which can be understood as a positive feminine trait was found to be positively linked to social interaction, self-promotion and documentation motivations (Kircaburun et al. 2018). Positive masculine traits were also expected to be positively linked to social interaction motivation. Moreover, negative feminine and negative masculine traits were both expected to be significant predictors of using social media for self-promotion motivations (Kircaburun et al. 2018). It may be because such personality use Instagram to show-off and present better version of themselves. This result concurs with the study by Sheldon and Newman (2019). There is also evidence that indicates negative feminine traits as predictors of use for diversion motivation (Kircaburun et al. 2018). Finally, the study by Sheldon and Newman (2019) indicated that the need for validation was a driver for creativity motivation.

H2a: social interaction motivation is positively influenced by (a) Instagram use, (b) biological sex (female), (c) positive masculine traits, and (d) positive feminine traits.

H2b: documentation motivation is positively influenced by (a) Instagram use, (b) biological sex (female), and (c) positive feminine traits.

H2c: diversion motivation is positively influenced by (a) Instagram use and (b) negative feminine traits.

H2d: self-promotion motivation is positively influenced by (a) Instagram use, (b) positive feminine traits, and (c) negative masculine traits and negatively influenced by (d) negative feminine traits.

H2e: creativity motivation is positively influenced by (a) Instagram use, (b) negative masculine traits, and (c) negative feminine traits.

Research on self-objectification tend to state that self-objectification is uniquely a female issue (Fredrickson & Roberts, 1997). Nonetheless, more recent research concurs to

say that personality rather than biological sex is a better predictor of self-objectification (Schwartz et al., 2010). According to Schwartz et al. (2010), negative masculine traits may be predictors of higher self-objectification, in addition to negative feminine traits (Fardouly et al., 2015; Fardouly & Vartanian, 2015; Kleemans et al., 2018). However, a rational or objective personality, meaning positive masculine traits could hinder the effects of self-objectification (Cohen et al., 2019).

An extensive use of Instagram was also shown among scholars to significantly drive self-objectification, particularly because of the mere nature of Instagram, which is an image-content social media platform (Fardouly & Vartanian, 2016, Vandenbosch & Eggermont, 2012). Nonetheless, not all motivations for Instagram use were believed to significantly impact self-objectification. In fact, self-objectification may only be significantly positively influenced by self-promotion motivation.

H3: self-objectification is positively influenced by (a) Instagram use, (b) biological sex (female), (c) negative feminine traits, (d) negative masculine traits, (e) self-promotion motivation, and negatively influenced by (f) positive masculine traits.

While there is little empirical evidence of biological sex (gender) differences in relation to well-being, existing literature has found that personality is very much linked to an individual's self-esteem and sense of life satisfaction.

In fact, when studying adolescents' self-esteem, Marcionetti and Rossier (2016) found that self-esteem was positively correlated with conscientiousness and negatively correlated with neuroticism. This indicates that self-esteem might be positively influenced by positive masculine traits and negatively influenced by negative feminine traits. Moreover, social media use and more specifically Instagram use was found to be a predictor of lower self-esteem among scholars (Meeus et al., 2019). This is notably explained by the exposure of images that drive social comparison and need for approval. Following that line of argument, motivations use may significantly impact one's self-esteem. Using Instagram for self-promotion, as well as for creative purposes, defined as the need for validation, was predicted to be a factor for a lower self-esteem (Sheldon & Newman, 2019), whereas social interaction could be seen as a predictor for higher self-esteem (Lee et al., 2018). All in all, self-objectification was also predicted to negatively influence self-esteem.

H4a: self-esteem is positively influenced by (a) positive masculine traits and (b) social interaction motivation, and negatively influenced by (c) Instagram use, (d) negative feminine traits, (e) creativity motivation, (f) self-promotion motivation, and (g) self-objectification.

As life satisfaction is another dimension of well-being than self-esteem, it is not predicted by the same factors. According to Vigil and Wu (2015), even though men and women engage differently with social media, it was not possible to conclude on gender differences regarding life satisfaction. Although there is little empirical evidence showing significant impacts of personality on life satisfaction, a media study by Chen, Tu and Wang (2008) among online gamers showed that some personality traits have significant influence on life satisfaction. They found that neuroticism has a negative influence on life satisfaction while both openness and conscientiousness have significant positive influence on life satisfaction.

Although scholars remain polarized about the impact of social media use on life satisfaction, most empirical evidence suggest a negative relationship between Instagram use and life satisfaction. In terms of motivation, self-promotion was predicted to negatively influence life satisfaction while social interaction was worth examining in relation to its potential positive effect. In the same way as for self-esteem, self-objectification which has been found to harm one's well-being (Mercurio & Landry, 2008) was predicted to negatively impact life-satisfaction.

H4b: life satisfaction is positively influenced by (a) positive masculine traits, (b) positive feminine traits, (c) social interaction motivation, and negatively influenced by (d) Instagram use, (e) negative feminine traits, (f) self-promotion motivation and (g) self-objectification.

To summarise, the theoretical framework was built around the following concepts: biological sex, gender traits, Instagram use, motivations, self-esteem and life satisfaction. These concepts were investigated in relation to the uses and gratification theory. The hypotheses were formulated with findings of previous scholarship in media studies. This theoretical framework was thus built to create an understanding of the predictors of self-objectification, and to a larger extent, of the predictors of well-being.



## **Chapter 3. Method**

This methodological chapter contains a justification for the choice of a quantitative research method, an explanation of the research design, as well as of the sample, and the measurements used to answer the research question: to what extent do gender traits, Instagram use and its motivations, influence self-objectification, and thus together, influence Instagram users' well-being?

### **3.1 Research design**

As mentioned above, the purpose of this research was to examine the potential impacts of gender traits, Instagram use, and its motivations use on self-objectification, and together, their influence on well-being, which was composed of self-esteem and life satisfaction. Therefore, this research intended to demonstrate a relationship between independent and dependent variables. The research question highlighted and assumed the presence of cause-effect relationships that were used to create hypotheses. In order to conduct this research, a quantitative method was thus used.

More specifically, this research relied on an online survey as surveys are an efficient way to collect data on large populations (Nardi, 2006). A survey was particularly appropriate to answer the research question as the main objective was to measure and establish relationships between a series of variables (Punch, 2003). In addition, surveys are often used to “gather people’s opinions, ideas, attitudes, knowledge and experiences” (Matthews & Ross, 2010, p. 204). Gathering individual’s opinions, attitudes and behaviours was the intention of this research. Indeed, it asked respondents questions about themselves, their behaviour on social media, and their attitudes towards specific aspects of their life. The survey was further designed to gather facts about the profile of respondents by the means of the demographics section.

However, in order for this research to produce insights about the different influences of well-being among Instagram users, several criteria had to be taken into account. One primordial criterion was for all respondents to be asked the same set of questions in the exact same order, so it could provide scientific information about the studied population (Fowler, 2012). One another important criterion was to rely on valid scales that had proven to be reliable. As the survey contained questions about complex and personal variables such as self-objectification and self-esteem, it was thus important to use valid and reliable scales.

As previously mentioned, for the aim of this research, an online survey was conducted. As the survey was meant for an international population made up of Instagram users, the use of Internet offered an access to a large and diverse virtual community (Wright, 2005). This ensured a greater relevance of answers as well as the possibility to reach more respondents, even though this reach was limited to English speakers. As the online survey could not be distributed on all platforms and administered in all languages, a choice was made to distribute the questionnaire in English, by the means of Qualtrics. After a phase of pilot testing to ensure that there was no ambiguity or difficulty in the completion of the survey (Beatty & Willis, 2007; Punch, 2003), the research made use of an online panel to reach respondents. The survey was thus distributed online via Amazon Mechanical Turk, which allowed the access to an international population, as well as an acceleration of the process of data collection (Wright, 2005).

The collected data was then analysed using the statistical software SPSS. The use of SPSS allowed to process data in such a way that it was possible to identify correlations between variables, as well as the intensity and direction of these correlations. In other words, to measure to what extent gender traits, Instagram use and its motivations were predictors of self-objectification, and ultimately of well-being, hierarchical regression analyses were conducted via SPSS.

Before conducting the regression analyses, a few conditions were verified with the use of SPSS that ensured the possibility to run further analyses. As this research used existing scales with subscales, it was crucial to check that the right ones were grouped in the present study. After running factor analyses for gender traits and motivations for Instagram use, items were found to belong to the expected factor. The use of SPSS also offered the possibility to run all the pre-assumptions prior to the analyses. Because the analyses conducted were either multiple or regression analyses, it was primordial to check that all the continuous variables in the analysis, both dependent and independent, were normally distributed. Running these pre-assumptions showed that it was indeed possible to conduct regression analyses to answer the research question.

### **3.2 Sampling**

In this research, the unit of analysis consisted of one survey respondent. The target population were individuals aged 18 years old or more, who were users of Instagram. To increase the representativeness of the sample, this research sought to collect data from

international respondents with different cultural backgrounds. In order to respond to these constraints, the service of Amazon Mechanical Turk was used. This service not only facilitated the online survey process but also ensured that the respondents were all adults. Indeed, this service only allows individuals aged 18 or more to be participants in studies. This condition was a means to avoid any ethical issue regarding the age of respondents. Moreover, individuals were informed of the general purpose of the research prior to their participation. Their informed consent was further asked in the introduction of the online survey. Without a consent, their participation to the survey was not allowed. In the introduction of the questionnaire, the participants were thus informed that their responses were purely voluntary, that they would be anonymous, and that their data would be kept confidential. They were further informed that the collected data would only be used for academic purposes. In addition, a filter question was asked at the beginning of the questionnaire so that only users of Instagram were further included in the study.

The desired sampling size was determined by the general rule of thumb that asks that, for each independent variable under study, there needs to be at least to be 15 participants. As methodological guidelines were also taken into consideration, the original desired sampling size was intended to be about 250 respondents. The sampling method used was a probability sampling method, due to the “ability to produce (globally) representative samples” (Sarstedt, Bengart, Shaltoni & Lehmann, 2017, p. 654). More specifically, as the survey was distributed online by the means of a panel, the sampling method was simple random. This method was mainly used to avoid the personal bias of selective sampling and snowball sampling.

There were several advantages to use a random sample (Wright, 2005) as it offered the possibility to access online communities and an increased diversity of individuals, thus avoiding potential bias regarding demographics. As Instagram is one of the fastest growing social platforms (Sheldon et al., 2017), users do not constitute a subgroup or a small portion of the population. This population was thus easy to target online, and weaknesses regarding random sampling were mostly avoided. However, as the data was self-reported, there was no guarantee that all participants provided accurate information (Wright, 2005), which is a disadvantage of using online surveys. Nonetheless, data clean-up was made possible according to some elements, such as the time spent answering the survey or the self-reported hours spent on Instagram per day.

### 3.3 Sample

During this research, a total of 685 responses were recorded. After data cleaning,  $N = 477$  were included in further analyses. In the final sample, the percentage of women was 50.1% and the male share was 49.9%. Participants' average age was 33.67 ( $SD = 9.86$ ), ranging from 18 to 69. Due to the international intention of the research, the sample obtained a total of 22 different nationalities, the most prominent nationalities being American (52.2%), Indian (26.6%), Brazilian (6.7%), Canadian (3.8%) and Italian (3.4%). The most named highest education level was Bachelor's degree (50.3%), followed by some college but no degree (20.8%), and Master's degree (18.7%). The respondents were also users of other social media, the most frequently recorded being Facebook (83.9%), Twitter (44.0%) and Pinterest (26.6%). Participants' average time spent using Instagram per day was 3.38 hours ( $SD = 2.81$ ). Participants' average number of followers was 714.09 ( $SD = 3610.37$ ). A preliminary independent samples T-test showed no significant difference in Instagram use (number of hours spent on Instagram per day) between men and women.

### 3.4 Measurements

*Gender variable.* Participants were asked about their gender affiliation (i.e. biological sex), which is found in the demographics (1 = male, 2 = female, 3 = other).

*Gender traits.* To measure this variable, the scale taken from Berger and Krahé (2013) was used. It consisted of 5-point Likert scales (1 = does not describe me at all, 5 = describes me extremely well) in relation to positive and negative gender attributes. In total, there were four subscales which consisted of positive feminine traits (Cronbach's  $\alpha = .80$ ), negative feminine traits (Cronbach's  $\alpha = .80$ ), positive masculine traits (Cronbach's  $\alpha = .80$ ), and negative masculine traits (Cronbach's  $\alpha = .91$ ).

*Instagram use.* Instagram use was measured by assessing the time spent on Instagram (Mackson et al., 2019). Participants were asked to self-report the approximate number of hours spent on Instagram.

*Motives for Instagram use.* Instagram use motivation was taken from the five factors established by Sheldon and Newman (2019), adapted from Sheldon et al. (2017), namely self-promotion (Cronbach's  $\alpha = .90$ ), social interaction (Cronbach's  $\alpha = .75$ ), diversion (Cronbach's  $\alpha = .78$ ), documentation (Cronbach's  $\alpha = .88$ ) and creativity (Cronbach's  $\alpha = .85$ ). In total, 18 items were included. Participants were asked to answer how often they use

Instagram for given motives. Questions were formulated on a 5-point Likert scale (1 = never, 5 = always).

*Self-objectification.* The Self-Objectification Questionnaire (Noll & Fredrickson, 1998) which has demonstrated validity in the past, was used.

“The Self-objectification Questionnaire asks respondents to rank a list of body attributes in ascending order of how important each is to their physical self-concept, from that which has the most impact (rank = 1) to least impact (rank = 12). Twelve body attributes are listed: six that are appearance based (physical attractiveness, colouring, weight, sex appeal, measurements, and muscle tone) and six that are competence based (muscular strength, physical coordination, stamina, health, physical fitness, and physical energy level).” (Noll & Fredrickson, 1998, p. 629).

The sum of the competence-based items was subtracted from the sum of the appearance-based items to obtain a total score (ranging from – 36 to + 36), with higher scores indicating greater self-objectification.

*Self-esteem.* To measure self-esteem, the Rosenberg Self-Esteem Scale (RSES) was used, taken from the work of Rosenberg (1989). This scale has demonstrated validity and strong reliability according to past research. The scale was made up of ten items using 4-point scales from strongly agree to strongly disagree (1 = strongly agree, 4 = strongly disagree). Respondents had to indicate their level of agreement on ten items (e.g. “On the whole, I am satisfied with myself”). Items 1, 3, 4, 7 and 10 were reverse scored. An overall score of self-esteem was computed by calculating the average scores across items. Higher scores reflected higher levels of global self-esteem.

*Life satisfaction.* Life satisfaction was measured with the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985). This scale (Cronbach’s  $\alpha = .92$ ) consisted of five items using 7-point Likert scales (1 = strongly disagree, 7 = strongly agree). The overall level of life satisfaction was calculated by averaging the participants’ scores across items.

*Demographics.* Participants were asked about their sex, nationality, level of education, age and the other social media they use.

### **3.5 Reliability of the measurements**

Although the scales used in this research were tested and used in previous research, it seemed pertinent to check the reliability of the continuous variables, notably the ones with subscales. Indeed, it was important to verify the scales’ internal consistency in order to see if

the items were correctly grouped together (Pallant, 2010). Factor analyses were thus conducted along with reliability checks. Before conducting the analyses, it was ensured that all the conditions were met, meaning that variables were measured on a continuous level, that they were normally distributed, that each scale contained at least three variables and that the sample size was sufficient. The three factor analyses conducted are reported below.

*Gender traits.* The 24 items which were Likert-scale based were entered into factor analysis using Principal Components extraction with Varimax rotation with fixed number of factors (= 4.00),  $KMO = .91$ ,  $\chi^2 (N = 477, 276) = 5445.802$ ,  $p < .001$ . The resultant model explained 59.9% of the variance in Gender traits. Factor loadings of individual items onto the four factors found are presented in Table 3.1. The factors found were in concordance with existing literature. Only the item naïve did not belong to the expected factor but was left in as it did not cause any reliability issue. The factors presented were labelled following the original scale of Berger and Krahé (2013):

*Negative masculine traits.* The first factor included seven items related to attributes such as arrogant, boastful and power-hungry.

*Positive masculine traits.* The second factor found included six items linked to traits like analytical, logical and practical.

*Positive feminine traits.* The six items which were included in this factor all related to traits like emotional, empathic and loving.

*Negative feminine traits.* The last factor found included five items linked to attributes like anxious, disoriented and self-doubting.

Table 3.1: Factor and reliability analyses for scales for gender traits (N = 477)

Item	<i>Negative masculine traits</i>	<i>Positive masculine traits</i>	<i>Positive feminine traits</i>	<i>Negative feminine traits</i>
To what extent do the following characters traits explain your personality?				
Inconsiderate	.86	-	-	-
Arrogant	.82	-	-	-
Boastful	.80	-	-	-
Ostentatious	.79	-	-	-
Power-hungry	.78	-	-	-
Harsh	.73	-	-	-
Naïve	.72			
Logical	-	.78	-	-
Solution-focused	-	.71	-	-
Analytical	-	.69	-	-
Practical	-	.68	-	-
Rational	-	.68	-	-
Objective	-	.62	-	-
Loving	-	-	.76	-
Tender	-	-	.72	-
Passionate	-	-	.70	-
Sensitive	-	-	.70	-
Empathic	-	-	.60	-
Emotional	-	-	.55	-
Anxious	-	-	-	.79
Self-doubting	-	-	-	.66
Overcautious	-	-	-	.54
Oversensitive	-	-	-	.53
Disoriented	-	-	-	.36
$R^2$	.23	.13	.13	.11
Cronbach's $\alpha$	.91	.80	.80	.80

*Motives for Instagram use.* The 18 items which were Likert-scale based were entered into factor analysis using Principal Components extraction with Varimax rotation, with fixed number of factors (= 5.00),  $KMO = .90$ ,  $\chi^2 (N = 477, 153) = 4702.94$ ,  $p < .001$ . The resultant model explained 71.8% of the variance in Motives for Instagram use. Factor loadings of individual items onto the five factors found are presented in Table 3.2. The factors found were in accordance with the theory and labelled after the scale of Sheldon and Newman (2019):

*Documentation.* The first factor included four items related to remembering events and celebrating events.

*Self-promotion.* The second factor included three items linked to self-promotion and popularity.

*Creativity.* The third factor included four items related to art creation and documenting the world through photography.

*Social interaction.* The fourth factor included five items linked to social interaction and social relations through pictures.

*Diversion.* The fifth and last factor included two items related to avoiding loneliness and escaping reality.



Table 3.2: Factor and reliability analyses for scales for motives for Instagram use (N = 477)

Item	<i>Documentation</i>	<i>Self- promotion</i>	<i>Creativity</i>	<i>Social interaction</i>	<i>Diversion</i>
How often do you use Instagram for the following reasons?					
To remember special events	.85	-	-	-	-
To celebrate an event	.85	-	-	-	-
To remember something important	.79	-	-	-	-
To describe my life through photos	.62	-	-	-	-
To self-promote myself	-	.76	-	-	-
To become popular	-	.76	-	-	-
To show-off	-	.73	-	-	-
To find people with common interests	-	-	.78	-	-
To create art	-	-	.75	-	-
To show-off my photography skills	-	-	.68	-	-
To document the world around me	-	-	.68	-	-
To see my friends' photos	-	-	-	.79	-
To see what other people share	-	-	-	.77	-
To follow my friends	-	-	-	.70	-
To like my followers' photos	-	-	-	.49	-
To escape reality	-	-	-	-	.87
To avoid loneliness	-	-	-	-	.77
<i>R</i> <sup>2</sup>	.18	.16	.15	.12	.10
Cronbach's $\alpha$	.88	.90	.85	.75	.78

*Life satisfaction.* The 5 items which were Likert-scale based were entered into factor analysis using Principal Components extraction with Varimax rotation, with fixed number of factors ( $= 1.00$ ),  $KMO = .89$ ,  $\chi^2 (N = 477, 10) = 1705.16$ ,  $p < .001$ . The resultant model explained 75.2% 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 .92. It indicates that the scale has good reliability.

### **3.6 Limitations, validity and reliability of the questionnaire**

It seems important to note that despite the measures taken, no research can be perfect in representing the truth as truth is in fact a matter of interpretation. Nonetheless, it is possible to reflect on the questionnaire's validity and reliability. According to Boynton and Greenhalgh (2004, p. 1313), a valid questionnaire "measures what it claims to measure". In the instance of this research, as some variables measured were rather complex (e.g. self-objectification, or self-esteem), it is difficult to affirm complete validity of self-reported responses. However, this research used valorised psychological scales to measure variables such as self-objectification, self-esteem and life satisfaction. Therefore, because the questionnaire relied on previous scholarship, its validity was increased.

Reliability on the other hand, is made up of internal consistency and test-retest reliability (Slok, Bemelmans, Kotz, Molen & Kerstjens, 2016). In the case of this research, the questionnaire was operationalised with the use of scales that have proven their reliability in past literature. The values of Cronbach's  $\alpha$  were thus indicators of the reliability of each item of a scale.

In short, the quantitative survey was designed to operationalise, using reliable scales, the concepts the research aimed to measure: gender, gender traits, Instagram use, motivations, self-objectification, self-esteem and life satisfaction. Although the questionnaire possesses some limitations, notably due to the self-report of answers online, it still consists in a valid and reliable survey.

## **Chapter 4. Results**

This chapter presents the results of the regression analyses that were conducted according to the different hypotheses previously formulated. A multiple regression analysis was conducted to verify existing theories. Hierarchical regression analyses were conducted in order to propose an improvement to the existing literature. This research argued that additional measures of gender such as gender traits needed to be taken into consideration as they were believed to have better predictive value for understanding media use and behaviours resulting from this use.

### **4.1 Impact of gender and gender traits on Instagram use**

In order to test H1, a linear regression analysis was conducted with Instagram use as the criterion. Predictors were biological sex and gender traits, namely positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits (see Table 4.1 for beta weights and values for explained variance).

The model was found to be significant,  $F(5, 471) = 5.58, p < .001$ . Only negative masculine traits (H1c) were found to be a significant predictor, while other gender traits were not significant for Instagram use. Negative masculine traits positively predicted Instagram use (= H1c).

This linear regression analysis showed that only negative masculine traits are predictors of Instagram use. Therefore, H1: Instagram use is positively influenced by (a) biological sex (female), (b) negative feminine traits and (c) negative masculine traits, was rejected apart from H1c.

Table 4.1. Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on Instagram use as criterion.

Model 1	
Predictor	
Biological sex	.02
Positive masculine traits	-.03
Negative masculine traits	.22**
Positive feminine traits	.07
Negative feminine traits	.01
	$R^2 = .06$
	$p < .001$

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### 4.2 Impact of Instagram use, gender and gender traits on social interaction motivation

In order to test H2a, a hierarchical regression analysis was conducted with social interaction motivation score as the criterion. Instagram use was entered in the first block. In the second and final block, biological sex was entered next to positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits (see Table 4.2 for beta weights and values for explained variance).

When Instagram use (H2aa) was used as a single predictor, the model became significant,  $F(1, 475) = 10.13$ . The second block showed that positive masculine traits (H2ac) and positive feminine traits (H2ad) improved the predictive value of the model,  $F_{change}(5, 470) = 19.48$ . Both predictors had a positive relationship with social interaction motivation.

This hierarchical regression analysis showed that Instagram use as well as positive masculine traits and positive feminine traits are predictors of social interaction motivation. Therefore H2a: social interaction motivation is positively influenced by (a) Instagram use, (b) biological sex (female), (c) positive masculine traits, and (d) positive feminine traits was accepted after rejecting H2ab.

Table 4.2. Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on social interaction motivation as a criterion.

	Model 1	Model 2
Predictor		
Instagram use	.14**	.10*
Biological sex		.07
Positive masculine traits		.16**
Negative masculine traits		.08
Positive feminine traits		.33***
Negative feminine traits		-.08
	$R^2 = .02$	$\Delta R^2 = .17$
	$p = .002$	$p < .001$

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### 4.3 Impact of Instagram use, gender and gender traits on documentation motivation

In order to test H2b, a hierarchical regression analysis was conducted with documentation motivation score as the criterion. Instagram use was entered in the first block. In the second and final block, biological sex was entered next to positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits (see Table 4.3 for beta weights and values for explained variance).

When Instagram use (H2ba) was used as a single predictor, the model became significant,  $F(1, 475) = 17.97$ . The second block showed that biological sex (female), negative masculine traits, positive feminine traits (H2bc) and negative feminine traits improved the predictive value of the model  $F_{change}(5, 470) = 23.59$ . Negative masculine traits and positive feminine traits were positively linked to documentation motivation (= H2bc). Negative feminine traits had a negative relationship with documentation motivation.

The hierarchical regression analysis showed that Instagram use, biological sex (female), negative masculine traits, positive feminine traits and negative feminine traits are

predictors of documentation motivation. Therefore H2b: documentation motivation is positively influenced by (a) Instagram use, (b) biological sex (female), and (c) positive feminine traits was accepted.

*Table 4.3.* Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on documentation motivation as a criterion.

	<b>Model 1</b>	<b>Model 2</b>
<b>Predictor</b>		
Instagram use	<b>.19***</b>	<b>.11**</b>
Biological sex		<b>.11*</b>
Positive masculine traits		.00
Negative masculine traits		<b>.38***</b>
Positive feminine traits		<b>.37***</b>
Negative feminine traits		<b>-.22**</b>
	<b><math>R^2 = .04</math></b>	<b><math>\Delta R^2 = .19</math></b>
	<b><math>p &lt; .001</math></b>	<b><math>p &lt; .001</math></b>

*Note:* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### **4.4 Impact of Instagram use and gender traits on diversion motivation**

In order to test H2c, a hierarchical regression analysis was conducted with diversion motivation score as the criterion. Instagram use was entered in the first block. In the second and final block, biological sex was entered next to positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits (see Table 4.4 for beta weights and values for explained variance).

When Instagram use was used as a single predictor, the model became significant,  $F(1, 475) = 20.98$ . The second block showed that negative masculine traits and negative feminine traits (H2cb) improved the predictive value of the model,  $F_{change}(5, 470) = 37.34$ .

Negative masculine traits and negative feminine traits (= H2cb) were both positive predictors of diversion motivation.

This hierarchical regression analysis showed that Instagram use, negative masculine traits and negative feminine traits are predictors of diversion motivation. Therefore, H2c: diversion motivation is positively influenced by (a) Instagram use and (b) negative feminine traits was accepted.

*Table 4.4.* Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on diversion motivation as criterion.

	<b>Model 1</b>	<b>Model 2</b>
<b>Predictor</b>		
Instagram use	<b>.21***</b>	<b>.09*</b>
Biological sex		-.04
Positive masculine traits		-.07
Negative masculine traits		<b>.35***</b>
Positive feminine traits		.04
Negative feminine traits		<b>.21**</b>
	<b><math>R^2 = .04</math></b>	<b><math>\Delta R^2 = .27</math></b>
	<b><math>p &lt; .001</math></b>	<b><math>p &lt; .001</math></b>

*Note:* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### **4.5 Impact of Instagram use and gender traits on self-promotion motivation**

In order to test H2d, a hierarchical regression analysis was conducted with self-promotion motivation score as the criterion. Instagram use was entered in the first block. In the second and final block, biological sex was entered next to positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits (see Table 4.5 for beta weights and values for explained variance).

When Instagram use (H2da) was used as a single predictor, the model became significant,  $F(1, 475) = 31.49$ . The second block showed that biological sex (male), as well as positive feminine traits (H2db), negative masculine traits (H2dc) and negative feminine traits (H2dd) improved the predictive value of the model,  $F_{change}(5, 470) = 74.39$ . While negative masculine traits (= H2dc) and positive feminine (= H2db) traits were positively linked to self-promotion motivation, negative feminine traits had a negative relationship with self-promotion motivation (= H2dd).

The hierarchical regression analysis showed that Instagram use, biological sex (male), positive feminine traits, negative masculine traits and negative feminine traits are predictors of self-promotion motivation. Therefore, H2d: self-promotion motivation is positively influenced by (a) Instagram use, (b) positive feminine traits, and (c) negative masculine traits and negatively influenced by (d) negative feminine traits was accepted.

*Table 4.5.* Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on self-promotion motivation as a criterion.

	<b>Model 1</b>	<b>Model 2</b>
<b>Predictor</b>		
Instagram use	<b>.25***</b>	<b>.10**</b>
Biological sex		<b>-.13**</b>
Positive masculine traits		-.04
Negative masculine traits		<b>.67***</b>
Positive feminine traits		<b>.14***</b>
Negative feminine traits		<b>-.13*</b>
	<b><math>R^2 = .06</math></b>	<b><math>\Delta R^2 = .41</math></b>
	<b><math>p &lt; .001</math></b>	<b><math>p &lt; .001</math></b>

*Note:* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



#### 4.6 Impact of Instagram use and gender traits on creativity motivation

In order to test H2e a hierarchical regression analysis was conducted with creativity motivation score as the criterion. Instagram use was entered in the first block. In the second and final block, biological sex was entered next to positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits (see Table 4.6 for beta weights and values for explained variance).

When Instagram use (H2ea) was used as a single predictor, the model became significant,  $F(1, 475) = 22.28$ . The second block showed that negative masculine traits (H2eb) and positive feminine traits improved the predictive value of the model,  $F_{change}(5, 470) = 36.16$ . Both negative masculine traits (= H2eb) and positive feminine traits had a positive relationship with creativity motivation.

This hierarchical regression analysis showed that Instagram use, negative masculine traits and positive feminine traits are predictors of creativity motivation. Therefore, H2e: creativity motivation is positively influenced by (a) Instagram use, (b) negative masculine traits, and (c) negative feminine traits was accepted after rejecting H2ec.

Table 4.6. Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on creativity motivation as a criterion.

	Model 1	Model 2
Predictor		
Instagram use	.21***	.10*
Biological sex		-.04
Positive masculine traits		.08
Negative masculine traits		.39***
Positive feminine traits		.30***
Negative feminine traits		-.07
	$R^2 = .05$	$\Delta R^2 = .27$
	$p < .001$	$p < .001$

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### 4.7 Impact of Instagram use, gender, gender traits and motivations on self-objectification.

In order to test H3, a hierarchical regression analysis was conducted with self-objectification score as the criterion. Instagram use was entered in the first block. The second block included biological sex next to positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits. In the third and final block scores for social interaction, documentation, self-promotion, diversion and creativity motivations were entered (see Table 4.7 for beta weights and values for explained variance).

When Instagram use was used as a single predictor, the model became significant,  $F(1, 475) = 7.33$ . The second block showed that adding negative masculine traits (H3d) improved the predictive value of the model,  $F_{change}(5, 470) = 9.66$ . The predictor had a negative relationship with the self-objectification score. However, the third block showed that adding motivation scores did not improve the predictive value of the model,  $F_{change}(5, 465) =$

1.79. None of the motivations for Instagram use were significant predictors for self-objectification score.

This hierarchical regression analysis showed that only negative masculine traits are predictors of self-objectification. Therefore, H3: self-objectification is positively influenced by (a) Instagram use, (b) biological sex (female), (c) negative feminine traits, (d) negative masculine traits, (e) self-promotion motivation, and negatively influenced by (f) positive masculine traits was rejected.

*Table 4.7.* Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on self-objectification as a criterion.

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>
<b>Predictor</b>			
Instagram use	<b>-.12**</b>	-.07	-.06
Biological sex		.02	.01
Positive masculine traits		.07	.05
Negative masculine traits		<b>-.34***</b>	<b>-.27**</b>
Positive feminine traits		.09	.08
Negative feminine traits		.06	.07
Social interaction motivation			.05
Documentation motivation			-.05
Self-promotion motivation			-.11
Diversion motivation			-.09
Creativity motivation			.13
	<b><math>R^2 = .02</math></b>	<b><math>\Delta R^2 = .09</math></b>	<b><math>\Delta R^2 = .02</math></b>
	<b><math>p = .007</math></b>	<b><math>p &lt; .001</math></b>	<b><math>p = .113</math></b>

*Note:* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### **4.8 Impact of Instagram use, gender traits, motivations and self-objectification on self-esteem**

In order to test H4a, a hierarchical regression analysis was conducted with the self-esteem score as the criterion. Instagram use was entered in the first block. The second block included biological sex next to positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits. In the third block scores for social interaction, documentation, self-promotion, diversion and creativity motivations were entered. In the fourth and final block, score for self-objectification was included (see Table 4.8 for beta weights and values for explained variance).

When Instagram use was entered as a single predictor, the model became not significant,  $F(1, 475) = 1.18$ . The second block showed that negative feminine traits (H4ad) improved the predictive value of the model,  $F_{change}(5, 470) = 4.69$ . This predictor has a negative relationship with self-esteem (= H4ad). However, the next block showed that none of the motivations were significant predictors for self-esteem,  $F_{change}(5, 465) = 2.14$ . The fourth block showed that the self-objectification improved the predictive value of the model,  $F_{change}(1, 464) = 5.04$ . This predictor had a negative relationship with self-esteem (= H4ag).

This hierarchical regression analysis showed that negative feminine traits and self-objectification are the only predictors of self-esteem. Therefore, H4a: self-esteem is positively influenced by (a) positive masculine traits and (b) social interaction motivation, and negatively influenced by (c) Instagram use, (d) negative feminine traits, (e) creativity motivation, (f) self-promotion motivation, and (g) self-objectification was rejected apart from H4ad and H4ag.

Table 4.8. Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on self-esteem as a criterion.

	Model 1	Model 2	Model 3	Model 4
Predictor				
Instagram use	-.05	-.01	.01	.00
Biological sex		.06	.04	.04
Positive masculine traits		-.04	-.03	-.03
Negative masculine traits		-.01	.07	.04
Positive feminine traits		-.02	.00	.01
Negative feminine traits		<b>-.18*</b>	<b>-.16*</b>	<b>-.16*</b>
Social interaction motivation			-.09	-.09
Documentation motivation			.10	.10
Self-promotion motivation			-.10	-.11
Diversion motivation			-.07	-.08
Creativity motivation			-.04	-.03
Self-objectification				<b>-.11*</b>
	$R^2 = .00$	$\Delta R^2 = .05$	$\Delta R^2 = .02$	$\Delta R^2 = .01$
	$p = .277$	$p < .001$	$p = .060$	$p = .025$

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### **4.9 Impact of Instagram use, gender traits, motivations and self-objectification on life satisfaction**

In order to test H4b, a hierarchical regression analysis was conducted with life satisfaction score as criterion. Instagram use was entered in the first block. The second block included biological sex next to positive masculine traits, negative masculine traits, positive feminine traits and negative feminine traits. In the third block scores for social interaction, documentation, self-promotion, diversion and creativity motivations were entered. In the fourth and final block, score for self-objectification was included (see Table 4.9 for beta weights and values for explained variance).

When Instagram use was entered as a single predictor, the model became not significant,  $F(1, 475) = 3.06$ . The second block showed that biological sex (female), positive masculine traits (H4ba), negative masculine traits, positive feminine traits (H4bc) and negative feminine traits (H4be) improved the predictive value of the model,  $F_{change}(5, 470) = 29.22$ . Negative feminine traits had a negative relationship with life satisfaction (= H4be) while the other three predictors had a positive relationship with life satisfaction. The third block showed that adding social interaction motivation (H4bc), documentation motivation and self-promotion motivation (H4bf) improved the predictive value of the model,  $F_{change}(5, 465) = 14.32$ . The final block showed that self-objectification (H4bg) was a significant predictor for life satisfaction,  $F_{change}(1, 464) = 5.28$ . This predictor had a positive relationship with the life satisfaction score.

This hierarchical regression analysis showed that biological sex (female), positive masculine traits, negative masculine traits, positive feminine traits, negative feminine traits, social interaction motivation, documentation motivation, self-promotion motivation, and self-objectification are predictors of life satisfaction. Therefore, H4b: life satisfaction is positively influenced by (a) positive masculine traits, (b) positive feminine traits, (c) social interaction motivation, and negatively influenced by (d) Instagram use, (e) negative feminine traits, (f) self-promotion motivation and (g) self-objectification was accepted after rejecting H4bd, H4bf and H4bg.

Table 4.9. Standardised beta weights and  $R^2$  of the hierarchical regression analyses with ratings on life satisfaction as a criterion.

	Model 1	Model 2	Model 3	Model 4
Predictor				
Instagram use	.08	.05	-.00	.00
Biological sex		.10*	.09*	.09*
Positive masculine traits		.15**	.12**	.12**
Negative masculine traits		.50***	.35***	.37***
Positive feminine traits		.28***	.13**	.13**
Negative feminine traits		-.59***	-.50***	-.50***
Social interaction motivation			.15**	.14**
Documentation motivation			.19***	.20***
Self-promotion motivation			.13*	.14*
Diversion motivation			-.09	-.08
Creativity motivation			.04	.03
Self-objectification				.09*
	$R^2 = .01$	$\Delta R^2 = .24$	$\Delta R^2 = .10$	$\Delta R^2 = .01$
	$p = .081$	$p < .001$	$p < .001$	$p = .022$

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### 4.10 Summary of accepted and rejected hypotheses

Multiple and hierarchical regression analyses were conducted in order to verify the hypotheses formulated based on existing literature. The table below provides a summary of whether the hypotheses were accepted or rejected.

*Table 4.10.* Summary of accepted, partially accepted and rejected hypotheses

	Accepted	Partially accepted	Rejected
Hypotheses			
H1: Instagram use is positively influenced by (a) biological gender (female), (b) negative feminine traits and (c) negative masculine traits.			X
H2a: social interaction motivation is positively influenced by (a) Instagram use, (b) biological sex (female), (c) positive masculine traits, and (d) positive feminine traits.			X
H2b: documentation motivation is positively influenced by (a) Instagram use, (b) biological sex (female), and (c) positive feminine traits.	X		
H2c: diversion motivation is positively influenced by (a) Instagram use and (b) negative feminine traits.	X		
H2d: self-promotion motivation is positively influenced by (a) Instagram use, (b) positive feminine traits, and (c) negative masculine traits and negatively influenced by (d) negative feminine traits.	X		
H2e: creativity motivation is positively influenced by (a) Instagram use, (b) negative masculine traits, and (c) negative feminine traits.			X



H3: self-objectification is positively influenced by (a) Instagram use, (b) biological sex (female), (c) negative feminine traits, (d) negative masculine traits, (e) self-promotion motivation, and negatively influenced by (f) positive masculine traits.	X
H4a: self-esteem is positively influenced by (a) positive masculine traits and (b) social interaction motivation, and negatively influenced by (c) Instagram use, (d) negative feminine traits, (e) creativity motivation, (f) self-promotion motivation, and (g) self-objectification.	X
H4b: life satisfaction is positively influenced by (a) positive masculine traits, (b) positive feminine traits, (c) social interaction motivation, and negatively influenced by (d) Instagram use, (e) negative feminine traits, (f) self-promotion motivation and (g) self-objectification.	X

---

To conclude this chapter, it is important to notice that the data collected has led to unexpected results as some hypotheses were only partially accepted or completely rejected. This next chapter will discuss in greater detail the implications of these results.

## **Chapter 5. Conclusion**

This research aimed to investigate the potential predictors of self-objectification as a result from Instagram use, and further their impact on the well-being of Instagram users, as composed by self-esteem and life satisfaction (Mercurio & Landry, 2008). In order to provide a thorough and cohesive conclusion, this chapter will discuss the main research findings and their implications for existent theory and research. This critical reflection will lead to the limitations of this research as well as to suggestions for future studies. An answer to the research question : to what extent do gender, Instagram use and its motivations influence self-objectification, and thus together, influence Instagram users' well-being? will be provided.

### **5.1 Discussion**

The present study was conducted through a quantitative survey and sought to refine existing literature about the predictors of self-objectification and how they could influence well-being. It investigated whether gender traits could add predictive value when examining self-objectification. It also tested, in addition to Instagram use, whether motivations for its use could predict self-objectification behaviours. Further, one purpose of the present study was to analyse how all the variables previously mentioned could impact the self-esteem and life satisfaction of Instagram users.

#### **5.1.1 Gender traits and Instagram use**

The present research found that only negative masculine attributes could positively predict Instagram use, namely the amount of time spent on Instagram. Although this research expected to find gender differences in Instagram use, in line with Sheldon and Byrant's (2016) and Mackson et al.'s (2019) work, no significant relation was found in the data. In this research, men and women did not differ in regard to the amount of time they usually spend on Instagram ( $\neq$  H1a). This lack of difference would demonstrate that biological sex is not a predictor for Instagram use and that gender traits, meaning personality, would have a better predictive value, as previously mentioned in this study. This research also expected to find that individuals who scored higher for negative feminine traits would spend more time on Instagram.

Contrary to what Kiracaburun et al. (2018) demonstrated, results showed that anxious or self-doubting individuals were not more likely than others to have a greater Instagram use ( $\neq$  H1b). Although individuals are not necessarily pushed to communicate with others on

Instagram, the platform may allow more opportunities for social comparison. Therefore, the enhanced social comparison offered by Instagram may hinder individuals with strong negative feminine traits to spend a lot of time on the platform. Individuals who are more comfortable with themselves and their image may, on the contrary, be heavier users of Instagram. Thus, the present study supported existing literature by showing the influence of personality on Instagram use. As described by Mackson et al. (2019), Instagram is a picture-based network and its use includes posting pictures and checking one's page for likes. It would not be surprising that individuals who tend to be ostentatious, arrogant and power-hungry would spend more time on Instagram to promote their image and post pictures of themselves. Individuals with such personalities may in fact be driven by the need for social approval, to use Instagram.

### **5.1.2 Gender traits, Instagram use and uses and gratification motivations**

While personality, especially high scores for negative masculine traits, was shown to be a positive predictor for Instagram use (= H1c), it was also expected to significantly predict motivations for its use (Sheldon & Byrant, 2016). As expected, Instagram use was found to be a positive significant predictor for all five motivations taken from Sheldon and Newman (2019), namely social interaction, documentation, diversion, self-promotion and creativity (= H2). The present study demonstrated that motivations follow Instagram use. In other words, these different motives would always be predicted by the amount of time an individual would spend on Instagram. For the purpose of this research, the most salient motivations were social interaction and self-promotion because both of them were completely or partially included in hypotheses related to self-objectification and well-being.

Regarding social interaction motivation, it was found as expected and in line with existing literature, that both positive gender attributes positively influenced social interaction (= H2a). However, contrary to the findings of Kircaburun et al. (2018), the present study found no gender differences in the Instagram use motive of social interaction ( $\neq$  H2ab). This lack of gender differences might indicate that personality is a more valuable predictor of Instagram use motivations. The results showed that individuals who scored higher for positive masculine and feminine traits were more likely to spend time on Instagram for social interaction. As social interaction implies a social aspect and has been defined as the need to achieve some sense of belonging (Rubin, 1986), it would make sense that loving and

empathic individuals, meaning individuals showing positive attributes, would seek social interaction whilst spending time on Instagram.

As expected, and in line with Kircaburun et al.'s (2018) findings, it was found that biological gender (female) and positive feminine traits were positive predictors of documentation motivation (= H2b). These results seem logical because documentation motivation is primarily defined by remembering important events and celebrating them (Sheldon & Newman, 2019). It makes sense that individuals with more empathy and sensitivity (i.e. positive feminine attributes) use Instagram for those purposes. However, the analysis also demonstrated that both negative gender traits could be predictors of use for documentation, which is novel to the existing literature. Negative masculine traits describe arrogant, boastful and ostentatious individuals, and were found to positively influence documentation motivation use. As the documentation motive scale also included a question involving the description of one's life through pictures (Sheldon & Newman, 2019), it may not be surprising that individuals who want to show off and who consider themselves as important, would spend time on Instagram to document their lives through photos. Interestingly, negative feminine traits were found to negatively influence Instagram use for documentation. It means that individuals who are more susceptible to be anxious and self-doubting would be less likely to spend more time on Instagram for documentation purposes. This result is surprising as Kircaburun et al. (2018) indicated that neurotic individuals were more subject to use social media in problematic ways. However, the personality in itself could explain this finding. Indeed, anxious and self-doubting individuals may not feel comfortable enough to document their life on Instagram or use Instagram for celebratory events. Individuals with high scores for negative feminine traits may feel discouraged to use Instagram for documentation.

With regard to diversion motivation, it was found as indicated by existing scholarship that negative feminine traits, were positive predictors of diversion motivation (= H2cb). Diversion motivation is described as the use of Instagram to escape both reality and one's loneliness (Sheldon & Newman, 2019). Instagram provides a means for doubting individuals to exist in a virtual environment where they are not obliged to interact or present themselves to others. This type of social media also allows self-doubting and disoriented individuals to be surrounded by others in a virtual community where they can escape their loneliness. It would make sense, in line with previous literature, that individuals scoring strongly for negative feminine traits are more likely to use Instagram for diversion motivation. However, it was also found that negative masculine traits would positively influence Instagram use for

diversion, which was not expected ( $\neq$  H2c). Upon further investigation, this result may be explained by the escape theory. According to Kircaburun and Griffiths (2019), escape theory suggests that individuals with higher standards than they could ever obtain are more likely to experience the need to escape from reality. Individuals with negative masculine traits are described as arrogant, boastful and power-hungry. This need for power and these feelings of superiority fit in the category of individuals in need for more than they actually have. That is why, such individuals may be more likely to spend more time on Instagram to escape from themselves or reality. In light of this argument, while negative feminine traits could predict Instagram use for diversion, primarily to avoid loneliness, negative masculine traits could influence this motivation more as a means to escape reality.

Personality-wise, it was found, as expected and in line with previous literature (Kircaburun et al., 2018), that negative masculine traits and positive feminine traits were positive predictors of social interaction motivation while negative feminine traits negatively influenced the use of Instagram for self-promotion ( $=$  H2d). Because self-promotion involves the intention to show-off (Sheldon & Newman, 2019), it is understandable that individuals with negative masculine attributes (e.g. arrogant, ostentatious) would spend more time on Instagram for the mere gratification of being seen and of promoting themselves. In addition, extraverted individuals with a great number of friends, and socially active people were found to be more likely to use Instagram for self-expression, meaning to share things about themselves (Kircaburun et al., 2018). In line with these findings, the present study concurs to say that positive feminine traits (e.g. loving, passionate) could positively influence Instagram use for self-promotion. On the opposite, individuals scoring higher for negative feminine traits were found to be less likely to spend time on Instagram to promote themselves. It would be logical that self-doubting and anxious individuals would be reluctant to present their personalities and share aspects of themselves online. What is further interesting to note in the instance of self-promotion, is that the present research found that biological sex as well as personality could play a role. While recent literature suggested that Instagram had become a powerful self-presentation media among the young (Lee, Lee, Moon & Sung, 2015), gender differences were not mentioned. It was however found that men were more likely to use Instagram for self-promotion ( $\neq$  H2d). This novel finding could improve the understanding of self-promotion tendencies on Instagram.

With regard to creativity motivation, it was found as expected, that negative masculine traits would positively predict the use of Instagram for creativity (H2e). As creativity was merely understood as the need for validation (Sheldon & Newman, 2019), it

seems understandable that boastful and ostentatious people would spend more time on Instagram for creative purposes. Creativity was defined, among other things, as the will to show-off one's skills and to document the world around oneself. Individuals with a high opinion of themselves and who like to show-off would thus be more inclined to use Instagram to create something that would put them in a positive light. However, contrary to what was expected, negative feminine traits were not found to be significant predictors of creativity motivation in this study. On the contrary, positive feminine traits appeared to positively influence creativity motivation ( $\neq$  H2e). More than the need for validation, creativity could also be linked to the need to create and connect with other users through art. This aspect of creativity motivation could potentially appeal to loving and sensitive personalities and could explain why individuals who scored high for positive feminine traits would use Instagram for creative purposes.

In short, it was overall found that personality could add significant predictive value for motivations to use Instagram. While some gender attributes explained motivation use as expected, some others emerged from the data and could add to the existing literature on the topic.

### **5.1.3 Gender traits, Instagram use, motivations and self-objectification**

Against all expectations, the present study found that the only predictor of self-objectification was negative masculine traits ( $\neq$  H3), which was not in line with existing literature. In the data, no other significant relations were found. While exposure to media content and Instagram use has been demonstrated to have a significant effect on self-objectification, (Fardouly & Vartanian, 2016; Vandenbosch & Eggermont, 2012), no relation was found in this research ( $\neq$  H3a). Even though it has been argued that Instagram use would lead to higher self-objectification (Fardouly, et al., 2018), the present study could not confirm such findings. Although existing scholarship discussed gender differences in self-objectification behaviour (Fardouly et al., 2015; Fredrickson & Roberts, 1997; Noll & Fredrickson, 1998), by stating that women were more subject to self-objectification than men, no differences were found in the present study ( $\neq$  H3b).

However, the recent concern for male self-objectification (Schwartz et al., 2010) may indicate that biological sex may not hold the best predictive value for self-objectification and could further explain the absence of gender differences in the present data. It means that personality would have a better predictive value for self-objectification. It was unexpectedly

found that negative masculine traits would negatively predict self-objectification ( $\neq$  H3d). This is not in line with Schwartz et al. (2010) who suggested that low success and power were associated with high self-objectification. Interpreting Schwartz et al.'s (2010) findings indicate that individuals who are power-hungry and harsh, that is, who scored high for negative masculine traits were supposed to score higher for self-objectification. However, the opposite effect was observed in the data.

Further, the uses and gratification theory was used to test whether motivations for Instagram use could possibly influence self-objectification. It was found that none of the motivations were significant predictors of self-objectification. Even though self-promotion motivation was believed to have an impact because it implies a need for reassurance-seeking (Sheldon & Newman, 2019), such causal relationship could not be verified in the present study ( $\neq$  H3e). According to the data, only individuals with harsh and ostentatious traits were less likely to experience less self-objectification.

#### **5.1.4 Gender traits, Instagram use, motivations, self-objectification and self-esteem**

Even though media consumption is believed to have negative impacts on self-esteem because of the nature of media content and the perpetuation of objectifying messages in new media (Ho & Ito, 2019; Vandenbosch & Eggermont, 2012; Wilcox & Laird, 2000), no significant relation was found in the data ( $\neq$  H4ac). Instagram use and motivations for its use, namely self-promotion, social interaction and creativity, had no predictive value for self-esteem in the present study. As expected, and in line with existing literature, personality more than biological sex played a role in self-esteem. It was found in accordance with literature that negative feminine traits negatively predicted self-esteem ( $=$  H4ad). It means that, as Marcionetti and Rossier (2016) pointed out, neurotic personalities may lead to lower self-esteem. Contrary to what was initially expected, positive masculine traits were not a significant predictor for self-esteem ( $\neq$  H4aa). There is a consensus among scholars stating that self-objectification negatively impacts self-esteem (Mercurio & Landry, 2018), primarily because self-objectification is often defined as a harmful behaviour leading to negative psychological outcomes. In fact, the mere definition of self-objectification (Fredrickson & Roberts, 1997) could indicate a disdain for one's self-worth. Because self-objectification means that one values one's body from a third-person perspective, it may automatically imply a lower self-esteem. The present study confirmed those assumptions by demonstrating that self-objectification was a negative predictor of self-esteem ( $=$  H4ag). It means that

individuals with negative feminine attributes who scored higher for self-objectification were more likely to have lower self-esteem.

#### **5.1.5 Gender traits, Instagram use, motivations, self-objectification and life satisfaction**

With regard to the predictors of life satisfaction, unexpected results arose from the data. The effects of social media use, and more specifically of Instagram use, tend to be polarised among scholars (Weinstein, 2018). However, the present study found no significant relation between Instagram use and overall life satisfaction ( $\neq$  H4bd). Interestingly and contrary to what Vigil and Wu (2015) suggested, the present study found gender differences regarding life satisfaction ( $\neq$  H4b). It was found that women were more likely to be satisfied with their life than men. This result might be explained by the cultural contexts and backgrounds of participants, even though there is no academic literature that could confirm that assumption. As expected, personality could play a significant role in one's life satisfaction (Chen et al., 2008). It was found, as expected, that life satisfaction was positively influenced by positive gender traits and negatively influenced by negative feminine traits ( $=$  H4b).

Interestingly, it was also found that individuals with high scores for negative masculine traits were more likely to be satisfied with their life. This unexpected result might in fact be explained by the nature of individuals with such personality traits. In fact, as life satisfaction relates to one's ideals, arrogant and power-hungry individuals may not want to admit that their life is far from their ideal and that it does not correspond perfectly to their high standards. This finding is subject to interpretation but individuals who score high for negative masculine traits might have indicated that they were globally satisfied with their life when it might not have necessarily been the case.

In line with existing literature, social interaction motivation was found to positively influence life satisfaction ( $=$  H4bc). Individuals seeking and getting social connection and relationships through Instagram use may understandably have higher life satisfaction scores. Contrary to what was expected, self-promotion as well was found to be a positive predictor of life satisfaction ( $\neq$  H4bf). Perhaps, individuals who use Instagram to show off and who get social recognition through self-promotion may feel like they have somewhat achieved more, which would lead them to score higher for life satisfaction. Similarly, documentation motivation for Instagram use was found to positively predict life satisfaction. Thus, even



though Instagram use had no influence in this study, three motivations were found to be positive predictors of life satisfaction, indicating that the use of Instagram for specific purposes might be beneficial to one's well-being.

What remains perplexing in the present study is that self-objectification was found to positively predict life satisfaction ( $\neq$  H4bg). In other words, individuals who scored high for self-objectification were more likely to be satisfied with their life, which is not in line at all with existing literature (Mercurio & Landry, 2018). However, upon further investigation, this result might be explained by the fact that, when assessing their life satisfaction, individuals are likely to use information that are pertinent at the time of the evaluation (Diener et al, 2009). In other words, it means that life satisfaction is more a state than a trait variable. Thus, at the time of the study, it would be possible that the more an individual would consider physical attributes important, the more they would use Instagram to be satisfied with their life. Especially given the fact that the data was collected at the beginning of the corona outbreak, the state of mind of individuals may have been altered regarding the image they had of themselves. For instance, individuals' routines were modified, notably regarding physical exercise. In this extraordinary situation, individuals who put more emphasis on their physical attributes may have scored higher on life satisfaction because they were given the time and leisure to focus on their physical appearance. It is also possible that individuals with high scores on self-objectification found refuge on Instagram during the pandemic. In this case, Instagram use would indirectly mediate the effect of self-objectification on life satisfaction.

According to the present study, self-objectification would have negative effects on self-esteem and positive ones on life satisfaction. Although self-esteem and life satisfaction are both components of well-being, they are not the same. The observed discrepancy may be further explained by the fact that they are differently influenced and may depend on the media content that is primed by media studies.

## **5.2 Limitations**

The present study was conducted after thorough examination of existing theory and research, as well as after several methodological considerations and choices. Nonetheless, this study possesses some limitations and previous findings should be interpreted knowing its constraints.

Although many choices were made in the construction and administration of the questionnaire to ensure its validity and reliability and avoid any potential bias, the representativeness of the global population was not perfect. Random sampling was used via the use of Amazon Mechanical Turk because of its advantages to access online and international communities, and reach a diversity of individuals (Wright, 2005). Even though a choice was knowingly made when distributing a survey in the English language, thus only accessing populations with the mastery of English, it resulted that the majority of respondents were American (52.2%). An international population was desired in this study, primarily because Instagram is an international fast-growing social network (Sheldon et al., 2017). While a total of 22 nationalities were included in the final samples, the vast majority came from the United States of America or were from a Western country such as Canada or Italy. Although the results of this study are valid and reliable, there is a cultural bias to be taken into consideration when interpreting the results. Indeed, as culture determines individuals' perceptions and behaviours (Kim, Sohn & Choi, 2011) it is important to take into account the role of cultural backgrounds. As pointed out by Sheldon et al. (2017), the influence of culture on social media use is not negligible. When carrying out a cross-cultural comparison of Croatian and American social media use, Sheldon et al. (2017) found that the cultural background, and especially individualism and collectivism aspects, significantly impacted the degree of motivations for Instagram use. Therefore, one could expect different results for different cultures, specifically when comparing individualistic cultures (e.g. American culture) and more collectivist cultures (e.g. India), which were less represented in the present study.

While the scales and subscales used were proven to be valid and reliable, some limitations still emerged from the design of the quantitative survey. Because of practicalities, time constraints, and the existence of a large body of literature, the survey was not experiential, and participants were not exposed to visual content. It was assumed in this research after reviewing literature that social media would often convey objectifying pictures or messages (Vandenbosch & Eggermont, 2012). In this research though, it was impossible to know with certainty the kind of Instagram content participants were routinely exposed to. It was also impossible to know participants' degree of exposure to specific content. While using the time spent on Instagram and its motivations could inform to some extent individuals' needs and wants as well as their media behaviour, it was impossible to know if they were indeed exposed to objectifying content. In the present study, the lack of relationship found between overall Instagram use and self-objectification may indicate that a survey experiment

could have been used to examine participants' response to specific social media content, in the same vein as Cohen et al. (2019).

Following that line of argument, attitudes regarding one's body and psychological states such as self-esteem might change a lot over time. The use of life satisfaction was meant to account for the fluctuations of self-esteem, as "there is substantial temporal stability in people's life satisfaction judgments" (Diener et al., 2009, p. 76). However, a long-term study could add significant predictive value for the predictors of self-objectification, and further well-being. The findings of this study remain valid and reliable, but results should be interpreted with the knowledge that they do not correspond to a large time span and, more importantly that the data was collected during the corona outbreak. The consequences of the pandemic remain uncertain on the findings. However, they should not be disregarded as the pandemic could have influenced the results, notably regarding the time spent on Instagram. Because feelings of loneliness were very much present, it is safe to assume that Instagram use was significantly increased and that certain gender traits may have been heightened. During the time period, individuals were more likely to feel anxious or lonely. It is thus probable that they would score higher for negative feminine attributes. The exceptional circumstances of the present study are something to keep in mind when interpreting the results.

### **5.3 Suggestions for future research**

In light of the findings and limitations, this study proposes several suggestions for future research. In a general sense, the present study, in line with existing literature (e.g. Kneer et al., 2019), has demonstrated the significance of studying personality in addition to gender and has pointed that personality could add significant predictive value, especially when studying consequences of problematic social media use. For instance, the present study pointed out the value of specific gender attributes when it came to predict self-objectification. Future research could thus continue to examine the predictive value of personality when analysing self-objectification.

Further, it would be interesting when studying the effects of Instagram use and motivations for its use on self-objectification to expose respondents to visual content in an experiential way, to ascertain which types of Instagram posts for instance, could drive higher self-objectification. Combining a long-term study with an experiential investigation could significantly improve the predictive value of the predictors under study.

Finally, the presence of a cultural bias offers room for research on different populations. As one's relation with one's body may differ according to one's cultural background, it would be riveting to see if findings differ when reiterating this research among populations that are less exposed to the westernisation of society. It is also possible that Instagram content and overall media consumption is different among such populations.

## **5.4 Summary**

To conclude, the present study found that gender traits influenced all the variables under study, namely Instagram use, motivations for its use, self-objectification, self-esteem and life satisfaction. These findings confirmed the value of existing literature claiming the need to examine personality in media studies. The present research also showed a lot of interplay between all variables. Indeed, gender traits were found to predict motivations, and eventually influenced well-being. Instagram use and its motivations may thus indirectly impact self-objectification. Self-objectification was found to directly impact both measures of well-being.

Negative masculine attributes were found to be significant predictors of documentation and self-promotion motivation use, and later, was found to negatively influence self-objectification. Further, these gender attributes positively impacted life satisfaction, which was also positively influenced by documentation and self-promotion motivations. Only negative feminine traits were found to have a negative effect on self-esteem, which appeared to also be negatively predicted by self-objectification.

In sum, only gender traits directly influenced self-objectification. However, gender, gender traits, motivations and self-objectification were direct predictors of well-being, composed by self-esteem and life satisfaction. Motivations for Instagram use that were directly influenced by gender attributes may predict self-objectification, but indirectly. Similarly, Instagram use, that was directly impacted by gender traits may influence self-objectification and well-being, but to a smaller extent, as it was not found to be a direct predictor.

## References

- Aparicio-Martínez, P., Ruiz-Rubio, M., Perea-Moreno, A., Martínez-Jiménez, M. P., Pagliari, C., Redel-Macías, M. D., & Vaquero-Abellán, M. (2020). Gender differences in the addiction to social networks in the southern Spanish university students. *Telematics and Informatics*, 46 doi:10.1016/j.tele.2019.101304
- Arroyo, A., Segrin, C., & Harwood, J. (2014). Appearance-related communication mediates the link between self-objectification and health and well-being outcomes. *Human Communication Research*, 40(4), 463-482. doi:10.1111/hcre.12036
- Aubrey, J. S. (2007). The impact of sexually objectifying media exposure on negative body emotions and sexual self-perceptions: Investigating the mediating role of body self-consciousness. *Mass Communication and Society*, 10(1), 1-23. doi:10.1080/15205430709337002
- Beatty, P. C., & Willis, G. B. (2007). Research synthesis: The practice of cognitive interviewing. *Public Opinion Quarterly*, 71, 287–311.
- Berger, A., & Krahé, B. (2013). Negative attributes are gendered too: Conceptualizing and measuring positive and negative facets of sex-role identity. *European Journal of Social Psychology*, 43(6), 516-531. doi:10.1002/ejsp.1970
- Boynton, P. M., & Greenhalgh, T. (2004). Selecting, designing, and developing your questionnaire. *BMJ: British Medical Journal*, 328, 1312–1315.
- Chen, C., Zhang, K., Gong, X., Zhao, S., Lee, M., & Liang, L. (2017). Examining the effects of motives and gender differences on smartphone addiction. *Computers in Human Behavior*, 75, 891-902. doi:10.1016/j.chb.2017.07.002
- Chen, L., Tu, H., & Wang, E. (2008). Personality traits and life satisfaction among online game players. *Cyberpsychology & Behavior : The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society*, 11(2), 145-9. doi:10.1089/cpb.2007.0023
- 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. doi:10.1177/1461444819826530
- Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-5.
- Diener, E., Scollon, C.N., Lucas, R.E. (2009). The evolving concept of subjective well-being: the multifaceted nature of happiness. In: Diener, E. (Ed.), *Assessing Well-being*. Springer, Netherlands, pp. 67–100.

- Du, H., King, R.B., Chi, P. (2017). Self-esteem and subjective well-being revisited: The roles of personal, relational, and collective self-esteem. *Plos One*, 12(8): e0183958. <https://doi.org/10.1371/journal.pone.0183958>
- Ehrenberg, A., Juckes, S., White, K. M., & Walsh, S. P. (2008). Personality and self-esteem as predictors of young people's technology use. *Cyberpsychology & Behavior : The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society*, 11(6), 739-41. doi:10.1089/cpb.2008.0030
- Faleatua, R. (2018). Insta brand me: playing with notions of authenticity, *Continuum*, 32:6, 721-732, doi: 10.1080/10304312.2018.1525921
- Fan, X., Deng, N., Dong, X., Lin, Y., & Wang, J. (2019). Do others' self-presentation on social media influence individual's subjective well-being? a moderated mediation model. *Telematics and Informatics*, 41, 86-102. doi:10.1016/j.tele.2019.04.001
- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). The mediating role of appearance comparisons in the relationship between media usage and self-objectification in young women. *Psychology of Women Quarterly*, 39(4), 447-457. doi:10.1177/0361684315581841
- Fardouly, J., & Vartanian, L. R. (2015). Negative comparisons about one's appearance mediate the relationship between facebook usage and body image concerns. *Body Image*, 12, 82-88. doi:10.1016/j.bodyim.2014.10.004
- Fardouly, J., & Vartanian, L. R. (2016). Social media and body image concerns: Current research and future directions. *Current Opinion in Psychology*, 9, 1-5. doi:10.1016/j.copsyc.2015.09.005
- Fardouly, J., Willburger, B. K., & Vartanian, L. R. (2018). Instagram use and young women's body image concerns and self-objectification: Testing mediational pathways. *New Media & Society*, 20(4), 1380-1395. doi:10.1177/1461444817694499
- Feltman, C., & Szymanski, D. (2018). Instagram use and self-objectification: The roles of internalization, comparison, appearance commentary, and feminism. *Sex Roles : A Journal of Research*, 78(5-6), 311-324. doi:10.1007/s11199-017-0796-1
- Fowler, F. J. (2012). *Survey Research Methods*. Thousand Oaks: SAGE Publications, Inc.
- Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173–206. doi:10.1111/j.1471-6402.1997.tb00108.x
- Galdi, S., Maass, A., & Cadinu, M. (2014). Objectifying media: Their effect on gender role

- norms and sexual harassment of women. *Psychology of Women Quarterly*, 38(3), 398-413. doi:10.1177/0361684313515185
- Gilman, R., & Huebner, E. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence*, 35(3), 293-301.
- Haferkamp, N., & Krämer, N. (2011). Social comparison 2.0: Examining the effects of online profiles on social-networking sites. *Cyberpsychology, Behavior and Social Networking*, 14(5), 309-14. doi:10.1089/cyber.2010.0120
- Ho, H., & Ito, K. (2019). Consumption-oriented engagement in social network sites: Undesirable influence on personal well-being. *European Journal of Marketing*, 53(7), 1355-1377. doi:10.1108/EJM-11-2017-0809
- Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*, 17, 100-110. doi:10.1016/j.bodyim.2016.02.008
- Joiner, T., Alfano, M., & Metalsky, G. (1992). When depression breeds contempt: Reassurance seeking, self-esteem, and rejection of depressed college students by their roommates. *Journal of Abnormal Psychology*, 101(1), 165-73.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Uses and gratifications research. *The Public Opinion Quarterly*, 37, 509e523. <http://dx.doi.org/10.1086/268109>.
- Kim, Y., Sohn, D., & Choi, S. M. (2011). Cultural difference in motivations for using social network sites: a comparative study of american and korean college students. *Computers in Human Behavior*, 27(1), 365–372. <https://doi-org.eur.idm.oclc.org/10.1016/j.chb.2010.08.015>
- Kircaburun, K., Alhabash, S., Betül Tosuntaş, S., & Griffiths, M.D. (2018). Uses and gratifications of problematic social media use among university students: A simultaneous examination of the big five of personality traits, social media platforms, and social media use motives. *International Journal of Mental Health and Addiction*, 1-23. doi:10.1007/s11469-018-9940-6
- Kircaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the big five of personality: The mediating role of self-liking. *Journal of Behavioral Addictions*, 7(1), 158-170. doi:10.1556/2006.7.2018.15
- Kircaburun, K., & Griffiths, M. D. (2019). Problematic instagram use: The role of perceived feeling of presence and escapism. *International Journal of Mental Health and Addiction*, 17(4), 909-921. doi:10.1007/s11469-018-9895-7
- Kleemans, M., Daalmans, S., Carbaat, I., & Anschütz, D. (2018). Picture perfect: The direct

- effect of manipulated instagram photos on body image in adolescent girls. *Media Psychology*, 21(1), 93-110. doi:10.1080/15213269.2016.1257392
- Kneer, J., Franken, S., & Reich, S. (2019). Not only for the (tom) boys: Gender variables as predictors for playing motivations, passion, and addiction for MMORPGs. *Simulation & Gaming*, 50(1), 44-61. doi:10.1177/1046878118823033
- Lee, E., Lee, J., Moon, J., & Sung, Y. (2015). Pictures speak louder than words: Motivations for using Instagram. *Cyberpsychology, Behavior and Social Networking*, 18(9), 552-6. doi:10.1089/cyber.2015.0157
- Lee, S., Chung, J., & Park, N. (2018). Network environments and well-being: An examination of personal network structure, social capital, and perceived social support. *Health Communication*, 33(1), 22-31. doi:10.1080/10410236.2016.1242032
- Mackson, S., Brochu, P., & Schneider, B. (2019). Instagram: Friend or foe? the application's association with psychological well-being. *New Media & Society*, 21(10), 2160-2182. doi:10.1177/1461444819840021
- Marcionetti, J., & Rossier, J. (2016). Global life satisfaction in adolescence: The role of personality traits, self-esteem, and self-efficacy. *Journal of Individual Differences*, 37(3), 135-144. doi:10.1027/1614-0001/a000198
- Matthews, B. & Ross, L. (2010). C3: Questionnaires. In B. Matthews & L. Ross, *Research methods: A practical guide for the social sciences* (pp. 200-217). Harlow: Pearson.
- McQuail, D., Blumler, J. G., & Brown, J. R. (1972). The television audience: Revised perspective. In D. McQuail (Ed.), *Sociology of mass communications* (pp. 135-165). Harmondsworth, UK: Penguin.
- Meeus, A., Beullens, K., & Eggermont, S. (2019). Like me (please?): Connecting online self presentation to pre- and early adolescents' self-esteem. *New Media & Society*, 146144481984744, 146144481984744-146144481984744. doi:10.1177/1461444819847447
- Meier, E., & Gray, J. (2014). Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychology, Behavior and Social Networking*, 17(4), 199-206. doi:10.1089/cyber.2013.0305
- Mercurio, A., & Landry, L. (2008). Self-objectification and well-being: The impact of self objectification on women's overall sense of self-worth and life satisfaction. *Sex Roles : A Journal of Research*, 58(7-8), 458-466. doi:10.1007/s11199-007-9357-3
- Michaels, M., Barr, A., Roosa, M., & Knight, G. (2007). Self-esteem. *The Journal of Early Adolescence*, 27(3), 269-295.



- Miner-Rubino, K., Twenge, J., & Fredrickson, B. (2002). Trait self-objectification in women: Affective and personality correlates. *Journal of Research in Personality*, 36(2), 147-172. doi:10.1006/jrpe.2001.2343
- Muscanell, N. L., & Guadagno, R. E. (2012). Make new friends or keep the old: Gender and personality differences in social networking use. *Computers in Human Behavior*, 28, 107-112. doi:10.1016/j.chb. 2011.08.016
- Nair, L. R., & Selvan, R. S. (2018). Gender mystique: Reframing gender as biological, social, linguistic, psychological or cultural imperative. *Language in India*, 18(12), 155.
- Nardi, P. (2006). *Doing survey research : A guide to quantitative methods* (2nd ed.). Boston: Pearson/Allyn & Bacon.
- Noll, S. M., & Fredrickson, B. L. (1998). A mediational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly*, 22(4), 623-636. doi:10.1111/j.1471-6402.1998.tb00181.x
- Orchard, L., Fullwood, C., Galbraith, N., & Morris, N. (2014). Individual differences as predictors of social networking. *Journal of Computer-Mediated Communication*, 19(3), 388-402. doi:10.1111/jcc4.12068
- Pallant, J. (2010). *Spss survival manual : a step by step guide to data analysis using spss* (4<sup>th</sup> ed.). Open University Press McGraw-Hill.
- Pang, H. (2018). Microblogging, friendship maintenance, and life satisfaction among university students: The mediatory role of online self-disclosure. *Telematics and Informatics*, 35(8), 2232-2241. doi:10.1016/j.tele.2018.08.009
- Phua, J., Jin, S., & Kim, J. (2017). Gratifications of using facebook, twitter, instagram, or snapchat to follow brands: The moderating effect of social comparison, trust, tie strength, and network homophily on brand identification, brand engagement, brand commitment, and membership intention. *Telematics and Informatics*, 34(1), 412-424. doi:10.1016/j.tele.2016.06.004
- Punch, K. (2003). *Survey research : The basics* (Essential resources for social research). London: Sage Publications.
- Rosenberg, M. (1989). *Society and the adolescent self-image* (Rev. ed., 1st Wesleyan, Ser. Wesleyan paperback). Wesleyan University Press.
- Rubin, A. M. (1986). Uses, gratifications, and media effects research. In J. Bryant & D. Zillmann (Eds.), *Perspectives on media effects* (pp. 281–301). Mahwah, NJ: Lawrence Erlbaum Associates.
- Sarstedt, M., Bengart, P., Shaltoni, A. M., & Lehmann, S. (2017). The use of sampling

- methods in advertising research: a gap between theory and practice. *International Journal of Advertising*, 37, 650-663.
- Schmuck, D., Karsay, K., Matthes, J., & Stevic, A. (2019). "looking up and feeling down". the influence of mobile social networking site use on upward social comparison, self-esteem, and well-being of adult smartphone users. *Telematics and Informatics*, 42, 101240-101240. doi:10.1016/j.tele.2019.101240
- Schwartz, J. P., Grammas, D. L., Sutherland, R. J., Siffert, K. J., & Bush-King, I. (2010). Masculine gender roles and differentiation: Predictors of body image and self-objectification in men. *Psychology of Men and Masculinity*, 11(3), 208-224. doi:10.1037/a0018255
- Seo, M., & Hyun, K. (2018). The effects of following celebrities' lives via snss on life satisfaction: The palliative function of system justification and the moderating role of materialism. *New Media and Society*, 20(9), 3479-3497. doi:10.1177/1461444817750002
- Sheldon, P., & Bryant, K. (2016). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior*, 58, 89-97. doi:10.1016/j.chb.2015.12.059
- Sheldon, P., & Newman, M. (2019). Instagram and american teens: understanding motives for its use and relationship to excessive reassurance-seeking and interpersonal rejection. *Social media and Society*, 8(1), 1-16.
- Sheldon, P., Rauschnabel, P., Antony, M., & Car, S. (2017). A cross-cultural comparison of croatian and american social network sites: Exploring cultural differences in motives for instagram use. *Computers in Human Behavior*, 75, 643-651. doi:10.1016/j.chb.2017.06.009
- Slok, A., Bemelmans, T., Kotz, D., Molen, T., Kerstjens, H., In, ' , . . . Schayck, O. (2016).The assessment of burden of copd (abc) scale: A reliable and valid questionnaire. *Copd: Journal of Chronic Obstructive Pulmonary Disease*, 13(4), 431-438. doi:10.3109/15412555.2015.1118025
- Smock, A. D., Ellison, N. B., Lampe, C., & Whon, D. Y. (2011). Facebook as a toolkit: A uses and gratification approach to unbundling feature use. *Computers in Human Behavior*, 27, 2322-2329. doi:10. 1016/j.chb.2011.07.011
- Thompson, S.H., & Lougheed, E. (2012). Frazzled by Facebook? An exploratory of gender differences in social network communication among undergraduate men and women. *College Student Journal*, 46(1), 88-98.

- Treem, J. W., Dailey, S. L., Pierce, C. S., & Biffel, D. (2016). What we are talking about when we talk about social media: A framework for study. *Sociology Compass*, 10(9), 768-784. doi:10.1111/soc4.1240
- Trepte, S., Dienlin, T., & Reinecke, L. (2015). Influence of social support received in online and offline contexts on satisfaction with social support and satisfaction with life: A longitudinal study. *Media Psychology*, 18(1), 74-105. doi:10.1080/15213269.2013.838904
- Vandenbosch, L., & Eggermont, S. (2012). Understanding sexual objectification: a comprehensive approach toward media exposure and girl's internalization of beauty ideals, self-objectification and body surveillance. *Journal of Communication*, 62(5), 869-887. doi:10.1111/j.1460-2466.2012.01667.x.
- Vigil, T., & Wu, H. (2015). Facebook users' engagement and perceived life satisfaction. *Media and Communication*, 20150720. doi:10.17645/mac.v3i1.199
- Weinstein, E. (2018). The social media see-saw: Positive and negative influences on adolescents' affective well-being. *New Media and Society*, 20(10), 3597-3623. doi:10.1177/146144481875563
- Weiser, E. (2000). Gender differences in internet use patterns and internet application preferences: A two-sample comparison. *Cyberpsychology and Behavior*, 3(2), 167-178.
- Wilcox, K., & Laird, J.D. (2000). The impact of media images of super-slender women in women's self-esteem: Identification, social comparison and self-perception. *Journal of Research in Personality*, 34, 278-286. doi:10.1006/jrpe.1999.2281
- Wright, K. (2005). Researching internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication*, 10(3), 00-00. doi:10.1111/j.1083-6101.2005.tb00259.x

## Appendix A. Questionnaire

---

### Start of Block: Default Question Block

#### Introduction

Dear Participant,

Thank you for taking the time to be part of this survey.

This questionnaire will take you **about 8 minutes** to complete.

This survey aims to find out more about online behaviour related to social media usage.

This study is intended for people aged 18 years and older. Please know that your participation is voluntary. You may refuse to take part in the research, to exit the survey at any time or to refuse to answer certain questions.

All your answers are voluntary. Your participation is anonymous and will be kept confidential.

There are no right or wrong answers. There are no risks involved in participating in this survey other than those encountered in day-to-day life. The results of the study will be exclusively used for academic purposes to help us learn more about particular behaviours on social media.

If you have any questions or concerns, please e-mail me at [520038eg@gmail.com](mailto:520038eg@gmail.com)

Thank you for your participation,  
Master's student in Media, Culture and Society at Erasmus University Rotterdam.

#### INFORMED CONSENT

Clicking on the button to continue this survey means that:

- You have read the above information

- You voluntarily agree to participate
- You are 18 years old or more

- ☐ I understand and I want to continue to the survey (1)
- ☐ I disagree/don't understand and want to exit the survey (10)

*Skip To: End of Survey If Dear Participant, thank you for taking the time to be part of this survey. This questionnaire w... = I disagree/don't understand and want to exit the survey*

---

Page Break

---

User of instagram Do you use Instagram?

☐ Yes (1)

☐ No (2)

*Skip To: End of Survey If Do you use Instagram? = No*

---

Page Break

---

Hours use On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

---

Followers use How many Instagram followers do you have? (please only use numbers)

---

Page Break

Gender traits To what extent do the following character traits describe your personality?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
Analytical (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arrogant (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxious (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Logical (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boastful (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empathic (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disoriented (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Objective (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harsh (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loving (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Naive (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Practical (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inconsiderate (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passionate (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Overcautious (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rational (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ostentatious (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sensitive (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oversensitive (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solution- focused (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Power-hungry (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tender (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-doubting (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Social int. motive How often do use Instagram for the following reasons?

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
To see what other people share (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To "like" my followers' photos (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To follow my friends (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To see my friends' photos (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To post photos for my friends (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Documentation motive How often do use Instagram for the following reasons?

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
To remember special events (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To celebrate an event (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To describe my life through photos (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To remember something important (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Self-promotion motive How often do use Instagram for the following reasons?

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
To show-off (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To become popular (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To self-promote myself (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Diversion motive How often do use Instagram for the following reasons?

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
To avoid loneliness (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To escape reality (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Creativity motive How often do use Instagram for the following reasons?

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
To create art (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To document the world around me (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To find people with whom I have common interests (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To show off my photography skills (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-----  
Page Break

---

Self-objectification Please rank this list of body attributes in ascending order of importance to you (most important, rank = 1 and least important, rank = 12)

- \_\_\_\_\_ Physical attractiveness (1)
- \_\_\_\_\_ Skin colour (2)
- \_\_\_\_\_ Weight (3)
- \_\_\_\_\_ Sex appeal (4)
- \_\_\_\_\_ Measurements (5)
- \_\_\_\_\_ Muscle tone (6)
- \_\_\_\_\_ Muscular strength (7)
- \_\_\_\_\_ Physical coordination (8)
- \_\_\_\_\_ Stamina (9)
- \_\_\_\_\_ Health (10)
- \_\_\_\_\_ Physical fitness (11)
- \_\_\_\_\_ Physical energy level (12)

---

Page Break

Self-esteem To what extent to you agree with the following statements about yourself?

	Strongly agree (1)	Agree (2)	Disagree (3)	Strongly disagree (4)
On the whole, I am satisfied with myself (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At times, I feel like I am not good at all (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I have a number of good qualities (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to do things as well as most other people (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I do not have much to be proud of (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I certainly feel useless at times (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I am a person of worth (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I could have more respect for myself (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All in all, I am inclined to feel that I am failure (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a positive attitude toward myself (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Life-satisfaction To what extent do you agree with the following statements about your life in general?

	Strongly disagree (22)	Disagree (23)	Somewhat disagree (24)	Neither agree nor disagree (25)	Somewhat agree (26)	Agree (27)	Strongly agree (28)
In most ways my life is close to my ideal (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The conditions of my life are excellent (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my life (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So far I have gotten the important things I want in life (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could live my life over, I would change almost nothing (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Social media What other social media do you use on a daily basis?

- ☐ Facebook (1)
- ☐ Snapchat (2)
- ☐ TikTok (3)
- ☐ Twitter (4)
- ☐ Pinterest (5)
- ☐ None (7)
- ☐ Other (6) \_\_\_\_\_

Age How old are you? (please only use numbers)

\_\_\_\_\_

Biological sex What is your gender?

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



Country In which country do you currently reside?

▼ Afghanistan (1) ... Zimbabwe (1357)



Level of education What is the highest level of school you have completed or the highest degree you have received?

- ☐ Less than high school degree (1)
  - ☐ High school graduate (high school diploma or equivalent) (2)
  - ☐ Some college but no degree (3)
  - ☐ Bachelor's degree (5)
  - ☐ Master's degree (6)
  - ☐ Doctoral degree (PhD) (7)
  - ☐ Professional degree (JD, MD) (8)
- 

Q19 Here is your completion code: [\\${e://Field/RandomID}](#)

Copy this value to paste into MTurk.

When you have copied this ID, please click the next button to submit your survey.

End of Block: Default Question Block

---

## Appendix B. SPSS Output

### Factor Analysis

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.909
Bartlett's Test of Sphericity	Approx. Chi-Square	5445.802
	df	276
	Sig.	.000

#### Communalities

	Initial	Extraction
To what extent do the following character traits describe your personality? - Analytical	1.000	.487
To what extent do the following character traits describe your personality? - Arrogant	1.000	.728
To what extent do the following character traits describe your personality? - Emotional	1.000	.559
To what extent do the following character traits describe your personality? - Anxious	1.000	.676
To what extent do the following character traits describe your personality? - Logical	1.000	.617

To what extent do the following character traits describe your personality? - Boastful	1.000	.672
To what extent do the following character traits describe your personality? - Empathic	1.000	.511
To what extent do the following character traits describe your personality? - Disoriented	1.000	.676
To what extent do the following character traits describe your personality? - Objective	1.000	.439
To what extent do the following character traits describe your personality? - Harsh	1.000	.659
To what extent do the following character traits describe your personality? - Loving	1.000	.656
To what extent do the following character traits describe your personality? - Naive	1.000	.634
To what extent do the following character traits describe your personality? - Practical	1.000	.515

To what extent do the following character traits describe your personality? - Inconsiderate	1.000	.750
To what extent do the following character traits describe your personality? - Passionate	1.000	.589
To what extent do the following character traits describe your personality? - Overcautious	1.000	.452
To what extent do the following character traits describe your personality? - Rational	1.000	.511
To what extent do the following character traits describe your personality? - Ostentatious	1.000	.651
To what extent do the following character traits describe your personality? - Sensitive	1.000	.638
To what extent do the following character traits describe your personality? - Oversensitive	1.000	.622
To what extent do the following character traits describe your personality? - Solution-focused	1.000	.539

To what extent do the following character traits describe your personality? - Power-hungry	1.000	.617
To what extent do the following character traits describe your personality? - Tender	1.000	.569
To what extent do the following character traits describe your personality? - Self-doubting	1.000	.601

Extraction Method: Principal Component Analysis.

#### Total Variance Explained

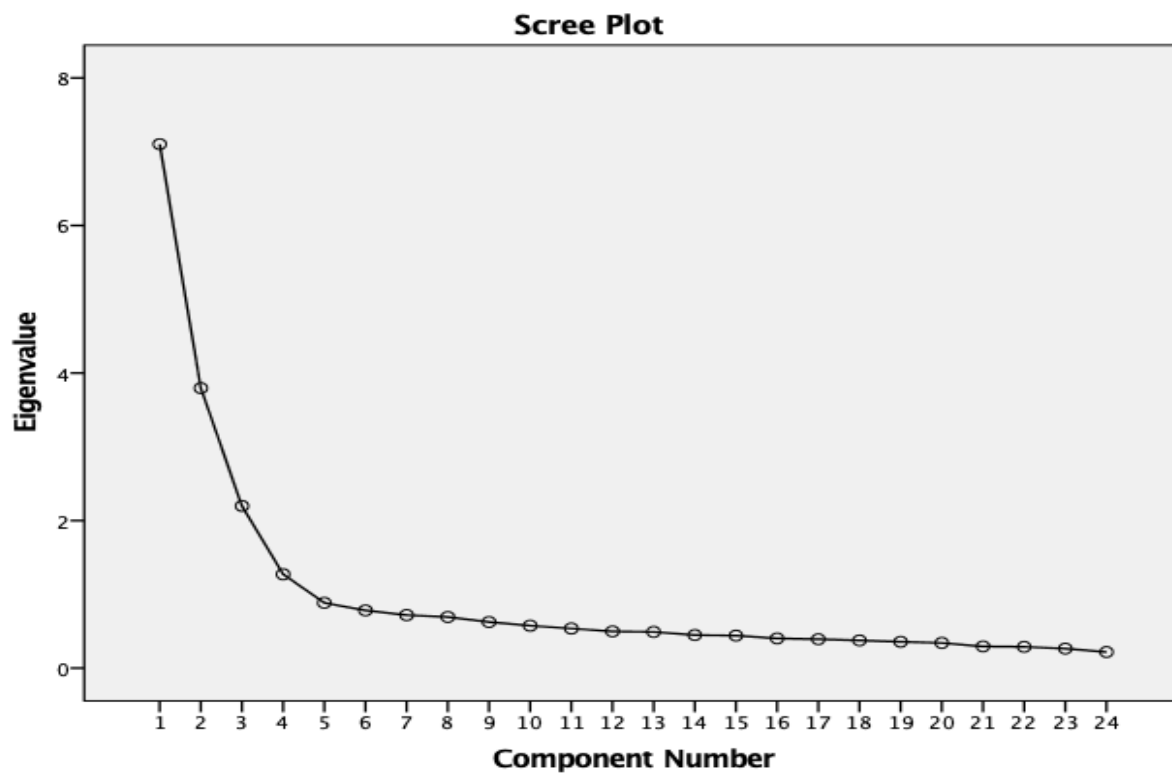
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total		
1	7.103	29.595	29.595	7.103	29.595	29.595	5.531		
2	3.795	15.813	45.408	3.795	15.813	45.408	3.239		
3	2.198	9.157	54.565	2.198	9.157	54.565	3.069		
4	1.272	5.302	59.867	1.272	5.302	59.867	2.529		
5	.885	3.688	63.555						
6	.783	3.262	66.817						
7	.719	2.996	69.813						
8	.693	2.889	72.702						
9	.625	2.603	75.305						
10	.575	2.394	77.699						
11	.537	2.239	79.938						
12	.498	2.076	82.013						

13	.491	2.046	84.060						
14	.448	1.868	85.927						
15	.441	1.837	87.764						
16	.403	1.680	89.444						
17	.392	1.635	91.080						
18	.376	1.569	92.648						
19	.357	1.487	94.136						
20	.341	1.422	95.558						
21	.295	1.228	96.786						
22	.288	1.201	97.987						
23	.265	1.103	99.091						
24	.218	.909	100.000						

### Total Variance Explained

Component	Rotation Sums of Squared Loadings	
	% of Variance	Cumulative %
1	23.046	23.046
2	13.495	36.541
3	12.787	49.328
4	10.539	59.867
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
To what extent do the following character traits describe your personality? - Arrogant	.772			
To what extent do the following character traits describe your personality? - Inconsiderate	.758	-.306		
To what extent do the following character traits describe your personality? - Disoriented	.756	-.323		

To what extent do the following character traits describe your personality? - Boastful	.752			
To what extent do the following character traits describe your personality? - Naive	.750			
To what extent do the following character traits describe your personality? - Harsh	.726			
To what extent do the following character traits describe your personality? - Ostentatious	.724			
To what extent do the following character traits describe your personality? - Power-hungry	.695			
To what extent do the following character traits describe your personality? - Oversensitive	.693		-.345	
To what extent do the following character traits describe your personality? - Self-doubting	.618			.361
To what extent do the following character traits describe your personality? - Overcautious	.561			.368



To what extent do the following character traits describe your personality? - Anxious	.549			.548
To what extent do the following character traits describe your personality? - Tender	.452	.374	-.396	
To what extent do the following character traits describe your personality? - Practical		.646		
To what extent do the following character traits describe your personality? - Logical		.638	.402	
To what extent do the following character traits describe your personality? - Solution-focused		.617	.341	
To what extent do the following character traits describe your personality? - Loving		.591	-.322	-.392
To what extent do the following character traits describe your personality? - Passionate	.326	.586		
To what extent do the following character traits describe your personality? - Empathic		.569	-.356	

To what extent do the following character traits describe your personality? - Analytical		.520	.343	
To what extent do the following character traits describe your personality? - Rational		.514		
To what extent do the following character traits describe your personality? - Objective	.340	.422	.379	
To what extent do the following character traits describe your personality? - Emotional	.497		-.536	
To what extent do the following character traits describe your personality? - Sensitive	.460	.425	-.493	

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 4 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
To what extent do the following character traits describe your personality? - Inconsiderate	.854			

To what extent do the following character traits describe your personality? - Arrogant	.818				
To what extent do the following character traits describe your personality? - Boastful	.800				
To what extent do the following character traits describe your personality? - Ostentatious	.791				
To what extent do the following character traits describe your personality? - Power-hungry	.776				
To what extent do the following character traits describe your personality? - Disoriented	.729			.364	
To what extent do the following character traits describe your personality? - Harsh	.728			.339	
To what extent do the following character traits describe your personality? - Naive	.723				
To what extent do the following character traits describe your personality? - Logical		.775			

To what extent do the following character traits describe your personality? - Solution-focused	.709			
To what extent do the following character traits describe your personality? - Analytical	.688			
To what extent do the following character traits describe your personality? - Practical	.680			
To what extent do the following character traits describe your personality? - Rational	.675			
To what extent do the following character traits describe your personality? - Objective	.615			
To what extent do the following character traits describe your personality? - Loving		.764		
To what extent do the following character traits describe your personality? - Tender		.716		
To what extent do the following character traits describe your personality? - Passionate		.703		

To what extent do the following character traits describe your personality? - Sensitive			.695	.366
To what extent do the following character traits describe your personality? - Empathic			.604	
To what extent do the following character traits describe your personality? - Emotional			.546	.472
To what extent do the following character traits describe your personality? - Anxious				.790
To what extent do the following character traits describe your personality? - Self-doubting	.396			.660
To what extent do the following character traits describe your personality? - Overcautious	.328			.538
To what extent do the following character traits describe your personality? - Oversensitive	.453		.354	.530

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 6 iterations.

**Component Transformation Matrix**

Component	1	2	3	4
1	.814	.209	.321	.437
2	-.352	.742	.559	-.110
3	.299	.589	-.663	-.353
4	-.352	.242	-.381	.820

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

**Reliability**

**Scale: ALL VARIABLES**

**Case Processing Summary**

		N	%
Cases	Valid	477	100.0
	Excluded <sup>a</sup>	0	.0
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.803	5

## Reliability

Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	477	100.0
	Excluded <sup>a</sup>	0	.0
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.912	7

## Reliability

Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	477	100.0
	Excluded <sup>a</sup>	0	.0
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.800	6

## Reliability

Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	477	100.0
	Excluded <sup>a</sup>	0	.0
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.803	6

## Factor Analysis

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.903
Bartlett's Test of Sphericity	Approx. Chi-Square	4702.944
	df	153
	Sig.	.000

### Communalities

	Initial	Extraction
How often do use Instagram for the following reasons? - To see what other people share	1.000	.691
How often do use Instagram for the following reasons? - To "like" my followers' photos	1.000	.546



How often do use Instagram for the following reasons? - To follow my friends	1.000	.654
How often do use Instagram for the following reasons? - To see my friends' photos	1.000	.672
How often do use Instagram for the following reasons? - To post photos for my friends	1.000	.635
How often do use Instagram for the following reasons? - To remember special events	1.000	.803
How often do use Instagram for the following reasons? - To celebrate an event	1.000	.804
How often do use Instagram for the following reasons? - To describe my life through photos	1.000	.628
How often do use Instagram for the following reasons? - To remember something important	1.000	.754
How often do use Instagram for the following reasons? - To show-off	1.000	.741
How often do use Instagram for the following reasons? - To become popular	1.000	.798
How often do use Instagram for the following reasons? - To self-promote myself	1.000	.786

How often do use Instagram for the following reasons? - To avoid loneliness	1.000	.738
How often do use Instagram for the following reasons? - To escape reality	1.000	.816
How often do use Instagram for the following reasons? - To create art	1.000	.749
How often do use Instagram for the following reasons? - To document the world around me	1.000	.678
How often do use Instagram for the following reasons? - To find people with whom I have common interests	1.000	.695
How often do use Instagram for the following reasons? - To show off my photography skills	1.000	.698

Extraction Method: Principal Component Analysis.

#### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total		
1	7.311	40.616	40.616	7.311	40.616	40.616	3.296		
2	2.386	13.256	53.872	2.386	13.256	53.872	2.852		
3	1.183	6.572	60.444	1.183	6.572	60.444	2.682		

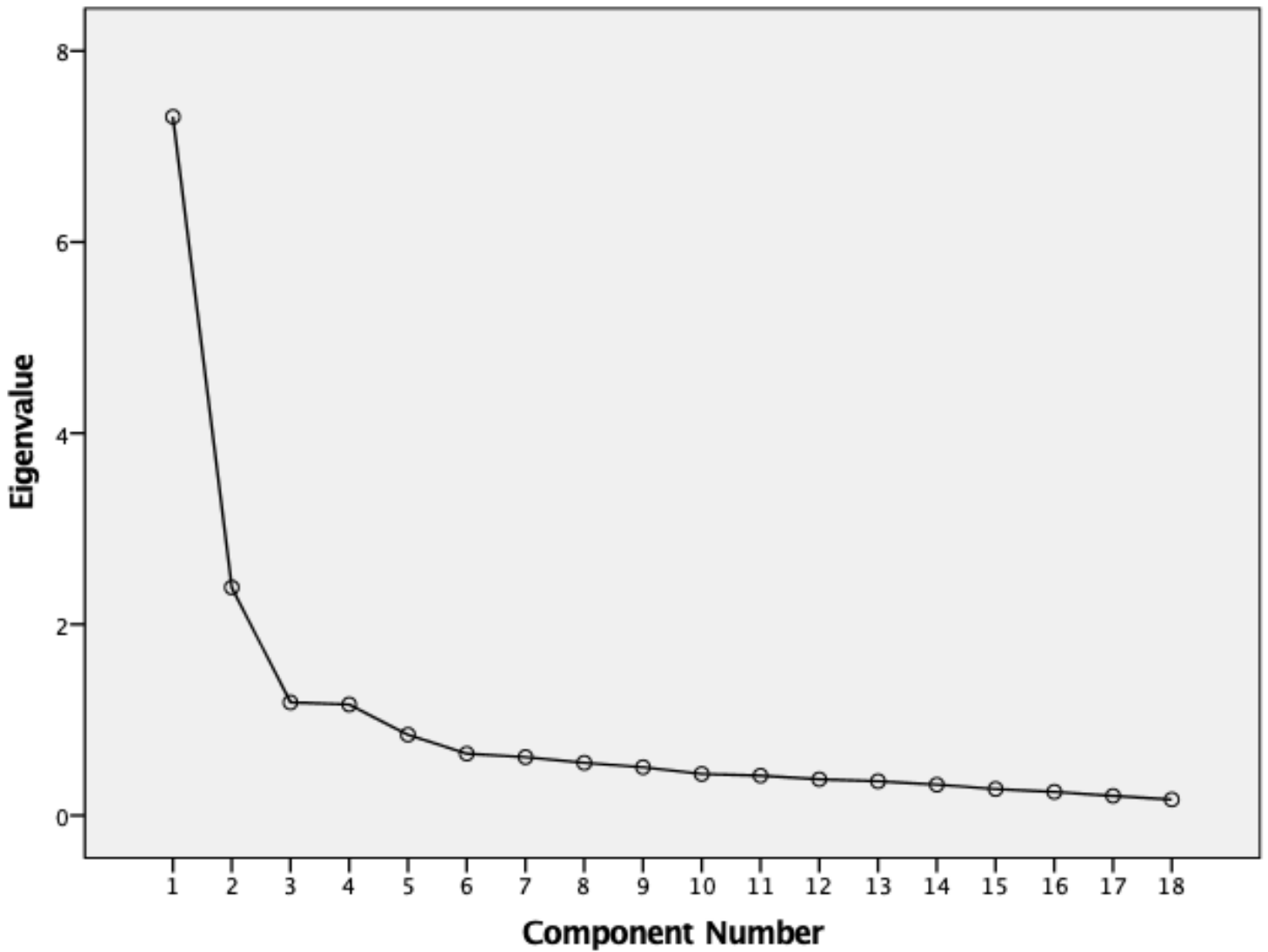
4	1.161	6.449	66.893	1.161	6.449	66.893	2.243		
5	.844	4.689	71.582	.844	4.689	71.582	1.812		
6	.646	3.589	75.172						
7	.610	3.391	78.562						
8	.551	3.061	81.623						
9	.504	2.801	84.424						
10	.434	2.411	86.836						
11	.416	2.314	89.150						
12	.378	2.098	91.247						
13	.358	1.989	93.237						
14	.322	1.791	95.027						
15	.277	1.539	96.566						
16	.247	1.372	97.938						
17	.205	1.138	99.076						
18	.166	.924	100.000						

### Total Variance Explained

Component	Rotation Sums of Squared Loadings	
	% of Variance	Cumulative %
1	18.310	18.310
2	15.845	34.155
3	14.899	49.054
4	12.460	61.514
5	10.068	71.582
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		

Extraction Method: Principal Component Analysis.

**Scree Plot**



**Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
How often do use Instagram for the following reasons? - To describe my life through photos	.736				
How often do use Instagram for the following reasons? - To become popular	.728	-.442			

How often do use Instagram for the following reasons? - To document the world around me	.727				
How often do use Instagram for the following reasons? - To remember something important	.724			-.344	
How often do use Instagram for the following reasons? - To create art	.723			.356	
How often do use Instagram for the following reasons? - To self-promote myself	.705	-.469			
How often do use Instagram for the following reasons? - To show off my photography skills	.700			.336	
How often do use Instagram for the following reasons? - To post photos for my friends	.699				-.319
How often do use Instagram for the following reasons? - To celebrate an event	.695	.363		-.341	
How often do use Instagram for the following reasons? - To show-off	.685	-.442			
How often do use Instagram for the following reasons? - To remember special events	.684	.351		-.369	

How often do use Instagram for the following reasons? - To find people with whom I have common interests	.620			.397	.375
How often do use Instagram for the following reasons? - To "like" my followers' photos	.607				
How often do use Instagram for the following reasons? - To avoid loneliness	.564	-.371	.398	-.310	
How often do use Instagram for the following reasons? - To escape reality	.474	-.410	.447	-.359	.309
How often do use Instagram for the following reasons? - To see my friends' photos	.382	.612	.355		
How often do use Instagram for the following reasons? - To follow my friends	.520	.531			
How often do use Instagram for the following reasons? - To see what other people share		.463	.545		

Extraction Method: Principal Component Analysis.<sup>a</sup>

a. 5 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5

How often do use Instagram for the following reasons? - To remember special events	.851				
How often do use Instagram for the following reasons? - To celebrate an event	.851				
How often do use Instagram for the following reasons? - To remember something important	.792				
How often do use Instagram for the following reasons? - To describe my life through photos	.618	.317	.309		
How often do use Instagram for the following reasons? - To become popular		.756			.332
How often do use Instagram for the following reasons? - To self-promote myself		.755	.346		
How often do use Instagram for the following reasons? - To show-off		.725			.359
How often do use Instagram for the following reasons? - To post photos for my friends	.416	.522		.355	
How often do use Instagram for the following reasons? - To find people with whom I have common interests			.782		

How often do use Instagram for the following reasons? - To create art		.375	.746		
How often do use Instagram for the following reasons? - To show off my photography skills		.441	.682		
How often do use Instagram for the following reasons? - To document the world around me	.399		.675		
How often do use Instagram for the following reasons? - To see my friends' photos				.785	
How often do use Instagram for the following reasons? - To see what other people share				.765	
How often do use Instagram for the following reasons? - To follow my friends	.339			.704	
How often do use Instagram for the following reasons? - To "like" my followers' photos	.370	.405		.486	
How often do use Instagram for the following reasons? - To escape reality					.866
How often do use Instagram for the following reasons? - To avoid loneliness		.329			.762

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 8 iterations.



**Component Transformation Matrix**

Component	1	2	3	4	5
1	.558	.517	.502	.298	.284
2	.424	-.424	-.191	.658	-.414
3	-.448	.052	-.257	.619	.590
4	-.551	.056	.636	.291	-.452
5	.074	-.740	.491	-.103	.442

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

**Reliability**

**Scale: ALL VARIABLES**

**Case Processing Summary**

		N	%
Cases	Valid	475	99.6
	Excluded <sup>a</sup>	2	.4
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.752	5

## Reliability

Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	476	99.8
	Excluded <sup>a</sup>	1	.2
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.883	4

## Reliability

Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	477	100.0
	Excluded <sup>a</sup>	0	.0
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.896	3

## Reliability

Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	477	100.0
	Excluded <sup>a</sup>	0	.0
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.776	2

## Reliability

Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	476	99.8
	Excluded <sup>a</sup>	1	.2
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.846	4

## Factor Analysis

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	1705.159
	df	10
	Sig.	.000

### Communalities

	Initial	Extraction
To what extent do you agree with the following statements about your life in general? - In most ways my life is close to my ideal	1.000	.803
To what extent do you agree with the following statements about your life in general? - The conditions of my life are excellent	1.000	.793
To what extent do you agree with the following statements about your life in general? - I am satisfied with my life	1.000	.826
To what extent do you agree with the following statements about your life in general? - So far I have gotten the important things I want in life	1.000	.698

To what extent do you agree with the following statements about your life in general? - If I could live my life over, I would change almost nothing	1.000	.641
--	-------	------

Extraction Method: Principal Component Analysis.

#### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.761	75.210	75.210	3.761	75.210	75.210
2	.451	9.023	84.233			
3	.367	7.333	91.566			
4	.235	4.701	96.266			
5	.187	3.734	100.000			

Extraction Method: Principal Component Analysis.

#### Component Matrix<sup>a</sup>

	Component
	1
To what extent do you agree with the following statements about your life in general? - I am satisfied with my life	.909
To what extent do you agree with the following statements about your life in general? - In most ways my life is close to my ideal	.896

To what extent do you agree with the following statements about your life in general? - The conditions of my life are excellent	.891
To what extent do you agree with the following statements about your life in general? - So far I have gotten the important things I want in life	.835
To what extent do you agree with the following statements about your life in general? - If I could live my life over, I would change almost nothing	.801

Extraction Method: Principal Component Analysis.<sup>a</sup>  
a. 1 components extracted.

**Rotated Component Matrix<sup>a</sup>**

--

a. Only one component was extracted.  
The solution cannot be rotated.

## Reliability

Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	477	100.0
	Excluded <sup>a</sup>	0	.0
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.915	.917	5

### Item Statistics

	Mean	Std. Deviation	N
To what extent do you agree with the following statements about your life in general? - In most ways my life is close to my ideal	25.62	1.618	477
To what extent do you agree with the following statements about your life in general? - The conditions of my life are excellent	25.74	1.573	477

To what extent do you agree with the following statements about your life in general? - I am satisfied with my life	25.95	1.607	477
To what extent do you agree with the following statements about your life in general? - So far I have gotten the important things I want in life	25.91	1.525	477
To what extent do you agree with the following statements about your life in general? - If I could live my life over, I would change almost nothing	25.35	1.786	477

#### Inter-Item Correlation Matrix

	To what extent do you agree with the following statements about your life in general? - In most ways my life is close to my ideal	To what extent do you agree with the following statements about your life in general? - The conditions of my life are excellent	To what extent do you agree with the following statements about your life in general? - I am satisfied with my life	To what extent do you agree with the following statements about your life in general? - So far I have gotten the important things I want in life	To what extent do you agree with the following statements about your life in general? - If I could live my life over, I would change almost nothing
To what extent do you agree with the following statements about your life in general? - In most ways my life is close to my ideal	1.000	.749	.787	.656	.679



To what extent do you agree with the following statements about your life in general? - The conditions of my life are excellent	.749	1.000	.803	.687	.606
To what extent do you agree with the following statements about your life in general? - I am satisfied with my life	.787	.803	1.000	.700	.628
To what extent do you agree with the following statements about your life in general? - So far I have gotten the important things I want in life	.656	.687	.700	1.000	.588
To what extent do you agree with the following statements about your life in general? - If I could live my life over, I would change almost nothing	.679	.606	.628	.588	1.000

#### Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.688	.588	.803	.215	1.365	.005	5

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
To what extent do you agree with the following statements about your life in general? - In most ways my life is close to my ideal	102.95	31.573	.829	.700	.887
To what extent do you agree with the following statements about your life in general? - The conditions of my life are excellent	102.84	32.214	.816	.699	.890
To what extent do you agree with the following statements about your life in general? - I am satisfied with my life	102.63	31.486	.842	.741	.884
To what extent do you agree with the following statements about your life in general? - So far I have gotten the important things I want in life	102.66	33.761	.743	.560	.904
To what extent do you agree with the following statements about your life in general? - If I could live my life over, I would change almost nothing	103.23	31.928	.700	.506	.916

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
128.58	49.257	7.018	5

### Regression

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Negative feminine traits, Positive masculine traits, What is your gender?, Positive feminine traits, Negative masculine traits <sup>b</sup>		. Enter

a. Dependent Variable: On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

b. All requested variables entered.

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	
1	.236 <sup>a</sup>	.056	.046	2.74221	.056	5.578	5	471	

#### Model Summary

Model	Change Statistics	
	Sig. F Change	
1	.000	

a. Predictors: (Constant), Negative feminine traits, Positive masculine traits, What is your gender?, Positive feminine traits, Negative masculine traits

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	209.732	5	41.946	5.578	.000 <sup>b</sup>
Residual	3541.779	471	7.520		
Total	3751.511	476			

a. Dependent Variable: On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

b. Predictors: (Constant), Negative feminine traits, Positive masculine traits, What is your gender?, Positive feminine traits, Negative masculine traits

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.315	.914		1.439	.151
	What is your gender?	.092	.268	.016	.344	.731
	Positive masculine traits	-.115	.197	-.029	-.587	.558
	Negative masculine traits	.583	.186	.217	3.132	.002
	Positive feminine traits	.268	.194	.073	1.380	.168
	Negative feminine traits	.014	.205	.005	.070	.945

a. Dependent Variable: On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

## Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers) <sup>b</sup>		. Enter
2	Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits <sup>b</sup>		. Enter

a. Dependent Variable: Social interaction motivation

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	
1	.144 <sup>a</sup>	.021	.019	.71470	.021	10.129	1	475	
2	.435 <sup>b</sup>	.189	.179	.65391	.168	19.484	5	470	

**Model Summary**

Model	Change Statistics	
	Sig. F Change	
1	.002	
2	.000	

- a. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)
- b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.174	1	5.174	10.129	.002 <sup>b</sup>
	Residual	242.626	475	.511		
	Total	247.799	476			
2	Regression	46.830	6	7.805	18.253	.000 <sup>c</sup>
	Residual	200.969	470	.428		
	Total	247.799	476			

- a. Dependent Variable: Social interaction motivation
- b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)
- c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.465	.051		67.632	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.037	.012	.144	3.183	.002
2	(Constant)	1.694	.218		7.757	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.026	.011	.102	2.397	.017

What is your gender?	.100	.064	.069	1.565	.118
Positive masculine traits	.159	.047	.156	3.390	.001
Negative masculine traits	.057	.045	.083	1.272	.204
Positive feminine traits	.314	.046	.332	6.766	.000
Negative feminine traits	-.058	.049	-.077	-1.178	.239

a. Dependent Variable: Social interaction motivation

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
1 What is your gender?	.042 <sup>b</sup>	.933	.351	.043	.998
Positive masculine traits	.272 <sup>b</sup>	6.225	.000	.275	.999
Negative masculine traits	.094 <sup>b</sup>	2.017	.044	.092	.949
Positive feminine traits	.376 <sup>b</sup>	8.887	.000	.378	.989
Negative feminine traits	.107 <sup>b</sup>	2.321	.021	.106	.966

a. Dependent Variable: Social interaction motivation

b. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

## Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers) <sup>b</sup>		. Enter
2	Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits <sup>b</sup>		. Enter

a. Dependent Variable: Documentation motivation

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	
1	.191 <sup>a</sup>	.036	.034	1.02226	.036	17.968	1	475	
2	.479 <sup>b</sup>	.230	.220	.91882	.193	23.594	5	470	

**Model Summary**

Model	Change Statistics	
	Sig. F Change	
1	.000	
2	.000	

a. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)



b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.777	1	18.777	17.968	.000 <sup>b</sup>
	Residual	496.381	475	1.045		
	Total	515.158	476			
2	Regression	118.369	6	19.728	23.368	.000 <sup>c</sup>
	Residual	396.789	470	.844		
	Total	515.158	476			

a. Dependent Variable: Documentation motivation

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.003	.073		40.977	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.071	.017	.191	4.239	.000
2	(Constant)	.720	.307		2.346	.019
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.041	.015	.111	2.658	.008
	What is your gender?	.230	.090	.111	2.566	.011
	Positive masculine traits	.003	.066	.002	.040	.968

Negative masculine traits	.374	.063	.377	5.942	.000
Positive feminine traits	.506	.065	.371	7.774	.000
Negative feminine traits	-.232	.069	-.215	-3.372	.001

a. Dependent Variable: Documentation motivation

Excluded Variables <sup>a</sup>						
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	What is your gender?	.035 <sup>b</sup>	.777	.438	.036	.998
	Positive masculine traits	.166 <sup>b</sup>	3.728	.000	.169	.999
	Negative masculine traits	.257 <sup>b</sup>	5.738	.000	.255	.949
	Positive feminine traits	.363 <sup>b</sup>	8.615	.000	.368	.989
	Negative feminine traits	.174 <sup>b</sup>	3.842	.000	.174	.966

a. Dependent Variable: Documentation motivation

b. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

## Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers) <sup>b</sup>		. Enter
2	Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits <sup>b</sup>		. Enter

a. Dependent Variable: Diversion motivation

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	
1	.206 <sup>a</sup>	.042	.040	1.13131	.042	20.975	1	475	
2	.561 <sup>b</sup>	.315	.306	.96218	.272	37.335	5	470	

**Model Summary**

Model	Change Statistics	
	Sig. F Change	
1	.000	
2	.000	

a. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.845	1	26.845	20.975	.000 <sup>b</sup>
	Residual	607.938	475	1.280		
	Total	634.783	476			
2	Regression	199.664	6	33.277	35.945	.000 <sup>c</sup>
	Residual	435.119	470	.926		
	Total	634.783	476			

a. Dependent Variable: Diversion motivation

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.456	.081		30.286	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.085	.018	.206	4.580	.000
2	(Constant)	1.413	.321		4.398	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.035	.016	.085	2.163	.031
	What is your gender?	-.097	.094	-.042	-1.036	.301
	Positive masculine traits	-.116	.069	-.071	-1.678	.094

Negative masculine traits	.389	.066	.353	5.902	.000
Positive feminine traits	.055	.068	.037	.810	.418
Negative feminine traits	.246	.072	.206	3.418	.001

a. Dependent Variable: Diversion motivation

#### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	What is your gender?	-.155 <sup>b</sup>	-3.478	.001	-.158	.998
	Positive masculine traits	.021 <sup>b</sup>	.470	.638	.022	.999
	Negative masculine traits	.506 <sup>b</sup>	12.707	.000	.504	.949
	Positive feminine traits	.144 <sup>b</sup>	3.228	.001	.147	.989
	Negative feminine traits	.465 <sup>b</sup>	11.510	.000	.467	.966

a. Dependent Variable: Diversion motivation

b. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

## Regression

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers) <sup>b</sup>		Enter

2	Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits <sup>b</sup>		. Enter
---	---	--	---------

a. Dependent Variable: Self-promotion motivation

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	
1	.249 <sup>a</sup>	.062	.060	1.15549	.062	31.494	1	475	
2	.690 <sup>b</sup>	.476	.470	.86789	.414	74.393	5	470	

**Model Summary**

Model	Change Statistics	
	Sig. F Change	
1	.000	
2	.000	

a. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.050	1	42.050	31.494	.000 <sup>b</sup>
	Residual	634.201	475	1.335		
	Total	676.251	476			
2	Regression	322.229	6	53.705	71.299	.000 <sup>c</sup>
	Residual	354.022	470	.753		
	Total	676.251	476			

a. Dependent Variable: Self-promotion motivation

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.188	.083		26.414	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.106	.019	.249	5.612	.000
2	(Constant)	.971	.290		3.349	.001
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.044	.015	.103	2.987	.003
	What is your gender?	-.297	.085	-.125	-3.500	.001
	Positive masculine traits	-.072	.062	-.043	-1.160	.247
	Negative masculine traits	.765	.059	.672	12.854	.000
	Positive feminine traits	.224	.062	.144	3.645	.000
	Negative feminine traits	-.159	.065	-.128	-2.445	.015

a. Dependent Variable: Self-promotion motivation

**Excluded Variables<sup>a</sup>**

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance

1	What is your gender?	-.295 <sup>b</sup>	-6.966	.000	-.305	.998
	Positive masculine traits	.128 <sup>b</sup>	2.895	.004	.132	.999
	Negative masculine traits	.636 <sup>b</sup>	18.139	.000	.640	.949
	Positive feminine traits	.194 <sup>b</sup>	4.426	.000	.199	.989
	Negative feminine traits	.405 <sup>b</sup>	9.807	.000	.411	.966

a. Dependent Variable: Self-promotion motivation

b. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

## Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers) <sup>b</sup>		Enter
2	Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits <sup>b</sup>		Enter

a. Dependent Variable: Creativity motivation

b. All requested variables entered.



**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	
1	.212 <sup>a</sup>	.045	.043	1.01158	.045	22.279	1	475	
2	.557 <sup>b</sup>	.310	.301	.86422	.265	36.158	5	470	

**Model Summary**

Model	Change Statistics	
	Sig. F Change	
1	.000	
2	.000	

a. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.798	1	22.798	22.279	.000 <sup>b</sup>
	Residual	486.064	475	1.023		
	Total	508.862	476			
2	Regression	157.828	6	26.305	35.219	.000 <sup>c</sup>
	Residual	351.034	470	.747		
	Total	508.862	476			

a. Dependent Variable: Creativity motivation

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.797	.073		38.574	.000

	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.078	.017	.212	4.720	.000
2	(Constant)	.541	.289		1.875	.061
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.037	.015	.101	2.565	.011
	What is your gender?	-.083	.084	-.040	-.983	.326
	Positive masculine traits	.111	.062	.076	1.791	.074
	Negative masculine traits	.386	.059	.391	6.513	.000
	Positive feminine traits	.407	.061	.300	6.643	.000
	Negative feminine traits	-.080	.065	-.074	-1.234	.218

a. Dependent Variable: Creativity motivation

#### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	What is your gender?	-.147 <sup>b</sup>	-3.299	.001	-.150	.998
	Positive masculine traits	.247 <sup>b</sup>	5.696	.000	.253	.999
	Negative masculine traits	.417 <sup>b</sup>	9.954	.000	.416	.949
	Positive feminine traits	.367 <sup>b</sup>	8.758	.000	.373	.989
	Negative feminine traits	.319 <sup>b</sup>	7.380	.000	.321	.966

a. Dependent Variable: Creativity motivation

b. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

## Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers) <sup>b</sup>		. Enter
2	Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits <sup>b</sup>		. Enter
3	Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation <sup>b</sup>		. Enter

a. Dependent Variable: Self-objectification score

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	
1									

1	.123 <sup>a</sup>	.015	.013	19.195	.015	7.334	1	475	
2	.327 <sup>b</sup>	.107	.096	18.375	.092	9.660	5	470	
3	.352 <sup>c</sup>	.124	.103	18.298	.017	1.793	5	465	

### Model Summary

Model	Change Statistics	
	Sig. F Change	
1		.007
2		.000
3		.113

a. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2702.164	1	2702.164	7.334	.007 <sup>b</sup>
	Residual	175006.817	475	368.435		
	Total	177708.981	476			
2	Regression	19011.129	6	3168.521	9.384	.000 <sup>c</sup>
	Residual	158697.852	470	337.655		
	Total	177708.981	476			
3	Regression	22013.647	11	2001.241	5.977	.000 <sup>d</sup>
	Residual	155695.334	465	334.829		
	Total	177708.981	476			

a. Dependent Variable: Self-objectification score

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

d. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.195	1.376		.868	.386
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	-.849	.313	-.123	-2.708	.007
2	(Constant)	-5.297	6.136		-.863	.388
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	-.479	.309	-.070	-1.553	.121
	What is your gender?	.740	1.795	.019	.412	.680
	Positive masculine traits	1.990	1.317	.073	1.511	.132
	Negative masculine traits	-6.233	1.259	-.338	-4.949	.000
	Positive feminine traits	2.288	1.302	.090	1.757	.080
	Negative feminine traits	1.207	1.375	.060	.878	.380
3	(Constant)	-4.085	6.595		-.619	.536
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	-.430	.312	-.063	-1.380	.168
	What is your gender?	.370	1.845	.010	.200	.841
	Positive masculine traits	1.240	1.349	.045	.919	.359
	Negative masculine traits	-4.930	1.484	-.267	-3.322	.001
	Positive feminine traits	1.912	1.405	.076	1.361	.174

Negative feminine traits	1.346	1.424	.067	.945	.345
Social interaction motivation	1.209	1.570	.045	.770	.442
Documentation motivation	-.949	1.164	-.051	-.816	.415
Self-promotion motivation	-1.727	1.188	-.107	-1.454	.147
Diversion motivation	-1.530	.942	-.091	-1.625	.105
Creativity motivation	2.333	1.202	.125	1.941	.053

a. Dependent Variable: Self-objectification score

#### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	What is your gender?	.103 <sup>b</sup>	2.280	.023	.104	.998
	Positive masculine traits	.050 <sup>b</sup>	1.100	.272	.050	.999
	Negative masculine traits	-.272 <sup>b</sup>	-6.024	.000	-.267	.949
	Positive feminine traits	.080 <sup>b</sup>	1.761	.079	.081	.989
	Negative feminine traits	-.140 <sup>b</sup>	-3.043	.002	-.138	.966
	Social interaction motivation	.046 <sup>b</sup>	.992	.322	.045	.979
	Documentation motivation	-.047 <sup>b</sup>	-1.010	.313	-.046	.964
	Self-promotion motivation	-.212 <sup>b</sup>	-4.614	.000	-.207	.938
	Diversion motivation	-.202 <sup>b</sup>	-4.425	.000	-.199	.958
	Creativity motivation	-.031 <sup>b</sup>	-.660	.510	-.030	.955
2	Social interaction motivation	.018 <sup>c</sup>	.363	.717	.017	.811
	Documentation motivation	-.024 <sup>c</sup>	-.474	.636	-.022	.770

Self-promotion motivation	-.076 <sup>c</sup>	-1.262	.208	-.058	.524
Diversion motivation	-.102 <sup>c</sup>	-1.936	.053	-.089	.685
Creativity motivation	.055 <sup>c</sup>	1.043	.297	.048	.690

a. Dependent Variable: Self-objectification score

b. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

## Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers) <sup>b</sup>		. Enter
2	Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits <sup>b</sup>		. Enter

3	Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation <sup>b</sup>	.	Enter
4	Self-objectification score <sup>b</sup>	.	Enter

a. Dependent Variable: Self-esteem score

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	
1	.050 <sup>a</sup>	.002	.000	.4039	.002	1.182	1	475	
2	.223 <sup>b</sup>	.050	.038	.3962	.047	4.693	5	470	
3	.267 <sup>c</sup>	.071	.049	.3939	.021	2.141	5	465	
4	.285 <sup>d</sup>	.081	.058	.3922	.010	5.036	1	464	

**Model Summary**

Model	Change Statistics	
	Sig. F Change	
1	.277	
2	.000	
3	.060	
4	.025	

a. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation



d. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation, Self-objectification score

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.193	1	.193	1.182	.277 <sup>b</sup>
	Residual	77.479	475	.163		
	Total	77.671	476			
2	Regression	3.877	6	.646	4.115	.000 <sup>c</sup>
	Residual	73.794	470	.157		
	Total	77.671	476			
3	Regression	5.538	11	.503	3.245	.000 <sup>d</sup>
	Residual	72.134	465	.155		
	Total	77.671	476			
4	Regression	6.312	12	.526	3.420	.000 <sup>e</sup>
	Residual	71.359	464	.154		
	Total	77.671	476			

a. Dependent Variable: Self-esteem score

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

d. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation

e. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation, Self-objectification score

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.320	.029		80.135	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	-.007	.007	-.050	-1.087	.277
2	(Constant)	2.557	.132		19.325	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	-.001	.007	-.008	-.173	.863
	What is your gender?	.052	.039	.064	1.343	.180
	Positive masculine traits	-.022	.028	-.039	-.789	.430
	Negative masculine traits	-.005	.027	-.013	-.191	.848
	Positive feminine traits	-.011	.028	-.021	-.402	.688
	Negative feminine traits	-.074	.030	-.176	-2.489	.013
3	(Constant)	2.693	.142		18.970	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.002	.007	.011	.228	.820
	What is your gender?	.034	.040	.042	.852	.395
	Positive masculine traits	-.018	.029	-.031	-.608	.543
	Negative masculine traits	.025	.032	.065	.783	.434
	Positive feminine traits	.000	.030	.001	.016	.988
	Negative feminine traits	-.068	.031	-.163	-2.232	.026

	Social interaction motivation	-.052	.034	-.093	-1.547	.123
	Documentation motivation	.040	.025	.104	1.617	.107
	Self-promotion motivation	-.035	.026	-.103	-1.367	.172
	Diversion motivation	-.024	.020	-.068	-1.176	.240
	Creativity motivation	-.017	.026	-.042	-.639	.523
4	(Constant)	2.684	.141		18.980	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.001	.007	.004	.086	.932
	What is your gender?	.035	.040	.043	.876	.381
	Positive masculine traits	-.015	.029	-.026	-.515	.607
	Negative masculine traits	.014	.032	.036	.435	.664
	Positive feminine traits	.005	.030	.009	.157	.875
	Negative feminine traits	-.065	.031	-.156	-2.142	.033
	Social interaction motivation	-.050	.034	-.089	-1.472	.142
	Documentation motivation	.038	.025	.099	1.538	.125
	Self-promotion motivation	-.039	.026	-.114	-1.521	.129
	Diversion motivation	-.027	.020	-.078	-1.346	.179
	Creativity motivation	-.011	.026	-.029	-.438	.662
	Self-objectification score	-.002	.001	-.107	-2.244	.025

a. Dependent Variable: Self-esteem score

**Excluded Variables<sup>a</sup>**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	What is your gender?	.091 <sup>b</sup>	1.990	.047	.091	.998
	Positive masculine traits	-.070 <sup>b</sup>	-1.534	.126	-.070	.999
	Negative masculine traits	-.169 <sup>b</sup>	-3.646	.000	-.165	.949
	Positive feminine traits	-.099 <sup>b</sup>	-2.154	.032	-.098	.989
	Negative feminine traits	-.203 <sup>b</sup>	-4.442	.000	-.200	.966
	Social interaction motivation	-.112 <sup>b</sup>	-2.427	.016	-.111	.979
	Documentation motivation	-.055 <sup>b</sup>	-1.175	.241	-.054	.964
	Self-promotion motivation	-.194 <sup>b</sup>	-4.166	.000	-.188	.938
	Diversion motivation	-.177 <sup>b</sup>	-3.842	.000	-.174	.958
	Creativity motivation	-.155 <sup>b</sup>	-3.333	.001	-.151	.955
	Self-objectification score	-.060 <sup>b</sup>	-1.302	.193	-.060	.985
2	Social interaction motivation	-.092 <sup>c</sup>	-1.838	.067	-.085	.811
	Documentation motivation	-.010 <sup>c</sup>	-.204	.838	-.009	.770
	Self-promotion motivation	-.146 <sup>c</sup>	-2.369	.018	-.109	.524
	Diversion motivation	-.103 <sup>c</sup>	-1.895	.059	-.087	.685
	Creativity motivation	-.089 <sup>c</sup>	-1.641	.101	-.076	.690
	Self-objectification score	-.100 <sup>c</sup>	-2.113	.035	-.097	.893
3	Self-objectification score	-.107 <sup>d</sup>	-2.244	.025	-.104	.876

a. Dependent Variable: Self-esteem score

b. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

- c. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits
- d. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation

Regression

Variables Entered/Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers) <sup>b</sup>		. Enter
2	Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits <sup>b</sup>		. Enter
3	Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation <sup>b</sup>		. Enter

4	Self-objectification score <sup>b</sup>	.	Enter
---	---	---	-------

a. Dependent Variable: Life satisfaction score

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.080 <sup>a</sup>	.006	.004	1.4006	.006	3.059	1	475
2	.492 <sup>b</sup>	.242	.232	1.2298	.236	29.223	5	470
3	.586 <sup>c</sup>	.343	.328	1.1510	.101	14.317	5	465
4	.592 <sup>d</sup>	.351	.334	1.1457	.007	5.284	1	464

**Model Summary**

Model	Change Statistics	
	Sig. F Change	
1	.081	
2	.000	
3	.000	
4	.022	

a. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation

d. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation, Self-objectification score

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	6.001	1	6.001	3.059	.081 <sup>b</sup>
Residual	931.851	475	1.962		

	Total	937.852	476			
2	Regression	226.992	6	37.832	25.013	.000 <sup>c</sup>
	Residual	710.861	470	1.512		
	Total	937.852	476			
3	Regression	321.824	11	29.257	22.084	.000 <sup>d</sup>
	Residual	616.028	465	1.325		
	Total	937.852	476			
4	Regression	328.760	12	27.397	20.870	.000 <sup>e</sup>
	Residual	609.092	464	1.313		
	Total	937.852	476			

a. Dependent Variable: Life satisfaction score

b. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

d. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation

e. Predictors: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation, Self-objectification score

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	25.581	.100		254.753	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.040	.023	.080	1.749	.081
2	(Constant)	23.100	.411		56.252	.000

	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.022	.021	.045	1.077	.282
	What is your gender?	.292	.120	.104	2.433	.015
	Positive masculine traits	.291	.088	.147	3.298	.001
	Negative masculine traits	.672	.084	.501	7.973	.000
	Positive feminine traits	.517	.087	.281	5.927	.000
	Negative feminine traits	-.851	.092	-.585	-9.252	.000
3	(Constant)	22.403	.415		54.006	.000
	On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	-.001	.020	-.002	-.044	.965
	What is your gender?	.244	.116	.087	2.098	.036
	Positive masculine traits	.237	.085	.120	2.792	.005
	Negative masculine traits	.463	.093	.345	4.962	.000
	Positive feminine traits	.245	.088	.133	2.774	.006
	Negative feminine traits	-.721	.090	-.495	-8.051	.000
	Social interaction motivation	.285	.099	.146	2.882	.004
	Documentation motivation	.258	.073	.191	3.523	.000
	Self-promotion motivation	.149	.075	.127	1.999	.046
	Diversion motivation	-.105	.059	-.086	-1.768	.078
	Creativity motivation	.059	.076	.044	.782	.435
4	(Constant)	22.430	.413		54.297	.000



On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)	.002	.020	.004	.103	.918
What is your gender?	.241	.116	.086	2.086	.038
Positive masculine traits	.229	.085	.115	2.704	.007
Negative masculine traits	.496	.094	.370	5.276	.000
Positive feminine traits	.232	.088	.126	2.636	.009
Negative feminine traits	-.730	.089	-.502	-8.181	.000
Social interaction motivation	.277	.098	.142	2.811	.005
Documentation motivation	.264	.073	.196	3.624	.000
Self-promotion motivation	.161	.075	.137	2.158	.031
Diversion motivation	-.095	.059	-.078	-1.599	.111
Creativity motivation	.044	.076	.032	.576	.565
Self-objectification score	.007	.003	.092	2.299	.022

a. Dependent Variable: Life satisfaction score

#### Excluded Variables<sup>a</sup>

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
1 What is your gender?	.008 <sup>b</sup>	.176	.860	.008	.998
Positive masculine traits	.274 <sup>b</sup>	6.226	.000	.275	.999
Negative masculine traits	.129 <sup>b</sup>	2.768	.006	.126	.949
Positive feminine traits	.213 <sup>b</sup>	4.734	.000	.212	.989

	Negative feminine traits	-.131 <sup>b</sup>	-2.837	.005	-.129	.966
	Social interaction motivation	.368 <sup>b</sup>	8.550	.000	.366	.979
	Documentation motivation	.407 <sup>b</sup>	9.528	.000	.401	.964
	Self-promotion motivation	.269 <sup>b</sup>	5.889	.000	.261	.938
	Diversion motivation	.031 <sup>b</sup>	.661	.509	.030	.958
	Creativity motivation	.315 <sup>b</sup>	7.062	.000	.309	.955
	Self-objectification score	.073 <sup>b</sup>	1.586	.113	.073	.985
2	Social interaction motivation	.281 <sup>c</sup>	6.567	.000	.290	.811
	Documentation motivation	.311 <sup>c</sup>	7.143	.000	.313	.770
	Self-promotion motivation	.260 <sup>c</sup>	4.790	.000	.216	.524
	Diversion motivation	.036 <sup>c</sup>	.736	.462	.034	.685
	Creativity motivation	.231 <sup>c</sup>	4.899	.000	.221	.690
	Self-objectification score	.092 <sup>c</sup>	2.162	.031	.099	.893
3	Self-objectification score	.092 <sup>d</sup>	2.299	.022	.106	.876

a. Dependent Variable: Life satisfaction score

b. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers)

c. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits

d. Predictors in the Model: (Constant), On average, how many hours a day have you spent on Instagram over the past week? (please only use numbers), Positive masculine traits, What is your gender?, Negative feminine traits, Positive feminine traits, Negative masculine traits, Social interaction motivation, Diversion motivation, Creativity motivation, Documentation motivation, Self-promotion motivation