Broadening the Scope of Research on Body Image Concerns, with a Focus on Personality Traits and Selfie Behaviour – A Review of Existing Literature

Josphine Jose[1*], K. T. Shwetha[2]

[1]*Research Scholar, Department of Psychology, Institute of Social Sciences & Humanities, Srinivas University, Mangalore, India*
[2]*Associate Professor, Department of Psychology, Institute of Social Sciences & Humanities, Srinivas University, Mangalore, India*

Abstract: **This study extensively reviews the literature and empirical studies on the new factors that contribute to body image concerns like social media usage, selfie behaviour, and photo manipulation habits. The study aims to identify the gaps in this field and formulate a comprehensive research agenda with variables that have not been explicitly, extensively, and empirically studied yet. Searches of relevant databases with appropriate keywords and extended searches of the reference lists were done to identify relevant papers. The results revealed very little evidence of articles that specifically studied the relationship between body image, personality traits, and photo manipulation habits. Further, there wasn't sufficient evidence of literature that proved that the relationship between these variables was either specifically studied or empirically tested in the Indian context. As the number of papers found that specifically studied these variables was very limited, a narrative style is chosen to adequately synthesize the findings and present the identified research gap in a logical and contextual sequence instead of the traditional systematic review of literature format. The researcher has successfully formulated a compelling research agenda that will add significantly to the existing literature on this subject.**

Keywords: **Big 5 personality traits, Body image, Personality dimensions, Photo filters, Selfie behaviour.**

1. Introduction

Body-related concerns and dissatisfaction with one's appearance have become very common [1]. The motivation for doing this investigation came from the need to answer the question, why is there a rise in the number of individuals seeking help from various professionals like dieticians, personal trainers, cosmetic surgeons, and psychologists to address their body image concerns. Research has shown media has gone from influencing appearance ideals to setting beauty standards that are unrealistic by using photo manipulation techniques [2]. Research has also shown that personality dimensions play a vital role in internalizing appearance ideals [3]. The trend of manipulating photos by using photo filters to attain unrealistic appearance ideals is rising among the general public [4]. People put much effort into taking the correct picture

and then invest even more time, energy, and sometimes money to edit these pictures to make them look presentable [5]. People mostly engage in such photo activities with an intention to share these pictures with others [6], but research shows that not all pictures in which so much time and energy is invested are shared [5]-[7]. There isn't enough evidence of research done to understand the association between body image, personality dimensions, and the use of photo filters [7],[8]. The relationship between selfie behaviour, social media exposure, and various psychological wellbeing variables has become a hot topic among researchers [8],[9] because of the rising popularity of social media and the rapid change in our lifestyle propelled by the digital revolution [9],[10]. Body image has become a variable of interest [8]-[10], given the similarity between the nature of visual content on social media and traditional media and the distinct type of comparisons that transpire on social networking platforms [10],[11]. This study aims to examine the role of personality dimensions as a mediator in the use of photo filters and their association with body image.

A. Body image

Body image issues are a common problem [1],[9],[10],[12]. Austrian psychoanalyst Paul Schilder first used the expression Body Image in his book 'The Image and Appearance of the Human Body (1935)'. It refers to how people see themselves. In contrast, distorted body image also referred to as negative body image, refers to an unrealistic view of how someone else sees their body. Unfortunately, the society we live in glorifies unrealistic body ideals. It is a genuine challenge to refrain from the temptation to follow the latest fitness or beauty trends or fall prey to the tendency to benchmark yourself against these unrealistic beauty standards. Many individuals experience anxiety, depression, anger, and even self-loathing while engaging in such activities. In addition to adversely impacting an individual's view of themselves, poor body image may also instigate an individual to avoid social situations and could interfere with the individual's ability to develop healthy social

and romantic relationships [13]. Previous research has established significant relations between body image attitudes, psychosocial functioning, and wellbeing [14]. The unfavourable psychological outcomes of Negative Body Image like dysfunctional Body Image investment or body dissatisfaction could include but are not confined to emotional instability, low self-esteem, depressed thoughts, anxiety, inadequate psychological adjustment, impaired sexual functioning, bad eating and exercising habits [16]-[19].

B. Photo taking and photo editing in light of self-representation

Self-representation is not a new concept; it has prevailed since primitive times [20]. Self could be presented through pictures that could be self-drawn, painted, crafted, etched, or crafted by a craftsman [21]. The first self-photographic portrait was created by Robert Cornelius, an American pioneer in photography, in the year 1839 when he photographed himself using the Daguerreotype photographic process [22]. With the launch of the 'Kodak Brownie box camera' in1900, taking photos became a universal phenomenon [21],[22]. Many scholars believe this to be one of the first revolutions of self-representation through photos [21]-[23]. With the launch of the Polaroid cameras in 1940, photography became trendy [24]. By the 1970s, instant photography became a craze thanks to the polaroid cameras. Even those who did not own or have access to a dark room could use these cameras. The film of these cameras did not need developing, and they could be held at an arm's distance allowing the individuals to take intimate pictures [20]. Earlier photography was limited to those who possessed a camera, but with the onset of the digital era and the launch of smartphones, instant photography came into being [24]. Smartphones, with their instant front and back cameras, many photo enhancing filter options, and readily available photo editing apps, truly democratized the art of photography and made it enjoyable [24],[25]. Photography has become a daily activity. The availability of affordable smartphones, easy access to the internet, user-friendly online photo modifying apps, a multitude of picture sharing platforms, and features such as tagging and sharing on social networking sites have revolutionized the way we take and share photographs forever [26]. The selfie trend that started with the introduction of front cameras on smartphones is here to stay [27]. Taking and sharing selfies is an integral part of our lives and an essential feature of any activity or social gathering. Selfies are frequently clicked using filters because these inbuilt photo filters are audience targeted and instantly improve the quality of the image [28]. Instagram was one of the pioneers in the digital and social networking space to offer filters, and it has changed the way we capture selfies [29].

C. Personality and its dimensions

Personality traits represent an individual's characteristic patterns of thoughts, feelings, and behaviour. Personality traits are categorized under three criteria (1) consistency, (2) stability, and (3) individual differences. If a person is consistent in his behaviour across situations, he is said to have a particular personality trait [30]. Trait psychology rests on the assumption that people differ from one another in terms of how they react or behave across situations. When there is consistency in their behaviour over time, they are said to have a set of essential traits [31].

D. The Big Five model

"An important feature of personality traits is that they can be depicted as a continuous distribution rather than distinct personality types. This implies that when personality psychologists talk about introverts and extroverts, they are not talking about two entirely different sets of people who are completely and qualitatively different from each other. Instead, they are referring to people who score relatively low or relatively high along a continuous distribution.[30] Statistical methods (specifically, a factor analysis technique) helped determine whether a few dimensions underlie the diversity of words used by psychologists like Allport and Odbert. The most widely accepted system to emerge from this approach was "The Big Five" or "Five-Factor Model" This system includes five broad traits that can be remembered with the acronym OCEAN: (O is for Openness; C is for Conscientiousness; E is for Extraversion; A is for Agreeableness; N is for Neuroticism). " [30],[31].

2. Methodology

A. Aim

This study aims to understand the extent of research done on a topic related to body image concerns and analyse the scope of expanding the current literature by exploring the impact of factors like personality dimensions and photo-taking, manipulating, and sharing behaviour.

B. Objective

To clearly state the gap in the available literature on body image and formulate a compelling research agenda with variables whose association has not been specifically studied or empirically tested yet.

C. Conceptual definition

a) Body image "Body image is considered to be a multidimensional construct that refers to an individual's mental representation of body-related perceptions and attitudes (i.e., thoughts, feelings, and behaviours), especially focused on but not limited to physical appearance "(Cash 2004). Literature on body image has been concerned with two aspects; body perception and body satisfaction [32].

b) Body perception "is related to the physical aspect of their body. This is an individual's assessment of their body's physical aspects (e.g., body weight, body shape, height, etc.) and how accurate this assessment is" (Cash 2004) [32].

c) Body satisfaction refers to the "feelings of fulfillment related to those physical aspects. Individuals with body satisfaction have positive body image, while individuals with negative body image have body dissatisfaction; they believe that people around them have better body features or are more attractive" (Cash 2004) [32].

d) "Personality traits reflect basic dimensions on which people differ. Personality traits refer to people's characteristic patterns of thoughts, feelings, and behaviours. It also implies consistency and stability" (Allport) [30].

e) Big Five Personality factors: This system includes five broad traits that can be remembered with the acronym OCEAN: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Cattell) [33].

f) Photo Filters: A photograph filter "is an advanced layer consolidated with a specific present mix of hues and settings that gives clients a chance to change the presence of a photograph before transferring it on social media" (Deary) [29].

g) Selfies: are typically defined as self-photos taken with a hand-held device that is usually shared on social media. However, more recent definitions also recognize the centrality of the photographer in the image, in that the body or face is the main focus of the image, and incorporate the notion that selfies are "consciously created, modified, and shared with others to varying degrees." (Hannavy) [22].

D. Search strategy

In January 2021, the following databases were searched for empirical investigations of body image in relation to personality traits, social media behaviour, and photo activity: Google Scholar, Academia, Research Gate, PubMed, and Web of Science. Existing literature on both the constructs about body image concerns and personality dimensions and the use of social media platforms were searched. Later this search was expanded to include studies related to the use of social networking sites, photo-taking, manipulating, and sharing activities. Appropriate keywords and Boolean terms were used to optimize the search results. The following search terms were used to capture social media and photo filter use: Social Networking Sites, SNS, Internet use, social media, Photo Filters, Selfie, Photo Editing Tools, Selfie Behaviour, Photo Manipulation, Facebook, Instagram, Snapchat, and Review. The keywords used to explore the components of body image were: Body Image, Positive Body Image, Body Dissatisfaction, Body Dimorphic Disorder, Body Satisfaction, Negative Body image, Eating Disorder, Appearance Ideal, Body Ideal, Thin Ideal, and Unrealistic Beauty Standard. The terms used to search for studies related to personality were; Personality, Personality traits, Personality Dimensions, Big Five Personality traits, NFM, and Neo Factor Model. Though preference was given to the latest articles while reviewing, no time restriction was placed while searching the articles. Following the systematic search of journal articles, the reference lists of included articles were also screened to identify any additional relevant articles. Prominent authors in the field were contacted to get additional information on working articles and tools being developed or used in their studies. Care was taken to include the most cited articles irrespective of the time frame. A secondary search was done in July of 2021 using a combination of the keywords given above to locate any additional articles. This time the search was focused around secondary literature. Then in December 2021, tertiary literature like books on body image and personality were reviewed to understand the conceptual and operational definition, related theories, theoretical constructs, and conceptual frameworks and generally accepted assessment tools on body image perceptions, personality dimensions, and photo activity. These tools varied from self-assessment to clinical assessment. In adherence to the PRISMA guidelines, articles obtained through the database searches were in three phases, (1) Based on their titles. Here those articles were included whose title indicated that the study researched social media use and some aspect of body image and /or personality dimensions. (2) Based on the abstracts. The same process was repeated here while screening the abstracts of the papers selected in the first stage; however, qualitative studies were excluded. (3) Finally, the entire journal article was considered and screened for eligibility. At this stage, articles were rejected if they did not include an independent measure of social media use, photo activity, body image component, and or personality. Articles that did not have the information required to compute an effect size were excluded. A comprehensive description of all inclusion and exclusion criteria is provided below.

E. Inclusion criteria

1) Studies that measured the participant's body image or any component of body image, positive or negative.
2) Studies that used self-reported measures were considered; studies that used alternative ways to measure the use of social media, photo activity, and body image constructs or personality were omitted.
3) The concept of using social media, photo activity, photo investment, and manipulation was broadly applied, where any aspect of the above variables was considered.
4) Study must have measured at least one photo activity. The activity studied could vary from deliberate Selfie taking, photo editing, use of photo filters, and any form of photo investment activity.
5) Studies that used cross-sectional, non-experimental design were considered.
6) Only those articles which were written in English were considered.

F. Exclusion criterion

1) Articles that were written in any language other than English.
2) Articles whose complete text was not readily available.
3) Articles that were qualitative.

G. Sample-level characteristics

Age, Gender. Ethnicity. Country grouping, type of tools used.

H. Measures

The researcher selected the articles to be reviewed based on their expertise in this field and grouped the selected articles into the following five categories. (1) Body Image and personality dimensions. (2) Use of photo filters. (3) Personality Dimensions and use of Photo Filters. (4) Body Image and use of Photo

filters. (5) Personality Dimensions, body image, and use of photo filters.

3. Discussion

Photographs have become the most common medium of communication. Pictorial self-portraits, more commonly known as "selfies," have become a medium through which individuals create their online persona and share a great deal of autobiographical information. It is a form of instant visual communication of how we are, who we are, where we are what we are doing [22]. People choose Selfies and SNS as the preferred medium of communication rather than face-to-face interactions because SNS provides individuals with a unique mode of self-expression and self-presentation in a more self-controlled manner [34],[35]. The rapid growth in the popularity of social networking sites is not surprising because people are by nature social creatures and are driven by the need for endorsement and self-confirmation. Social networking sites give them complete freedom to create their own profile [36]. These profiles are modifiable at their convenience without any formal approval; hence people take great creative liberties and enjoy complete self-expression in creating their online profiles [20],[37]. Online, a person can be anything or anybody. Research has shown that millennials increasingly use this a mode to escape from their mundane lives and be someone interesting [37],[38]. Research has also shown that while this is good for developing their creative talent, it negatively affects their self-esteem and mental wellbeing [39]. The user has the freedom to create the content they want to share with the group they want to share it with; thus, it is common to find people with multiple profiles on different SNS [3,4,5]. Social networking sites have also become a major platform for social interactions and relationship building for their users [4],[5]. They can share their content and view and comment on peer-generated content by liking, sharing, and commenting [6]. Therefore, users are cautious about the kind of content they share on social media, especially their pictures [39]. Much time, energy, effort, and money are invested in creating the appropriate online content [6]. Considerable thought is given to the pictures that are taken and chosen after modification for sharing on the SNS as it is supposed to generate interest in their online profile, which is depicted by the number of likes and tags that they get on the image [7],[8]. Researchers have found that photo activity be it online or offline, is related to a person's personality and may lead to body image concerns [9],[40]. Research also suggests that selfies and exposure to SNSs can be linked to psychological disorders [40]. Mental problems like narcissism and addiction have been associated with the act of applying filters to the selfies, increased frequency of taking selfies, and eventually changing the way they look in their picture [41],[42]. Research has shown that people, mainly women, internalize appearance ideals due to the unique nature of comparison on these social networking sites, leading to a rise in body image concerns [41]. Researchers have found that personality plays a vital role in the internalization of appearance ideals and the external manifestation of these internalized ideals [43]. For example, a person with a narcissistic personality is more likely to resort to

dieting, and an extrovert may choose to exercise to achieve their appearance ideal [41],[43].

It was common to have individuals aspiring to look like a model or their favourite celebrities until the recent past. To meet these appearance goals, people would resort to make-up, dieting, exercising, change in clothing, etc. [28],[43]. With the advent of photo filters on smartphones and SNS like Instagram and Snapchat and the easy availability of photo editing tools online, people could fulfill their wish of looking as flawless as their airbrushed celebrity without much physical effort[26],[44]. They could change their appearance in their pictures by changing their skin tone, facial features, and even their body shape. Research has found that the nature of comparison is changing [44],[45]. People are no longer comparing themselves with any model or celebrity; they are comparing themselves with the airbrushed, filtered, and perfected online version of themselves [46]. These days' individuals want to look more like their filtered, flawless, cute selfie rather than any celebrity and are resorting to extreme measures like cosmetic surgery [23],[18],[44],[47].

The widespread popularity of selfie-posting behaviour has led to increasing academic interest in exploring psychological determinants for this behaviour. The definition of a selfie has also changed. It is no longer defined as just self-photos taken with a hand-held device usually shared on social media [20],[21] Now, the definition requires the centrality of the photographer in the image, and the body or the face has to be the main focus of the image [21]. The definition also expresses the assumption that these selfies are deliberately created and modified to share them with others, be it online or offline [47]. This extended conceptualization recognizes multiple actions involved in taking a selfie, like staging, preparation, and posing [24,29,47]. After selecting the suitable picture and editing tool and /or filters, pictures are modified. Posting photos, browsing, viewing, and evaluating others' photos by liking, tagging, untagging, and comments have all been brought under the umbrella of selfie-related practices [22,45,47,48]. By uploading selfies to social media, users seek to gratify their needs [47]. However, some psychologists point out that the trend of taking and posting selfies is related to self-esteem values and personality dimensions [12],[30]. While launching her website, Essena O'Neill, an Australian model, during the launch of her website called 'Let's Be Game Changers' in the June of 2016, said, "people who frequently post selfies on social media sites are expected to exhibit narcissism, Machiavellianism, and psychopathy, O'Neill named these three psychological traits as the dark triad [49],[50]. Narcissism is extreme selfishness; Machiavellianism is the manipulation of others or duplicity; psychopathy is showing haste and no concern for others' feelings." [50].

A. Research Gap

The findings of this review and the research gap identified have been summarised under the following heading.

a) Evidence Gap (contradictory evidence gap): Much of what is known about body image dissatisfaction is based on the research done on white samples with a significant omission of

women of other colour or ethnicity. It is unclear if the findings of these studies can be generalized across other ethnic groups. Most of the studies on body image study the outcome like eating disorders, BDD, anxiety, depression, etc. Very few studies focused on the contributing factors. The studies that were found were too general in nature, like the use of social media. There is an intense need for extensive research in this area.

b) Knowledge Gap (knowledge void gap): Very few tools were found that measured positive body image and fewer tools were found to measure the need/motivation/extent and impact of the use of photo filters. There were barely any tools that measured the impact of positive body image media campaigns.

c) Practical–Knowledge Gap (action knowledge gap): The absence of specificity when it comes to research investigating the role of personality dimensions and the obsession for attaining perfection through the use of photo filters proves that more research is needed for a better understanding of individual variation in personality traits and body image concerns. Internalized anxiety disorders and coping strategies concerning mental disorders like snap chat dysmorphia and zoom dysmorphia are not studied. The paradoxical effect of the Mirror therapy is not explored in any study.

d) Methodological Gap (methods and research design): - Lack of Qualitative studies using moderators like the use of beauty filters and anxiety of facing real self on virtual platforms. There is a shortage of longitudinal studies which could throw light on the extent of the impact of these variables.

e) Empirical Gap (Evaluation Void Gap): Despite the rapid growth of research on body image, evidence shows that empirical research has been slow to investigate the relationship between personality dimension, photo editing habits, and body image. Most empirical studies were predominantly correlation-based studies. The nature of the correlational study does not allow the identification of the prospective contribution of selfie behaviour to the development of negative body image. There is no evidence of study done to examine if personality type dictates the photo-editing habits or predisposition to body image issues or if the relationship is the other way around.

f) Theoretical Gap (theory application void Gap): There were very few theory-based studies, and mostly the self-objectification theory was taken as the guiding theory. The implication of other theories like the Illusion of control theory, behavioural action theory, belief action-outcome model, critical realism theory, social learning theory, and theory of planned behaviour can also be explored.

g) Population Gap: Population above 30 is hardly studied, and studies on men are minimal. Body image issues are considered to be a western phenomenon. It is somehow assumed that the Indian population is beyond such concerns. There is hardly any evidence of studies on the Indian ethnic population or geographical region.

4. Conclusion

This study will assess the available literature on body image in relation to personality traits, photo-taking and manipulating habits. While selecting the articles for this review, the researcher focused on those research papers that focused on studying new contributors to body image concerns, especially those factors that have emerged due to the changing social environment and the rapid development of technology. Papers that studied personality and its role in body image concerns were also reviewed. The scope of the search and review was widened to include newly discovered variables like selfie behaviour and photo activity, which had some association with both body image concerns and personality dimensions. The review of the available literature reveals the need to study the consequences of body image concerns among men. Men require as much attention as women [8],[14]. The research found that because men disliked discussing body-image-related concerns, the body image issues faced by men were mostly misunderstood, misinterpreted, undiagnosed, and often untreated [9],[13],[17],[19]. Research also showed that while men reported less body dissatisfaction than women, they are not immune to these issues [15],[16].

The review reveals that most studies had a limited sample size and were focused on either young women or adolescents in western countries. Contrary to popular belief, the body image issue is not a phenomenon limited to upper-class European women [9],[12],[16],[26]. Detailed research on other ethnic groups with a different demographic profile say, people in their midlife will make the result more generalizable and add to the existing knowledge base. Most studies were cross-sectional and correlational in nature. A longitudinal study will significantly help understand the far-reaching impact on the personality and mental well-being of individuals. Research has shown that social media exposure negatively affects body image and the need to develop a positive body image is the same for both sexes [12],[18],[20]. Though some media campaigns were launched to address this issue, very little evidence was found that suggested that the impact of such media campaigns was studied or evaluated. Tools that precisely measure these variables need to be developed to evaluate the relevance and success of positive body image campaigns [2],[4],[7],[29]. The review reveals that most studies on social networking sites broadly study the impact of media in general terms on body image [3],[10],[11],[30]. There was little evidence of studies that specifically researched exposure to which type of social media platform or what type of social media activity affected body image the most [6],[23],[24]. A better understanding of this will help develop a timely and focused intervention strategy. Intervention-based studies were mainly related to eating disorders or BDD [6],[23],[24]. There was no evidence of substantial research on the impact of photo activity-driven body image issues on other variables like mental health, self-esteem, personality, etc. Research shows that appearance-related content ranks high on the contributing variables list of problematic SNS activity that let to body image issues [11],[30]. In-depth research, including variables like photo-taking, manipulating, sharing, and browsing activity, will help understand the need or motivation behind such photo (manipulative) activity. After reviewing several papers, it can be safely concluded that research on this subject is still in its initial stages [49]. Researchers have ample scope to fill the numerous research gaps like methodological, conceptual,

population, practical or theoretical gaps in the exist in the available literature.

Very few studies researched the association between body image and personality dimensions; even fewer have evaluated photo activity and its impact on body image. To the best of the researcher's knowledge, no studies have been published that have specifically examined or empirically tested the relationship between these three variables, namely body image, personality trait, and the use of photo filters, especially in the Indian context. To bridge the current opening in the literature, the researcher proposes to undertake a study that aims to understand the relationship between personality traits, body image, and the use of photo filters.

Hence the agenda of the proposed research would be to understand the relationship between body image, personality, and the use of photo filters. The researcher wishes to focus on a demographic profile that is untouched yet; therefore, the geographical limit of the study would be India, and the age group of the sample would be people in their middle age irrespective of their gender.

References

[1] Sonya Bruner. (February 2021) Links Between Body Image and Depression 2022. depressionhelp-911.com›links-between-body-image. https://destroydepression.com/?hop=3c3q2k11

[2] Teana Krolak. (April, 2021), Social Media's Role on Body Insecurity. Read More. Mental Health Karla Lassonde April 20, 2021. https://www.communicatingpsychologicalscience.com/blog?offset=1619712000954

[3] Yellow. Social Media Report: Part One - Consumers. Melbourne: Sensis; 2018.

[4] Kofoed J, Larsen MC. A. (2016). Snap of intimacy: photo-sharing practices among young people on social media. First Monday. 2016;21(11).

[5] Rideout, V., & Robb, M. B. (2018). Social media, social life: Teens reveal their experiences. San Francisco, CA: Common Sense Media.

[6] Brittany Tackett, MA. (2019, Novemper2019). Social Media and Body Image 11 and exclusion criteria is provided in the section https://://projectknow.com/eating-disorders/and-social-media/. https://www.coursehero.com/file/p4oatf9/SOCIAL-MEDIA-AND-BODY-IMAGE-11-and-exclusion-criteria-is-provided-in-the-section/

[7] How do "selfies" impact adolescents' well-being and body confidence?. https://vuir.vu.edu.au/39531/1/prbm-177834-how-do-selfies-impact-adolescents-well-being-and-body.pdf

[8] Siibak, A. (2009). Constructing the self through the photo selection-visual impression management on social networking websites. Cyberpsychology: Journal of psychosocial research on cyberspace, 3(1).

[9] Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. Cyberpsychology & behavior, 1(3), 237-244.

[10] Gonzales, A. L., & Hancock, J. T. (2011). Mirror, mirror on my Facebook wall: Effects of exposure to Facebook on self-esteem. Cyberpsychology, behavior, and social networking, 14(1-2), 79-83.

[11] Yurchisin, J., Adomaitis, A. D., Johnson, K. K., & Whang, H. H. (2016, November). Exploring the effect of body appreciation on the relationship between social networking site usage and body dissatisfaction. In International Textile and Apparel Association Annual Conference Proceedings (Vol. 73, No. 1). Iowa State University Digital Press.

[12] Waskul, D. D., & Vannini, P. (2016). Introduction: The body in symbolic interaction. In Body/embodiment (pp. 15-32). Routledge.

[13] Body Image Issues (2012) - Albert Ellis Institute. https://albertellis.org/2012/03/body-image-issues/

[14] Varnali, K., & Toker, A. (2015). Self-disclosure on social networking sites. Social Behavior and Personality: an international journal, 43(1), 1-13.

[15] Cash, T. F., Fleming, E. C., Alindogan, J., Steadman, L., & Whitehead, A. (2002). Beyond body image as a trait: The development and validation of the Body Image States Scale. Eating disorders, 10(2), 103-113.

[16] Donaghue, N. (2009). Body satisfaction, sexual self-schemas and subjective well-being in women. Body Image, 6(1), 37-42.

[17] Grilo, C. M., Masheb, R. M., Brody, M., Burke-Martindale, C. H., & Rothschild, B. S. (2005). Binge eating and self-esteem predict body image dissatisfaction among obese men and women seeking bariatric surgery. International Journal of Eating Disorders, 37(4), 347-351.

[18] Matz, P. E., Foster, G. D., Faith, M. S., & Wadden, T. A. (2002). Correlates of body image dissatisfaction among overweight women seeking weight loss. Journal of consulting and clinical Psychology, 70(4), 1040.

[19] Mirzoeff, N. (2015). How To See The World. London: Penguin Random House.

[20] Tiidenberg, K. (2015). Selfies, Image and The Re-making Of The Body. Body & Society, 72-95.

[21] Hannavy, J. (2008). Encyclopedia Of Nineteenth-Century Photography. New York: Routledge.

[22] Susanto, D. A. (2013, July 17). Selfie Is A Sign Of The Narcissistic And Less Confident?Merdeka. Retrieved December 20, 2016.

[23] Iqani, M., & Schroeder, J. E. (2016). #selfie: Digital Self-portraits As Commodity Form And Consumption Practice. Consumption Markets & Culture, 405-415.

[24] Wickel, T. M. (2015). Narcissism And Social Networking Sites: The Act of Taking Selfies. The Elon Journal of Undergraduate Research in Communications, 5-10.

[25] Hu, Y., Manikonda, L., & Kambhampati, S. (2014). What We Instagram: A First Analysis of Instagram Photo Content and User Types. Tempe: Arizona State University.

[26] Pandey, A. M., & Sang, B. A. (2015). Capturing The Visual Language of social media Exploiting Web Image Search for User Interest Profiling. Singapore: Institute of Infocomm Research.

[27] Ting, H., & De Run, E. C. (2015). Beliefs About The Use Of Instagram: An Exploratory Study. International Journal of Business Innovation and Research, 15-30.

[28] Bakhshi, S., Shamma, D., Kennedy, L., & Gilbert, E. (2015). Why we filter our photos and how it impacts engagement. In Proceedings of the International AAAI Conference on Web and social media (Vol. 9, No. 1, pp. 12-21).

[29] Personality Traits – Introduction to Psychology. https://openpress.usask.ca/introductiontopsychology/chapter/personality-traits/

[30] Personality Traits – The Balance of Personality. https://pdx.pressbooks.pub/thebalanceofpersonality/chapter/1-personality-traits/

[31] Eliana V. Carrac¸ David Markland, Marlene N. Silva, Sı´lvia R. Coutinho, Paulo N. Vieira, Cla´udia S. Minderico, Luı´s B. Sardinha, Pedro J. Teixeira (2011) Dysfunctional body investment versus body dissatisfaction: Relations with well-being and controlled motivations for obesity treatment. Motiv Emot (2011) 35:(423-434).

[32] Matthews, G., Deary, I. J., & Whiteman, M. C. (2003). Personality traits. Cambridge University Press.

[33] Lin, K. Y., & Lu, H. P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. Computers in human behavior, 27(3), 1152-1161.

[34] Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. Computers in human behavior, 24(5), 1816-1836.

[35] Brenner, J., & Smith, A. (2013). 72% of online adults are social networking site users. Washington, DC: Pew Internet & American Life Project.

[36] Ellison, N. B., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. New media & society, 13(6), 873-892.

[37] Wilhelm, S. (2006). Feeling good about the way you look: A program for overcoming body image problems. Guilford Press.

[38] Varnali, K., & Toker, A. (2015). Self-disclosure on social networking sites. Social Behavior and Personality: an international journal, 43(1), 1-13.

[39] Wagner, C. N., Aguirre Alfaro, E., & Bryant, E. M. (2016). The relationship between Instagram selfies and body image in young adult women. First Monday, 21(9).

[40] Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. Psychology of women quarterly, 21(2), 173-206.

[41] The 'Selfie' obsession: A chronic, narcissistic mental disorder. 21st Century Wire. 2014.

http://21stcenturywire.com/2014/12/13/selfie-obsession-achronicnarcissistic-mental-disorder/

[42] Qiu, L., Lu, J., Yang, S., Qu, W., & Zhu, T. (2015). What does your selfie say about you?. Computers in Human Behavior, 52, 443-449.

[43] Sung, Y., Lee, J. A., Kim, E., & Choi, S. M. (2016). Why we post selfies: Understanding motivations for posting pictures of oneself. Personality and Individual Differences, 97, 260-265.

[44] Butt, S., & Phillips, J. G. (2008). Personality and self-reported mobile phone use. Computers in human behavior, 24(2), 346-360.

[45] Brandt R. (Jun 25, 2014) Google divulges numbers at I/O: 20 billion texts, 93 million selfies and more; Silicon Val Bus J. 2014.

[46] Rubin, A. M. (2009). Uses-and-gratifications perspective on media effects. In Media effects (pp. 181-200). Routledge.

[47] D'Souza, C. A. (2017). A Study of the Gratifications of Posting Selfies on Facebook and Its Relationship with Self-esteem (Doctoral dissertation, St Joseph's College).

[48] Fardouly, J., & Holland, E. (2018). Social media is not real life: The effect of attaching disclaimer-type labels to idealized social media images on women's body image and mood. New media & society, 20(11), 4311-4328.

[49] Krawczyk, R., Menzel, J., & Thompson, J. K. (2012). Methodological issues in the study of body image and appearance.