Investigating Body Image, Eating Attitudes, and Social Media Usage in College Students in Ireland

National College of Ireland

Carla Quinn

19400982

Supervisor: Dr. Michelle Kelly

Thesis Presented in Partial Fulfillment of the Requirements for the Bachelor of Arts (Hons) Degree in Psychology, Submitted to the National College of Ireland, March 2022

Submission of Thesis and Dissertation

National College of Ireland
Research Students Declaration Form
(Thesis/Author Declaration Form)

Name: Carla Quinn

Student Number: x19400982

Degree for which thesis is submitted: QQI BA (Honours) Degree in Psychology at level 8

Title of Thesis: Investigating Body Image, Eating Attitudes, and Social Media Usage in College Students in Ireland

Date: 24/03/2022

Material submitted for award

A. I declare that this work submitted has been composed by myself. ☑

B. I declare that all verbatim extracts contained in the thesis have been distinguished by quotation marks and the sources of information specifically acknowledged. ☑

C. I agree to my thesis being deposited in the NCI Library online open access repository NORMA. ☑

D. ***Either*** *I declare that no material contained in the thesis has been used in any other submission for an academic award.
Or *I declare that the following material contained in the thesis formed part of a submission for the award of

_____
(State the award and the awarding body and list the material below) ☑

I declare that the following material contained in the thesis formed part of a submission for the award of QQI BA (Honours) Degree in Psychology at Level 8

Acknowledgements

I would like to say a huge thank you to all who took part in this study which made it possible. I would not have accomplished this without guidance from my supervisor, Michelle Kelly, who helped me along the way and the emotional support and kindness from my loving mam, Siobhain, who has always been there to help me throughout each journey and accomplishment in my life. And finally, to my amazing partner, who always encouraged me.

Abstract

The current study explored the relationship between social media engagement, body image, and eating attitudes across participants aged 18 years and above in Ireland while examining the potential gender differences. Specifically to address whether social media usage has affected eating attitudes and body image. There is a lack of research examining body image, eating attitudes and social media in Ireland during the ongoing COVID-19 pandemic. A total of 92 participants completed an online survey shared across social media platforms that measured their level of social media engagement, current body image states and eating attitudes. Findings from hierarchical regressions show that increased social media use results in higher body dissatisfaction and increased eating disorder risk. Results from *t-tests* indicated no significant gender differences. The findings add to the growing evidence that social media use is associated with adverse outcomes for body image and eating behaviours. This study discusses the implications and recommended practices for assessing and investigating body image, eating attitudes, and social media engagement while adding to the literature to further understand such concepts that are constantly changing and adapting as technology advances and social media engagement increases.

Table of Contents

Page

Literature Review

Introduction

The following review will examine prior research from scientific literature, theoretical findings, and academic books related to body image, eating attitudes and social media use. This review will not explore diaries. The majority of the sources conclude that body image, precisely body dissatisfaction, is an area of concern across individuals primarily in adolescence and adulthood, along with disordered eating behaviours, which can be affected by social media use, particularly during the ongoing COVID-19 pandemic.

Body Image

Body image is a subjective multidimensional construct that considers biological, psychological, social, and external factors based on how people view their bodies (American Psychological Association, 2018). An individual's perception of their body image can depend on multiple factors but usually stems from their thoughts and feelings. There are many aspects to the term, including 'perceptual body image', which is an unclear image of how you look, and 'cognitive body image', which can lead to dissatisfaction about body weight and shape. Another aspect is 'behavioural body image', which relates to individuals who feel they should isolate themselves or employ unhealthy behaviours to deal with their bodies (National Eating Disorders Collaboration, 2021). Theories of body image disturbance contain three distinct categories: developmental, perceptual, and socio-cultural. The socio-cultural theory of body image explored in a book by Thompson et al. (1999) explains that powerful messages about the significance of appearances are sent out by social agents such as the media, classmates, and parents (Rodgers et al., 2009). Romantic relationships and friendships can influence body image development (Cash, 2012), along with negative self-evaluations about how one view their body (MacIntyre et al.,

2020), especially in western societies (Mond et al., 2013). Additionally, the feminist approach to understanding body image and disordered eating (DE) emphasises socio-cultural variables and gender ideas unique to western societies that place women at risk of developing body image concerns and eating disorders (Borowsky et al., 2015).

Body satisfaction refers to positive thoughts and feelings about body perception (Grogan, 2017). In contrast, *body dissatisfaction* refers to negative thoughts and feelings regarding one's body, typically along with discrepancy between actual and ideal body size and is linked to health-related behaviours and psychological health as the drive for a slimmer physique is seen as widespread and generalised (Swami et al., 2010). Body dissatisfaction is affected by many interlinked factors, such as evolutionary, psychological, socio-cultural, and biological (Ferguson et al., 2011). Body image and body dissatisfaction are often intertwined in the literature, with research inspecting various elements of each other. This review explores prior research and theories concerning body image, eating attitudes, and social media use while also looking into the distinctions between men and women based on the literature.

The objectification theory explored in a publication by Fredrickson & Roberts (1997) infers that women are conditioned to internalise an observer's point of view as the dominant vision of their physical selves. Self-objectification occurs when individuals regard themselves as though they are things to be seen and assessed based on their looks. Self-objectification and DE have been found to have a moderate positive relationship, discovered in a recent meta-analysis, including 53 cross-sectional studies (Schaefer & Thompson, 2018). A study utilising the EAT-26 test in college students concluded that females with a high self-objectification expressed more body-related anxiety and self-reported DE habits (Greenleaf & McGreer, 2006). In addition, the self-discrepancy theory (Higgins, 1987) explains how people evaluate their "actual" selves

considering internalised norms. The importance of SDT to body image is partly due to the existence of societal norms that promote specific standards of appearance. Concepts like the 'thin-ideal' and the desire for muscular men are largely unattainable criteria for most people without resorting to drastic means. Therefore, when comparing one's actual self to society's ideal, the individual may fall short of the norm, leading to the possession of body-related self-discrepancy. One study found a small effect whereby indicators expressing dissatisfaction were linked to real and ideal body image disparities from one's perspective (Snyder, 1998).

Gender Differences

Undoubtedly, despite gender identity, any individual can suffer from negative feelings due to bodily dissatisfaction, negatively impacting personal identity (Seyed Alireza Hosseini & Padhy, 2019). Body image dissatisfaction was linked to signs of self-criticism and social discomfort in transgender individuals from Canada and Ireland using qualitative analysis, allowing for a more in-depth comprehension (McGuire et al., 2016). A large amount of literature focuses on adolescent females and women's body dissatisfaction (Grabe et al., 2008; Lokken et al., 2003), with findings that women are negatively affected by body shape more often than men (Fallon et al., 2014). However, males' and females' bodily dissatisfaction was analysed in a publication by Furnham et al. (2002), whereby men reported wanting to be heavier but not overweight, and women wished to be lighter in weight. This may be influenced by the fact that both genders have the same idea that negative feelings are produced when shown an overweight physique, rating it as less appealing, therefore driving the need for a thinner body in both genders (Voges et al., 2019). This finding may have real-life implications due to weight bias and obesity stigma commonly portrayed in the media that causes negative thinking related to overweight individuals (Puhl & Heuer, 2009). Additionally, Paxton (2004) showed that boys predominantly

focus on muscularity when presented with idealised body images. This finding supports more recent findings of men's desire for a muscular, fit body (Lennon & Johnson, 2021). These findings suggest a potential cultural and societal influence as media promotes the ‘thin, slender ideal’ for women and the desire for men to have a muscular body (Neighbors & Sobal, 2007; Tiggemann & Slater, 2013).

Body Image and Disordered Eating

Body dissatisfaction has shown to be a significant risk and maintenance factor in DE (Stice, 2002); therefore, it is essential to explore both aspects together. Eating attitudes is described as ‘beliefs, thoughts, feelings, behaviour, and relationship with food’, (Alvarenga et al., 2012). An individual’s perception and thoughts about food are influenced by many environmental factors (Lydecker et al., 2017). In n = 1850 women, DE was linked to a lower psychological domain (Baceviciene et al., 2020). Using the Eating Attitudes Test-26, body image satisfaction and eating attitudes were observed in adolescents, n = 385, with 83.5% of females expressing displeasure with their appearance (Pedro et al., 2016). Body image concerns and DE are serious health issues that can affect anybody from childhood through maturity (Neumark-Sztainer et al., 2018). Today, the ‘thin ideal’ explaining the need to have a thin body is a term leading to DE in adolescents and young adults (Bailey et al., 2014), which can be understood by examining eating attitudes.

The tripartite model of influence posits that body dissatisfaction and DE are impacted by three primary sources of influence: parents, peers, and the media. This model is supported in undergraduate female studies (Baceviciene et al., 2020; Hardit & Hannum, 2012). Females typically reported greater body image criticism and pressure from the media using the tripartite influence model guidance. Exposure to media and accessibility to food plays a significant role in

how individuals interact with food and eating patterns and affects bodily perception (Rounsefell et al., 2019). The relationship between social media use and DE tendencies using a sample of adolescents indicates that these interactions arise earlier than previously thought, potentially leading to dissatisfaction in early adulthood (Wilksch et al., 2019). Protective factors in the prevention of negative body image and DE and found that the Embodiment theory explains how Piran's (2015) developmental theory of embodiment (DTE) is to encompass interpersonal, individual, and socio-cultural changes (Levine & Smolak, 2015). According to the DTE, those who are 'embodied' possess a reduced risk of developing an eating disorder. Embodied people have the abilities, the sense of agency and freedom, and the flexibility to enjoy their bodies, nurture and care for them, and value their uniqueness.

Social Media

Billions of individuals engage in social media, which is expected to rise to about 4.41 billion by 2025 (Stat, 2021). Social media usage extensively impacts one's overall well-being, requiring up-to-date research (Faelens et al., 2021). The link between media portrayals and body image problems is widely recognised. A meta-analysis of 25 papers proved that body image was substantially more negative after viewing slender, thin media imagery than photographs of inanimate objects and models who are 'average' in weight, leading to body dissatisfaction (Groesz et al., 2002). In addition, a meta-analysis conducted by Grabe et al. (2008) indicated that women's exposure to mass media outlets is associated with body image dissatisfaction. Furthermore, individuals are more likely to develop negative body views because of image-based social networking sites like Facebook (Marengo et al., 2018). Facebook engagement also causes young adults to feel pushed to lose weight, seem more attractive, and modify their looks while on social media, explaining the effect of such exposure (Pepin & Endresz, 2015). Saiphoo & Vahedi

(2019) found a small association between social media usage and body disturbances n = 36,552 within a recent meta-analysis.

To support this finding, an exploratory analysis using college students published by Aparicio-Martinez et al. (2019) identified a connection between body image, body ideals, and social media usage, presenting that body issues were also related to DE pathology, identified using the EAT-26 test. It was also observed that body image was associated with social networking service (SNS) behaviours such as lurking and writing comments on other people's accounts. In contrast, SNS duration was linked to ED concern (Santarossa & Woodruff, 2017). Additionally, a meta-analysis by Holland & Tiggemann (2016) found that the impact of social media on body image is the same for girls and boys; therefore, future research should include individuals of all gender identities. These findings are worrying and support the idea of the adverse effects that social media can have on one's overall identity and wellness; therefore, this area requires continuous evaluation.

The social comparison theory (Festinger, 1954) helps understand body image concerning social media use. It explains that individuals typically compare themselves to people of similar age, e.g., images that others post on social platforms. Social comparison theory and social media show a positive relationship, potentially damaging users as they view their lives as unfavourable compared to others (Jiang & Ngien, 2020). A study by Jiotsa et al. (2021) found an apparent link between the regularity with which one compares one's physical appearance to that of persons followed on social media platforms and body dissatisfaction and a desire for slimness. In this study, a cofounding factor was educational level. SNS use and body image dissatisfaction were also strongly mediated by appearance-based comparisons, a common feature of online social platforms (Ryding & Kuss, 2019). To support this, it was found that people who compare their

physical features to people they think to be more desirable than them are more likely to be unsatisfied with their body image and possess an increased occurrence of DE or eating disorders (Tiggemann et al., 2009). In men, it was seen that media body comparison was not a significant predictor of body dissatisfaction (van den Berg et al., 2007). However, media use has changed drastically since the year of publication for this study. A meta-analysis including a wide range of study designs showed the effect of media exposure on the 'ideal' body physique and found a slight change in eating patterns, primarily in individuals prone to eating disorders (Hausenblas et al., 2013). Overall, the impacts of media exposure on body image and eating disorders were minor to moderate. In contrast, several studies show an indirect link between body dissatisfaction and DE (Brechan & Kvalem, 2015; Cruz-Sáez et al., 2018). Therefore, updated findings are essential.

The Impact of Covid-19

Social media use during the COVID-19 pandemic is a rising area of research as it has allowed individuals to stay in touch with others while keeping a safe distance. Disruptions in everyday routine, a rise in smartphone and social media use, increased negative feelings, and anxiety-inducing media have all created distinct challenges to body image and increased the likelihood of developing an eating disorder and the severity of its symptoms (Rodgers et al., 2020). Overall, there has been an increase in smartphone usage reported during the pandemic, along with a rise in smartphone addiction (Serra et al., 2021). Social media addiction can cause poor mental health, observed in college students (Andreassen et al., 2016), which may increase negative feelings when using social platforms. In contrast, a recent meta-analytic study found that screen media does not relate to issues with mental health, emphasising that prior studies analysing screen time and mental health may not be reliable (Ferguson et al., 2021).

The pandemic has made a living via the internet more accessible than in previous years. A recent finding that COVID-19-related stress and anxiety might shape body image outcomes under physical and social distancing conditions in males and females increases the importance of studying such concepts during the pandemic (Swami et al., 2021). To add to this research finding, the influence of the COVID-19 lockdown on social network use and body image disturbances was explored, which showed that frequent exposure to social media sites, specifically Instagram, was correlated with body disturbance and dissatisfaction and want to be thinner (Vall-Roqué et al., 2020). TikTok, a video-focused social networking service, has increased usage during the pandemic. Recent studies have been published suggesting the negative impacts of TikTok, particularly on body image, as TikTok trends become more common (Liu, 2021). However, these studies are still in the early stages. According to a meta-analytic study of DE behaviours and social media use, university students have been shown to possess the strongest link between SNSs and DE behaviour than other groups. The meta-analysis' principal conclusion was that excessive usage of SNS is linked to an elevated likelihood of DE behaviours (Zhang et al., 2021).

Moreover, eating behaviours such as emotional eating has increased during the pandemic (Cecchetto et al., 2021). The pandemic produces tension and anxiety, worsening some individuals' eating disorder symptoms and body image (Czepczor-Bernat et al., 2021). Similarly, Robertson et al. (2020) looked at body image and eating alterations during the pandemic. Women were more likely than males to report increased difficulties with eating control, food obsession, and deteriorating body image. Overall, decreased mental well-being was associated with body image concern and eating patterns. One finding explains how increased weight stigma occurred via social media concerning obesity and COVID-19, which may explain observed findings

(Pearl, 2020). The Irish Medical Journal paper reported eating disorder rates during the COVID-19 pandemic; a reported 25% increase in inpatient admissions between March and September of 2020 occurred, with 40% of entries being males, a considerably higher rate of admissions for males compared to previous years (Barrett & Richardson, 2021), suggesting the importance of evaluating and examining ED related outcomes in all genders.

The Current Study

Based on the findings, the present study aims are to investigate body image, eating attitudes and social media usage in college students in Ireland during the ongoing COVID-19 pandemic. The current study will analyse potential differences between males and females and whether a rise in social media usage has impacted body image state evaluations and eating attitudes. The study aimed to investigate the extent to which COVID-19 is affecting our daily lives in various ways. Although a recent event, studies are already evidently proving the impacts of the pandemic on our lives and well-being.

A student population represents a distinct demographic that typically suffers from significant psychological discomfort due to financial concerns, nutritional consumption, and academic demands (Pedrelli et al., 2014; Whatnall et al., 2019). Poor body image affects academic achievement, which can cause distress to students (Naz, 2017). Hawkins et al. (2004) proved that exposure to thin-ideal images in college students might lead to body dissatisfaction, including a heightened likelihood of eating disorder symptoms in women. Similarly, a longitudinal study presented that college women are at an increased risk for DE and body image concerns (Neumark-Sztainer et al., 2011). In addition, a consistent and robust association was shown between social media use and eating concerns in individuals aged 19 to 32 years in the U.S (Sidani et al., 2016), an age range typically consisting of college students. More research is

needed as social media has become a regular part of everyday life for over 4 billion individuals (Kemp, 2021). Social media use, our culture and current trends change due to technological advances; therefore, up-to-date research is required to understand key concepts relating to everyday life. Overall, this review has shown a lack of research on college students in Ireland's eating attitudes/behaviour concerning social media and body image during the COVID-19 pandemic. Therefore, the researcher will address the gaps in the literature while adding to existing research in the current study.

We hypothesise to find, concerning previous research, firstly, an increase in social media engagement compared to pre-covid social media engagement. Secondly, to find a relationship between body image dissatisfaction (CV) and increased social media use (PV). Thirdly, observe a relationship between eating attitudes (higher eating disorder risk) (CV) and increased social media use. Finally, females will have poorer body image, higher social media engagement scores and an increased likelihood of eating disorder risk when compared to males.

Conclusion

The strengths of past studies include outcomes that allow a better understanding of the factors affecting body image and eating attitudes, one of which includes social media exposure and engagement. There are evident weaknesses, with many studies focusing on female adolescents and women at a specific age range, with samples commonly taken from the United States. To support body image and eating attitude research, all gender identities should be considered, including any age range of individuals. To fill the gaps, body image, eating attitudes and social media should be explored during the COVID-19 pandemic. In the current study, such issues are addressed.

Methodology

The particular measures for this study are listed below.

Participants

A sample of 92 (Females: *n* = 76, Males: *n* = 16) college students aged 18 years or over were included in the current study. The participants came from various counties across Ireland. The study used a non-probability, convivence sampling approach to gain responses. Participants were recruited online through social media platforms and their social media accounts since people engaged on social media may be more willing to provide relevant replies to the research question. In the current study, 58.7% of participants were in the third year, 15.2% in the fourth year, 21.7% in the first year, and the remaining 4.3% in the second year of college/university. Inclusion criteria consisted of being of any gender, living in Ireland, with enrolment in college/university.

Measures

Using Google Forms, a survey generator, the study questionnaire included demographic questions and three associated scales. Demographic questionnaires were necessary to get an overall profile of the participants in this study. Questions concerning gender and academic year in college were collected. Three questionnaires/scales/tests were employed to collect data.

The Social Media Engagement Questionnaire (SMEQ) developed by Przybylski, Murayama, DeHann, & Gladwell (2013) is a simple 5-item scale that measures social media engagement, precisely, the extent to which the individual engages in social media. In the original, non-adapted questionnaire, individual scores are calculated by adding replies to all five items, resulting in a reliable result (a = .82 to .89). Response anchors consist of values from 0 = *Not one day,* and 7 = *Every day*. In the current study, the questions were adapted slightly to in that it will

state, 'Pre-covid how often did you use social media in the 15 minutes after you wake up?', to reflect social media use before the COVID-19 pandemic and, 'Currently how often did you use social media in the 15 minutes after you wake up?' to make a total of 10 questions. Each score given is added up the answers to all items on the scale, with the highest score being 35 for each set of 5 questions and the lowest being 0. For 10 items, the highest score is 70. In the current study, the Cronbach's alpha for the SMEQ in the present study while considering the adapted questions is (a = .88), indicating a high level of internal consistency (see Appendix B for more information).

The Body Image State Scale (BISS) is described as being relatively stable and internally consistent with the internal consistency of the BISS scale measured as .77 for females and.72 for males, developed by Cash et al. (2002). It is a multi-item measure of momentary affective experiences of one's physical appearance with a 6-item scale with a 9-point dimensional response, allowing for more accurate results. In this scale, higher BISS scores on the 9-point dimension indicate more favourable body image states, and lower BISS scores indicate less favourable body image states (body dissatisfaction). For example, right now I feel . . . *A great deal worse* about my looks than I usually feel, to ' *A great deal better about my looks* than I usually feel. Scores are revered scored from positive to negative, which involved reverse scoring items 2, 4 and 6. After reverse coding, the average of the 6-items is calculated to score this scale. The internal consistency for the BISS scale was not performed due to the high variability of questions within this scale. The histogram for BISS shows a normal distribution (see Appendix C for further information).

EAT-26 Eating Attitudes Test©, (EAT-26) developed by Garner, Olmstedt, Bohr and Garfinkel (1982) examines the possible presence of "eating disorder risk", in other words, risk of

disordered eating attitudes which can be either low, medium or high. This test is used to see if eating habits need to be examined further. The EAT-26 is based on eating attitudes, feelings, and behaviours. It is a self-reported test acceptable for use in a non-clinical setting. The EAT-26 correlates with the EAT-40 (r = 0.98); however, the EAT-26 consists of fewer questions, making it easier to conduct to a student or non-clinical population. In the EAT-26, three subscales are present. These are dieting (questions 1, 6, 7, 10, 11, 12, 14, 16, 17, 22, 23, 24, 26), food preoccupation and bulimia (questions 3, 4, 9, 18, 21, 25) and oral control (2, 5, 8, 13, 15, 19, 20) Scores greater than 20 indicate a need for further examination from a qualified professional. Low scores (below 20) can still be consistent with serious eating concerns, as denial of symptoms can be present with disordered eating habits. The scale has high reliability and validity (Garner, Olmsted, Bohr, & Garfinkel, 1982; Lee et al., 2002; Mintz & O'Halloran, 2000). Test-retest reliability = .84 to .89. In the current study, for questions 1-26, the Cronbach's alpha was (a = .883), reporting a high consistency in the current sample (see Appendix D for more information).

Design

The study implemented a quantitative approach using an experimental cross-sectional research design to see whether changes in one or more variables connect to other variables (s). The predictor variables are gender and social media engagement pre-covid and currently. The criterion variables are body image and eating attitudes/behaviour (eating disorder risk) used for regression analyses. For hypothesis 4, a between-group design compared the mean differences in body image states, eating attitudes (eating disorder risk), behavioural eating attitudes and extent of social media use between two groups (males and females).

Statistical software SPSS (version 27) was used to analyse the data. For research Q1, a paired samples t-test was conducted to investigate social media engagement pre-covid and currently. A Spearman's rank-order correlation was employed as a non-parametric variant of the Pearson product-moment correlation to investigate the study variables before regression analysis. The influence of the PVs, social media engagements, and gender on the two CVs, body image states and eating attitudes was investigated using two separate hierarchical multiple regression analyses. Lastly, multiple Mann Whitney- U tests were performed as an alternative to the independent samples t-test and one independent samples t-test to compare males' and females' body dissatisfaction levels, eating attitudes (eating disorder risk), eating disorder behavioural questions, and social media use pre-covid and current.

Procedure

A pilot study consisting of four participants was required prior to data collection to examine whether the research project was feasible in the current study due to an addition/adaption to the Social Media Engagement Questionnaire (SMEQ). Five questions have been added to the existing five questions, such as, 'Pre-covid how often did you use social media in the 15 minutes before you go to sleep?', These questions were added to determine whether the COVID-19 pandemic has influenced the extent of social media engagement. Outcomes of the pilot study concluded that no further changes or alterations were necessary (see Appendix B).

The study was presented across such platforms by the researcher. The participant most likely heard about the study from a social media platform such as Facebook, Instagram, or through a group chat. Interest in the research topic may have motivated the individual to participate. Relevant information was provided concerning the nature of the study, benefits, and ethical implications, including confidentiality prior to participant engagement. Individuals

clicked on the link provided, which directed them to an online website to anonymously collect the participant's data. Data was collected using an online survey software known as Google Forms, making it highly accessible and convenient from any device, particularly during COVID-19. The participant could read through the information sheet and the consent form before proceeding. The participant was required to agree before proceeding to the survey. The participants were guided to complete firstly the Social Media Engagement Questionnaire (SMEQ), followed by the Body Image States Scale (BISS) and finally the Eating Attitudes Test-26 (EAT-26). A debriefing sheet was available with personal contact information concerning the researcher and supervisor contact details if the participant wished for further information. Helpline numbers were also provided, along with a statement urging participants to speak out and get support if the questionnaire had caused them any discomfort. The survey took approximately 10 minutes to complete, whereby the participant was then free to exit the tab after completion. There were no penalties if the individual left the form without completion. Once complete, no other actions were required. Upon completion, the participant did not need to worry about their data as data was kept anonymous and secure (for complete information, see Appendix F).

Ethical considerations

Data was gathered under the National College of Ireland's (NCI) ethical procedures which were taken into account by the researcher. Participants were notified that if the research project received a 2.1 or better grade, it would be placed in the NCI library, which gives access to students, college staff and guests to examine if desired. The study's benefits and risks were explicitly stated. Informed consent was given, and participants were not persuaded or exploited, which is highly unethical. This information was communicated to participants by mentioning it

clearly on the information and debriefing form. For participants who experienced minor distress due to participating, support services such as BodyWhys and Aware contact details were included in the debriefing form (see Appendix F & G).

Results

Descriptive statistics

Descriptive statistics were gathered on all variables prior to inferential testing. The presented data is derived from an opportunistic sample of 92 participants (n = 92). Relevant descriptive statistics such as gender identity and academic year were gathered. The following values were obtained: frequencies and valid per cent of categorical variables demonstrated in Table 1 below. For continuous variables, means with 95% confidence intervals (M), medians (MD), standard deviations (SD), skewness, kurtosis, minimum, and maximum were gathered, shown in Table 2. The data set was subjected to preliminary analysis to check the assumptions of normality. Histograms were also obtained for each variable, with the BISS scale showing a normal distribution. Social media engagement scores both pre-covid and currently, eating attitudes (eating disorder risk), and eating attitude behavioural questions were non-normally distributed (see Table 1 and 2).

Table 1

Descriptive statistics for categorical variables, n = 92

Variable	Frequency	Valid %
Gender		
Female (Woman)	76	82.6
Male (Man)	16	17.4
Academic Year		
First Academic Year	20	21.7
Second Academic Year	4	4.3
Third Academic Year	54	58.7
Fourth Academic Year	14	15.2

Table 2

Descriptive statistics and reliability of all continuous variables, n = 92

Variable	*M* [95% CI]	Median	*SD*	Skewness	Kurtosis	Minimum	Maximum
Pre-covid social media	22.22 (20.122 – 24.312)	23	10.11	-.435	-.79	.00	35
Current social media	26.032 (24.18 – 27.88)	28	8.93	-.906	.011	.00	35
Eating attitudes	14.50 (12.00- 16.99)	11	12.03	1.16	.934	.00	58
Eating attitudes behavioural	7.61 (6.89- 8.31)	7	3.43	.835	-.102	4	17
Body image	23.22 (22.139 - 26.295)	24.5	10.03	.27	-.371	6	53

Inferential statistics

Hypothesis 1

A paired samples (within groups design) t-test was conducted to explore the extent of social media engagement pre-covid conditions and currently. Results showed a statistically significant result between Time 1 (pre-covid social media engagement) ($M = 22.21$, $SD = 10.11$) and Time 2 (current social media engagement) ($M = 26.03$, $SD = 8.93$) $t\ (91) = -3.91$, $p < .001$ (two-tailed). Therefore, the results are statistically significant with increased social media engagement currently. The mean difference in scores was 3.82 resulting in a 3.8-unit increase observed with a 95% confidence interval ranging from -5.75 to-1.87. The calculated eta squared statistic (0.34) indicated a small to medium effect size.

Normality analysis indicated that current and pre-covid social media engagement and eating attitudes were not properly distributed. As a result, instead of using the Pearson correlation coefficient, a non-parametric Spearman correlation coefficient was used to examine the relationship between social media engagement, body image (as measured by the BISS scale) and

eating disorder risk (measured by the EAT-26). Results indicated that body image and eating attitudes showed a large, negative correlation between the two variables (r = -.490, n = 92, p = <.001). Body image and pre-covid social media showed a small to medium positive association (r = .263, n = 92, p = .011). There was a large, negative correlation between body image and current social media engagement, (r = -.173, n = 92, p = .10) and it was not significant. This suggests that as body satisfaction increases, eating disorder tendencies decrease. Moreover, as social media use increases, higher bodily dissatisfaction occurs.

Hypothesis 2

Hierarchical multiple regression was carried out to understand the relationship between social media engagement pre-covid and currently and its impact on body image, to evaluate the prediction of body image states from pre-covid and current social media use while controlling for gender. Preliminary analyses were conducted to ensure no violation of normality, linearity, multicollinearity, and homoscedasticity assumptions. Tolerance and VIF values showed an acceptable range. Gender was entered in the first block at step 1, R square value =.037, which explains 4% of the variance in body image (F = (1. 90) = 3.41, p = .068, t = -1.847). The outcome revealed a model that was not statistically significant. Upon entry of step 2, where pre-covid and current social media engagement were added, the model was statistically significant (p < .001), R square change = .206 or 20.6%. The model explains 24.2% of the variance in body image (F = (3. 88) = 9.40, p <.001.) The two variables explained an additional 20.6% (21%) of the variance in body image after controlling for gender. R squared change = 0.21, F change (1,88) = 11.96 (12.00), p < .001. The regression coefficient associated with current social media engagement (B = -0.511, 95% CI (-0.754, -0.268, t = -4.176, p = .001) suggests that with each additional unit change in current social media engagement, that body image decreases by around

0.511 units. Overall, in the final model, social media engagement pre- covid recording the highest *beta* value (*beta* = .482, $p < .001$) and currently (*beta* = -.455, $p < .001$) were statistically significant (see Table 3).

Table 3

Hierarchical Multiple Regression Analysis Summary Predicting Body Image Total Score with Gender, Social Media Engagement Pre-Covid and Currently, n = 92

Variable	R^2	*Adj. R2*	*B*	*SE*	*β*	*t*	*p*
Step 1	.037	.026	30.12	3.36		8.97	.000
Gender			-5.03	2.72	-0.19	-1.85	.068
Step 2	.242	.217	30.92	4.41		7.01	.000
Gender			-3.43	2.49	-0.13	-1.38	.173
Social Media Pre-Covid			0.48	.110	0.48	4.35	.000
Social Media Current			-0.51	.122	-0.46	-4.18	.000

Note: Table demonstrating body image total score output for gender, social media engagement pre-covid and currently rounded to two decimal places; R2 = R-squared; Adj R2 = Adjusted R-squared; B = unstandardized beta value; SE = Standard errors of B; β = standardized beta value; t = t-value; $N = 92$

Hypothesis 3

Hierarchical multiple regression was conducted to investigate the relationship between social media engagement, pre-covid and current covid, and its impact on eating attitudes (eating disorder risk), to evaluate the prediction of eating attitudes from pre and current COVID social media engagement, controlling for gender. Preliminary analyses were conducted to ensure no violation of normality, linearity, multicollinearity, and homoscedasticity assumptions, with Tolerance and VIF values showing an acceptable range. For the first block analysis (step 1), the

predictor variable gender was entered. The results of the first block hierarchical linear regression analysis revealed a model that was not statistically significant (p = .086), explaining 3.2% of the variance in eating attitudes, R square = .032. Upon entry of pre-covid and current social media engagement at step 2, the total variance explained by the whole model was .287 or 28.7%, F (3,88) = 11.78 (11.80), p = < .001, which is statistically significant (p <.001). The two added measures explained an additional 25.4% of the variance in eating attitudes after controlling for gender. R squared change = .254, F change (1,88) = 15.68 (15.70), p = .001. In the final model, social media engagement currently was the strongest predictor of eating attitudes, recording a higher beta value (*beta* = .552, p <.001) than pre- covid conditions (*beta* = -.48, p <.001), with both being statistically significant. This finding implies that with each change in social media engagement currently, that eating disorder risk increases by approximately 0.552 (see Table 4).

Table 4

Hierarchical Multiple Regression Analysis Summary Predicting Eating Attitudes Total Score with Gender, Social Media Engagement Pre-Covid and Currently, n = 92

Variable	R^2	*Adj. R2*	*B*	*SE*	*β*	*t*	*p*
Step 1	.032	.022	7.84	4.04		1.94	.055
Gender			5.67	3.27	0.18	1.73	.086
Step 2	.287	.262	3.10	5.14		0.60	.548
Gender			4.00	2.90	0.13	1.38	.171
Social Media Pre-Covid			-0.57	0.13	-0.48	-4.45	.000
Social Media Current			0.74	0.14	0.55	5.22	.000

Note: Table demonstrating eating attitudes total score output for gender, social media engagement pre-covid and currently rounded to two decimal places; R2 = R-squared; Adj R2 = Adjusted R-squared; *B* = unstandardized beta value; SE = Standard errors of B; β = standardized beta value; t = t-value; *N* = 92

Hypothesis 4 analyses – Independent Samples

According to preliminary data analysis, eating attitudes (eating disorder risk), eating behavioural questions, and social media engagement pre-covid and currently were non-normally distributed. As a result, the Mann-Whitney U test was implemented as a non-parametric alternative to the independent samples t-test for these variables. A Mann-Whitney U test was conducted to compare current social media usage among males and females. This test indicated no significant result between females (*Md* = 28, *n* = 76) than for males (*Md* = 27.5, *n* = 16, *U* = 564, z = -.458. Overall, there is so significant difference *p* = .647, *r* = .05 (-.047) (large effect size).

A Mann-Whitney U Test revealed no significant difference in eating attitudes (eating disorder risk) between males (*Md* =8, *n* = 16) and females (*Md* =11.5, *n* = 76), *U* = 690, *z* = .851, *p* = .395, *r* = 0.09 (.088) (very small effect size).

A final Mann-Whitney U test was conducted to compare eating disorder behavioural questions between males and females. Results demonstrated that there were no significant differences between males (*Md* = 9.5, *n* = 16) and females (*Md* = 7, *n* = 76), *U* = 732, *z* = 1.292, *p* = .196, *r* = 0.13 (small effect size).

Lastly**,** an independent samples t-test was carried out to determine potential gender differences between males and females in body image scores. Results showed that there was no statistically significant difference in scores for males (*M* = 20.06, *SD* = 10.48) and females (*M* = 25.09, *SD* = 9.78; t (90) = 1.84, *p* = .068 two-tailed.). The magnitude of the differences in the means (mean difference = 5.02, 95% CI: -.38 to 10.44) was small to moderate (eta squared = .036).

There was a statistically significant change in participants currently engaging in social media pre-covid and currently, with social media engagement increasing in current times (during covid-19) than pre-covid conditions. Regression analyses have shown that pre-covid social media engagement positively impacts body image (higher body satisfaction) and current social media usage has a negative effect on body image (body image dissatisfaction). Pre-covid social media engagement showed decreased eating disorder risk. In comparison, current social media use has an increased effect on eating attitudes (higher eating disorder risk).

Overall, current social media engagement predicts a higher risk for eating disorders and higher bodily dissatisfaction. There were no distinct gender differences observed in any of the analyses conducted. Further interpretations and evaluations of findings are discussed below.

Discussion

Overview of Our Findings

The present study sought to evaluate the association between SM engagement, eating attitudes, and body image perception and how social media engagement predicts outcomes for these study variables while simultaneously looking into possible gender disparities. Systematic reviews have revealed that social media use impacts body image and increases DE tendencies (Holland & Tiggemann, 2016). Furthermore, the current study supports findings from a study by Santarossa & Woodruff (2017) whereby SNS use was linked to body image and eating disorder concerns, noting how 'problematic' such findings may be to individuals. To provide knowledge on existing findings, the present study developed four key hypotheses to address the current study's objectives. Firstly, it was hypothesised that social media engagement would increase during the COVID-19 pandemic. Secondly, that increased social media engagement would predict body dissatisfaction, thirdly, that eating disorder risk would increase as social engagement increases, and finally, to find significant differences in results between males and females, with females rating higher levels of dissatisfaction concerning body image scores, eating disorder risk and increased social media engagement.

Hypothesis one was analysed by conducting a paired samples t-test to explore social media engagement pre-covid and currently, labelled as Time 1 and 2. Results showed a statistically significant change in participants engaging in social media, with increasing social media use compared to pre-covid conditions. This finding supports various papers that report a drastic increase in internet and social media use during this period. Recent statistical reports show increased time spent on social networks from the beginning of the COVID-19 outbreak to current times (Statista Research Department 2022). This is supported by a finding that found

younger individuals spending up to 8.8 hours of screentime on digital devices (Ministry of Human Resource Development Government of India 2020). In addition, a large-scale study by Google (2021) found that the types of activities and length of screen time exposure that people engage in can have detrimental consequences on wellness. Individuals spent more time occupied with activities they felt were detrimental to their overall well-being. Similarly, a recent publication by Pandya & Lodha, (2021) supports our finding that extended screen usage during COVID-19 has harmful consequences. A recent publication showed similar outcomes in that more time spent on social media per day during the pandemic was linked to lower mental well-being, potentially leading to a higher likelihood of dissatisfaction in other areas (Thygesen et al., 2022). However, the implications are still in early development.

In support of hypothesis two, it was proposed that there will be a link between body image dissatisfaction and rising social media use. This hypothesis is supported and accepted in the current study. Hierarchical regression was used to determine the amount of variance explained by body image. Results found that increased social media engagement that occurred during the ongoing pandemic predicted worse outcomes for body image, with gender showing no distinct differences. Social media use prior to the pandemic produced better outcomes for body satisfaction. Although studies are still ongoing that explore the impact of the uptake in activities during the pandemic, the finding in the present study is consistent with prior literature by Fardouly & Vartanian (2016) where it was observed by longitudinal analysis that increased social media engagement leads to higher levels of body dissatisfaction. Using an experimental method, it was found that the media promoting ‘fitspiration’, a term used to motivate people to exercise and eat well, was associated with low mood and discontent with one's own body (Carrotte et al., 2017). Additionally, a more recent study by Aparicio-Martinez et al. (2019)

linked the desire for a slimmer body image with media use. Engaging in social comparisons was shown to negatively impact body image, specifically in women, during the COVID-19 pandemic (Ahuja & Banerjee, 2021).

Our findings are consistent with a mixed-methods systematic review that found that within thirty quantitative studies, social media engagement produced worse outcomes for body image, decreasing one's body satisfaction and increasing DE behaviours such as dieting. Qualitative study outcomes produced many fundamental themes, including the notion that external affirmation is sought through social media, leading to worsened perception (Rounsefell et al., 2019). In contrast to the present study, social comparison within this study was highly related to body dissatisfaction. The current study did not directly analyse this vital concept related to social media use and body image. In addition, research shows that time spent on social media platforms is not a strong enough predictor for body dissatisfaction (Meier & Gray, 2014). However, these findings occurred before the pandemic; therefore, the current study results provide concise, up-to-date literature concerning the analysed variables.

In support of hypothesis three, a second hierarchical regression showed that higher social media use increased eating disorder tendencies, with gender being insignificant. Findings from various pieces of literature are consistent with the acceptance of our hypothesis in the present study (Holland & Tiggemann, 2016; Zhang et al., 2021). In addition, a recent systematic review by Padín et al. (2021) selected 19 publications. Within this, findings within articles were summarised with outcomes showing that eating disorders and social media usage are impacted by the amount of time spent on social media and the type of interactions and posted images. In contrast to our study, gender differences were also present.

Finally, to examine hypothesis four, it was expected that there would be a difference between males and females, specifically that women would show higher levels of bodily discontent, increased risk of eating disorder and higher social media use. The present study demonstrated no significant differences between males and females contrary to a vast amount of literature proposing that women suffer more often from body dissatisfaction (MacNeill et al., 2017; Mellor et al., 2010; Quittkat et al., 2019). One explanation may be that women typically view their bodies as 'bigger' than their actual size and weight, with one study supporting the concept that the 'thin-ideal' may be influencing this (Silva et al., 2019). It was unexpected to observe no gender differences between the test variables. However, results may have presented with no differences due to various limitations such as inadequate size grouping in the 'male' condition. Nonetheless, it is still essential to critique our findings. To support our study, it has been observed that men face similar issues with body dissatisfaction, with one publication stating that men were more dissatisfied with their weight than women (Keel et al., 2007). Turel et al. (2018) found that males were almost as likely as females to be dissatisfied with their bodies, with 65.2% of males reporting bodily dissatisfaction compared to 68.6% of females.

Furthermore, concepts such as the muscular ideal may be influencing body image issues in men, with an increasing number of men following influencers who may alter their muscular images on platforms such as Instagram. This may increase males using steroidal drugs to gain the desired image (Thornborrow et al., 2020). This is supported by findings from Griffiths et al. (2018), revealing that the links between social media usage and muscularity dissatisfaction and eating disorder behaviours were stronger for image-based platforms, emphasizing the need to research the impacts of social media. In addition, there was no difference between men and women in eating disorder risk. This finding may be due to study limitations mentioned

previously. However, an acceptable hypothesis may be that DE in males might have increased with rising pressure on men to achieve particular cultural norms. The rising concept of the muscular ideal that men may encounter could potentially be closing the gender divide in eating disorder risk and DE research between males and females (Griffiths et al., 2013). Men deal with bodily dissatisfaction just as much as women, but perhaps for different reasons, e.g., dissatisfaction due to being underweight (Kumar, 2016), which may occur due to DE or fixation on dietary food intake.

Hypotheses one, two and three are accepted in the current study, with four rejected, concluding that for hypothesis four, all possibilities remain. Therefore, further research should be conducted.

Implications

To the researcher's knowledge, the current study is one of the first to look at body image, eating attitudes, and social media use among college students in Ireland during the ongoing pandemic, while including any gender of an individual over 18 years. In addition, a vast amount of research does not include men when researching eating disorder risk as it is typically associated with females, which means men are often ignored and underrepresented (Strother et al., 2012). The practical implications of this study are that higher social media use negatively affects body image, causing higher body dissatisfaction and increased eating disorder risk, which can be detrimental to one's mental health. Implementing training for educational teaching in schools concerning the importance of a healthy body image and how social media may affect body image perception and eating habits may promote better understanding in individuals to be aware of such concepts while engaging in online platforms. Body image and related research aim

to produce better health outcomes for individuals while providing awareness and knowledge of disorders such as body dysmorphic disorder.

Limitations

The limitations in the current study will be discussed. The social media engagement questionnaire (SMEQ) was adapted for the current study to include 'pre-covid', and 'currently'. In the present study, participants had to reflect on their social media use prior to the pandemic, which may have potentially been unreliable. Although this allowed to give an insight and clear outcome on whether social media engagement increased or decreased between these two periods, it may not be a sufficient measure as it was not directly measured at two different time points. Examining data taken by the same participants (repeated measures) at two different time points would increase reliability and accuracy. In addition, self-report bias may have been present, including social desirability bias which can occur in research using surveys (Althubaiti, 2016).

Additionally, the Body Image States Scale (BISS) implemented in the present study consisted of participants answering questions reflecting on their feelings towards their current state. This way of gathering data may be unreliable as feelings towards one's body can change depending on various factors, e.g., environmental aspects and mood. In addition, the scale only consists of 6 items which may be too few to grasp the complexity of body image concerns (Cash et al., 2002). The SMEQ in the current study addressed pre-covid and current conditions. In contrast, the BISS scale employed self-report, examining one specific period (current state). Therefore, we cannot interpret the accurate results of pre-covid versus current body image states to determine whether body image worsened due to the pandemic. Further studies should investigate which aspects of body image causes the most dissatisfaction and investigate body

image states during the pandemic using a longitudinal design, optimally beginning one year prior to the COVID-19 pandemic.

The calculated G-power for the current study was a minimum of 80 participants (Tabachnick & Fidell, 2019). In the current study, $n = 92$, therefore significantly surpassing the recommended number of participants. Nonetheless, the study contained a disproportionate sample of males and females, with females $n = 76$. This may have been due to the unequal balance of genders that can occur in psychological research, mainly if research topics are of interest to a specific population (Dunn, 2004). Future studies should include a larger sample of males amongst other gender identities, as the researcher is aware this may impact readers' interpretations of results.

Strengths

Despite mentioned limitations, the current study explored relevant outcomes linked with body image, eating attitudes and social media engagement in college students, allowing future research to expand on. The results gathered from the current study allow more focus to be provided on the importance of a healthy body image and mindfulness while using social media. The current study provides knowledge between body image and DE emphasised as an essential area of research (MacNeill et al., 2017). This study consisted of substantial sample size, $n = 92$, which allowed for a concise analysis. The scales and questionnaires in the current study showed high consistency and reliability from Cronbach's alpha (see Measures section, pg.16). In addition, the EAT-26 implemented in the present study is used in various studies exploring potential DE tendencies, especially in a college student population. This scale can be used in any population, not just a clinical sample. Additionally, this scale can be used in females and males, unlike similar scales, e.g., the Body Attitudes Test (BAT), which strictly analyses ED in females.

The link between SM, eating disorders, and body image is a significant public health issue, primarily affecting young people's mental health; therefore, continuous research is necessary to address such issues. This study also addressed concepts that had not yet been extensively researched in Ireland using college students during the COVID-19 pandemic.

Future Research

Further studies should examine the current study's variables using longitudinal designs. The researcher emphasizes the importance of further literature implementing a longitudinal design to include pre-covid conditions if feasible. In addition, examining variables such as stress levels, COVID-19 related anxiety, levels of depression, and other factors that may influence body image outcomes may be essential for body image research. Other aspects that may contribute to body image perception include perfectionism, both positive and negative, and self-esteem, which has been demonstrated to be a strong predictor of body image in girls (Rasooli & Lavasani, 2011). Prior literature surrounding body image has shown that social media comparison influences body image when using social media, which could be explored in up-to-date studies (Lewallen & Behm-Morawitz, 2016).

Additional research could include participants from various countries and more expansive gender identities or sexual orientations, e.g., individuals identifying as non-binary or homosexual, as these were not recorded in the present study. Body image perception has been found to be highly influenced by cultural factors in females (Stojcic et al., 2020). In addition, black women have shown to possess lower levels of DE behaviours (Quick & Byrd-Bredbenner, 2014). In males, men from the United Kingdom desired the muscular ideal body shape more than men from Uganda (Thornborrow et al., 2020), an evident cultural difference. Therefore, including updaded research, while considering culture and identity is crucial. Lastly, future

research should be conducted in the current year as researchers are still exploring the effects of the COVID-19 pandemic on essential aspects of life. Further directions should include implementing healthy body image courses or education on the importance of a healthy body image to increase wellness.

Conclusions

Overall, this study contributes whilst strengthening previous findings that body image and eating attitudes are influenced by social media engagement. Specifically, higher social media engagement predicts worse outcomes for the individual. Body image is a complex concept that constantly adapts to changes in technology and the environment. Future research may produce more insight on the impact of COVID-19 on everyday activities and how this may lead to adverse outcomes for body image and eating behaviours. Future studies could measure precisely which social platform contributes to body dissatisfaction and DE risk as TikTok, a video and appearance focused platform, has become increasingly popular over the past two years with over 2 billion downloads (Kale, 2020), which uses video filters regularly. The broader implications of this study include the potential for governments to focus on the detrimental effects that higher social media use may have on individuals' perceptions. In addition, to raise awareness that body positivity produces better outcomes for eating attitudes and overall mental well-being. Information could be implemented into education systems or stated on the HSE or related websites.

References

Ahuja, K. K., & Banerjee, D. (2021). A Psychosocial Exploration of Body Dissatisfaction: A Narrative Review With a Focus on India During COVID-19. *Frontiers in Global Women's Health*, *2*(1). https://doi.org/10.3389/fgwh.2021.669013

Althubaiti, A. (2016). Information bias in health research: definition, pitfalls, and adjustment methods. *Journal of Multidisciplinary Healthcare*, *9*(9), 211–217. https://doi.org/10.2147/jmdh.s104807

Alvarenga, M. dos S., Scagliusi, F. B., & Philippi, S. T. (2012). Comparison of eating attitudes among university students from the five Brazilian regions. *Ciencia & Saude Coletiva*, *17*(2), 435–444. https://doi.org/10.1590/s1413-81232012000200016

American Psychological Association. (2018). APA Dictionary of Psychology. In *dictionary.apa.org*. https://dictionary.apa.org/body-image

Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, *30*(2), 252–262. https://doi.org/10.1037/adb0000160

Aparicio-Martinez, P., Perea-Moreno, A.-J., Martinez-Jimenez, M. P., Redel-Macías, M. D., Pagliari, C., & Vaquero-Abellan, M. (2019). Social Media, Thin-Ideal, Body Dissatisfaction and Disordered Eating Attitudes: An Exploratory Analysis. *International Journal of Environmental Research and Public Health*, *16*(21), 4177. https://doi.org/10.3390/ijerph16214177

Baceviciene, M., & Jankauskiene, R. (2021). Changes in sociocultural attitudes towards appearance, body image, eating attitudes and behaviours, physical activity, and quality of

life in students before and during COVID-19 lockdown. *Appetite*, *166*(1), 105452. https://doi.org/10.1016/j.appet.2021.105452

Baceviciene, M., Jankauskiene, R., & Balciuniene, V. (2020). The Role of Body Image, Disordered Eating and Lifestyle on the Quality of Life in Lithuanian University Students. *International Journal of Environmental Research and Public Health*, *17*(5), 1593. https://doi.org/10.3390/ijerph17051593

Bailey, A. P., Parker, A. G., Colautti, L. A., Hart, L. M., Liu, P., & Hetrick, S. E. (2014). Mapping the evidence for the prevention and treatment of eating disorders in young people. *Journal of Eating Disorders*, *2*(1). https://doi.org/10.1186/2050-2974-2-5

Barrett, E., & Richardson, S. (2021). Eating Disorders During the COVID-19 Pandemic. *Ir Med J*, *114*(1), 233. http://www.imj.ie/wp-content/uploads/2021/01/Eating-Disorders-During-the-COVID-19-Pandemic.pdf

Borowsky, H. M., Eisenberg, M. E., Bucchianeri, M. M., Piran, N., & Neumark-Sztainer, D. (2015). Feminist identity, body image, and disordered eating. *Eating Disorders*, *24*(4), 297–311. https://doi.org/10.1080/10640266.2015.1123986

Brechan, I., & Kvalem, I. L. (2015). Relationship between body dissatisfaction and disordered eating: Mediating role of self-esteem and depression. *Eating Behaviors*, *17*(1), 49–58. https://doi.org/10.1016/j.eatbeh.2014.12.008

Carrotte, E., Prichard, I., Megan, & Lim, S. (2017). “Fitspiration” on Social Media: A Content Analysis of Gendered Images. *Journal of Medical Internet Research*, *19*(3). https://doi.org/10.2196/jmir.6368

Cash, T. F. (2012). *Encyclopedia of body image and human appearance*. Elsevier.

Cash, T., Fleming, E., 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. https://doi.org/10.1080/10640260290081678

Cecchetto, C., Aiello, M., Gentili, C., Ionta, S., & Osimo, S. A. (2021). Increased emotional eating during COVID-19 associated with lockdown, psychological and social distress. *Appetite*, *160*, 105122. https://doi.org/10.1016/j.appet.2021.105122

Cruz-Sáez, S., Pascual, A., Wlodarczyk, A., & Echeburúa, E. (2018). The effect of body dissatisfaction on disordered eating: The mediating role of self-esteem and negative affect in male and female adolescents. *Journal of Health Psychology*, 135910531774873. https://doi.org/10.1177/1359105317748734

Czepczor-Bernat, K., Swami, V., Modrzejewska, A., & Modrzejewska, J. (2021). COVID-19-Related Stress and Anxiety, Body Mass Index, Eating Disorder Symptomatology, and Body Image in Women from Poland: A Cluster Analysis Approach. *Nutrients*, *13*(4), 1384. https://doi.org/10.3390/nu13041384

Dunn, K. M. (2004). Patterns of Consent in Epidemiologic Research: Evidence from Over 25,000 Responders. *American Journal of Epidemiology*, *159*(11), 1087–1094. https://doi.org/10.1093/aje/kwh141

Faelens, L., Hoorelbeke, K., Soenens, B., Van Gaeveren, K., De Marez, L., De Raedt, R., & Koster, E. H. W. (2021). Social media use and well-being: A prospective experience-sampling study. *Computers in Human Behavior*, *114*, 106510. https://doi.org/10.1016/j.chb.2020.106510

Fallon, E. A., Harris, B. S., & Johnson, P. (2014). Prevalence of body dissatisfaction among a United States adult sample. *Eating Behaviors*, *15*(1), 151–158. https://doi.org/10.1016/j.eatbeh.2013.11.007

Fardouly, J., & Vartanian, L. R. (2016). Social Media and Body Image Concerns: Current Research and Future Directions. *Current Opinion in Psychology*, *9*, 1–5. https://doi.org/10.1016/j.copsyc.2015.09.005

Ferguson, C. J., Kaye, L. K., Branley-Bell, D., Markey, P., Ivory, J. D., Klisanin, D., Elson, M., Smyth, M., Hogg, J. L., McDonnell, D., Nichols, D., Siddiqui, S., Gregerson, M., & Wilson, J. (2021). Like this meta-analysis: Screen media and mental health. *Professional Psychology: Research and Practice*. https://doi.org/10.1037/pro0000426

Ferguson, C. J., Winegard, B., & Winegard, B. M. (2011). Who is The Fairest One of All? How Evolution Guides Peer and Media Influences on Female Body Dissatisfaction. *Review of General Psychology*, *15*(1), 11–28. https://doi.org/10.1037/a0022607

Festinger, L. (1954). A Theory of Social Comparison Processes. *Human Relations*, *7*(2), 117–140. https://doi.org/10.1177/001872675400700202

Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification Theory: Toward Understanding Women's Lived Experiences and Mental Health Risks. *Psychology of Women Quarterly*, *21*(2), 173–206. https://doi.org/10.1111/j.1471-6402.1997.tb00108.x

Furnham, A., Badmin, N., & Sneade, I. (2002). Body Image Dissatisfaction: Gender Differences in Eating Attitudes, Self-Esteem, and Reasons for Exercise. *The Journal of Psychology*, *136*(6), 581–596. https://doi.org/10.1080/00223980209604820

Google. (2021). *A study on digital wellbeing - Think with Google*. Think with Google. https://www.thinkwithgoogle.com/feature/digital-wellbeing-statistics/

Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, *134*(3), 460–476. https://doi.org/10.1037/0033-2909.134.3.460

Greenleaf, C., & McGreer, R. (2006). Disordered Eating Attitudes and Self-Objectification Among Physically Active and Sedentary Female College Students. *The Journal of Psychology*, *140*(3), 187–198. https://doi.org/10.3200/jrlp.140.3.187-198

Griffiths, S., Murray, S. B., Krug, I., & McLean, S. A. (2018). The Contribution of Social Media to Body Dissatisfaction, Eating Disorder Symptoms, and Anabolic Steroid Use Among Sexual Minority Men. *Cyberpsychology, Behavior, and Social Networking*, *21*(3), 149–156. https://doi.org/10.1089/cyber.2017.0375

Griffiths, S., Murray, S. B., & Touyz, S. (2013). Disordered eating and the muscular ideal. *Journal of Eating Disorders*, *1*(1). https://doi.org/10.1186/2050-2974-1-15

Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The Effect of Experimental Presentation of Thin Media Images on Body Satisfaction: A Meta-Analytic Review. *International Journal of Eating Disorders*, *31*(1), 1–16. https://doi.org/10.1002/eat.10005

Grogan, S. (2017). *Body image : understanding body dissatisfaction in men, women and children*. Routledge, Taylor & Francis Group.

Hardit, S. K., & Hannum, J. W. (2012). Attachment, the tripartite influence model, and the development of body dissatisfaction. *Body Image*, *9*(4), 469–475. https://doi.org/10.1016/j.bodyim.2012.06.003

Hausenblas, H. A., Campbell, A., Menzel, J. E., Doughty, J., Levine, M., & Thompson, J. K. (2013). Media effects of experimental presentation of the ideal physique on eating disorder symptoms: A meta-analysis of laboratory studies. *Clinical Psychology Review*, *33*(1), 168–181. https://doi.org/10.1016/j.cpr.2012.10.011

Hawkins, N., Richards, P. S., Granley, H. M., & Stein, D. M. (2004). The Impact of Exposure to the Thin-Ideal Media Image on Women. *Eating Disorders*, *12*(1), 35–50.

https://doi.org/10.1080/10640260490267751

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*(3), 319–340. https://doi.org/10.1037/0033-295x.94.3.319

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*(17), 100–110. https://doi.org/10.1016/j.bodyim.2016.02.008

Humphreys, P., & Paxton, S. J. (2004). Impact of exposure to idealised male images on adolescent boys' body image. *Body Image*, *1*(3), 253–266. https://doi.org/10.1016/j.bodyim.2004.05.001

Jiang, S., & Ngien, A. (2020). The Effects of Instagram Use, Social Comparison, and Self-Esteem on Social Anxiety: A Survey Study in Singapore. *Social Media + Society*, *6*(2), 205630512091248. https://doi.org/10.1177/2056305120912488

Jiotsa, B., Naccache, B., Duval, M., Rocher, B., & Grall-Bronnec, M. (2021). Social Media Use and Body Image Disorders: Association between Frequency of Comparing One's Own Physical Appearance to That of People Being Followed on Social Media and Body Dissatisfaction and Drive for Thinness. *International Journal of Environmental Research and Public Health*, *18*(6), 2880. https://doi.org/10.3390/ijerph18062880

Kale, S. (2020, April 26). How coronavirus helped TikTok find its voice. *The Observer*. https://www.theguardian.com/technology/2020/apr/26/how-coronavirus-helped-tiktok-find-its-voice

Keel, P. K., Baxter, M. G., Heatherton, T. F., & Joiner, T. E. (2007). A 20-year longitudinal study of body weight, dieting, and eating disorder symptoms. *Journal of Abnormal Psychology*, *116*(2), 422–432. https://doi.org/10.1037/0021-843x.116.2.422

Kemp, S. (2021, October 21). *Digital 2021 October Global Statshot Report*. DataReportal – Global Digital Insights. https://datareportal.com/reports/digital-2021-october-global-statshot

Kumar, H. (2016). Gender Difference Regarding Body Image: A Comparative Study. *Advances in Obesity, Weight Management & Control*, *4*(4). https://doi.org/10.15406/aowmc.2016.04.00092

Lennon, S. J., & Johnson, K. K. P. (2021). Men and muscularity research: a review. *Fashion and Textiles*, *8*(1). https://doi.org/10.1186/s40691-021-00245-w

Levine, M. P., & Smolak, L. (2015). The role of protective factors in the prevention of negative body image and disordered eating. *Eating Disorders*, *24*(1), 39–46. https://doi.org/10.1080/10640266.2015.1113826

Lewallen, J., & Behm-Morawitz, E. (2016). Pinterest or Thinterest?: Social Comparison and Body Image on Social Media. *Social Media + Society*, *2*(1), 205630511664055. https://doi.org/10.1177/2056305116640559

Liu, J. (2021). The Influence of the Body Image Presented Through TikTok Trend-Videos and Its Possible Reasons. *Advances in Social Science, Education and Humanities Research*, *559*.

Lokken, K., Ferraro, F. R., Kirchner, T., & Bowling, M. (2003). Gender Differences in Body Size Dissatisfaction Among Individuals With Low, Medium, or High Levels of Body Focus. *The Journal of General Psychology*, *130*(3), 305–310. https://doi.org/10.1080/00221300309601161

Lydecker, J. A., White, M. A., & Grilo, C. M. (2017). Form and formulation: Examining the distinctiveness of body image constructs in treatment-seeking patients with binge-eating

disorder. *Journal of Consulting and Clinical Psychology*, *85*(11), 1095–1103. https://doi.org/10.1037/ccp0000258

MacIntyre, R. I., Heron, K. E., Braitman, A. L., & Arigo, D. (2020). An Ecological Momentary Assessment of Self-improvement and Self-evaluation Body Comparisons: Associations with College Women's Body Dissatisfaction and Exercise. *Body Image*, *33*(1), 264–277. https://doi.org/10.1016/j.bodyim.2020.04.002

MacNeill, L. P., Best, L. A., & Davis, L. L. (2017). The role of personality in body image dissatisfaction and disordered eating: discrepancies between men and women. *Journal of Eating Disorders*, *5*(1). https://doi.org/10.1186/s40337-017-0177-8

Marengo, D., Longobardi, C., Fabris, M. A., & Settanni, M. (2018). Highly-visual social media and internalizing symptoms in adolescence: The mediating role of body image concerns. *Computers in Human Behavior*, *82*(1), 63–69. https://doi.org/10.1016/j.chb.2018.01.003

McGuire, J. K., Doty, J. L., Catalpa, J. M., & Ola, C. (2016). Body image in transgender young people: Findings from a qualitative, community based study. *Body Image*, *18*(1), 96–107. https://doi.org/10.1016/j.bodyim.2016.06.004

Mellor, D., Fuller-Tyszkiewicz, M., McCabe, M. P., & Ricciardelli, L. A. (2010). Body Image and Self-Esteem Across Age and Gender: A Short-Term Longitudinal Study. *Sex Roles*, *63*(9-10), 672–681. https://doi.org/10.1007/s11199-010-9813-3

Ministry of Human Resource Development Government of India. (2020). *National Education Policy 2020*. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

Mond, J., Mitchison, D., Latner, J., Hay, P., Owen, C., & Rodgers, B. (2013). Quality of life impairment associated with body dissatisfaction in a general population sample of

women. *BMC Public Health*, *13*(1). https://doi.org/10.1186/1471-2458-13-920

National Eating Disorders Collaboration. (2021). *Body Image*. Nedc.com.au. https://nedc.com.au/eating-disorders/eating-disorders-explained/body-image/

Naz, T. (2017). Body's Image Concerns And Its Impact On Academic Achievements. *Journal of Psychology & Clinical Psychiatry*, *7*(3). https://doi.org/10.15406/jpcpy.2017.07.00437

Neighbors, L. A., & Sobal, J. (2007). Prevalence and magnitude of body weight and shape dissatisfaction among university students. *Eating Behaviors*, *8*(4), 429–439. https://doi.org/10.1016/j.eatbeh.2007.03.003

Neumark-Sztainer, D., Wall, M. M., Chen, C., Larson, N., Christoph, M. J., & Sherwood, N. E. (2018). Eating, Activity, and Weight-related Problems From Adolescence to Adulthood. *American Journal of Preventive Medicine*, *55*(2), 133–141. https://doi.org/10.1016/j.amepre.2018.04.032

Neumark-Sztainer, D., Wall, M., Larson, N. I., Eisenberg, M. E., & Loth, K. (2011). Dieting and Disordered Eating Behaviors from Adolescence to Young Adulthood: Findings from a 10-Year Longitudinal Study. *Journal of the American Dietetic Association*, *111*(7), 1004–1011. https://doi.org/10.1016/j.jada.2011.04.012

Padín, P. F., González-Rodríguez, R., Verde-Diego, C., & Vázquez-Pérez, R. (2021). Social media and eating disorder psychopathology: A systematic review. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *15*(3). https://doi.org/10.5817/CP2021-3-6

Pandya, A., & Lodha, P. (2021). Social Connectedness, Excessive Screen Time During COVID-19 and Mental Health: A Review of Current Evidence. *Frontiers in Human Dynamics*, *3*(1). https://doi.org/10.3389/fhumd.2021.684137

Pearl, R. L. (2020). Weight Stigma and the "Quarantine-15." *Obesity*. https://doi.org/10.1002/oby.22850

Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C., & Wilens, T. (2014). College Students: Mental Health Problems and Treatment Considerations. *Academic Psychiatry*, *39*(5), 503–511. https://doi.org/10.1007/s40596-014-0205-9

Pedro, T. M., Micklesfield, L. K., Kahn, K., Tollman, S. M., Pettifor, J. M., & Norris, S. A. (2016). Body Image Satisfaction, Eating Attitudes and Perceptions of Female Body Silhouettes in Rural South African Adolescents. *PLOS ONE*, *11*(5), e0154784. https://doi.org/10.1371/journal.pone.0154784

Pepin, G., & Endresz, N. (2015). Facebook, Instagram, Pinterest and co.: body image and social media. *Journal of Eating Disorders*, *3*(S1). https://doi.org/10.1186/2050-2974-3-s1-o22

Przybylski, A. K. (2017). Social Media Engagement Questionnaire (SMEQ). *Osf.io*. https://doi.org/10.17605/OSF.IO/H4K3G

Puhl, R. M., & Heuer, C. A. (2009). The Stigma of Obesity: A Review and Update. *Obesity*, *17*(5), 941–964. https://doi.org/10.1038/oby.2008.636

Purton, T., Mond, J., Cicero, D., Wagner, A., Stefano, E., Rand-Giovannetti, D., & Latner, J. (2019). Body dissatisfaction, internalized weight bias and quality of life in young men and women. *Quality of Life Research*, *28*(7), 1825–1833. https://doi.org/10.1007/s11136-019-02140-w

Quick, V. M., & Byrd-Bredbenner, C. (2014). Disordered eating, socio-cultural media influencers, body image, and psychological factors among a racially/ethnically diverse population of college women. *Eating Behaviors*, *15*(1), 37–41. https://doi.org/10.1016/j.eatbeh.2013.10.005

Quittkat, H. L., Hartmann, A. S., Düsing, R., Buhlmann, U., & Vocks, S. (2019). Body Dissatisfaction, Importance of Appearance, and Body Appreciation in Men and Women Over the Lifespan. *Frontiers in Psychiatry*, *10*(864). https://doi.org/10.3389/fpsyt.2019.00864

Rasooli, S. S., & Lavasani, M. G. (2011). Relationship between personality and perfectionism with body image. *Procedia - Social and Behavioral Sciences*, *15*(1), 1015–1019. https://doi.org/10.1016/j.sbspro.2011.03.231

Robertson, M., Duffy, F., Newman, E., Bravo, C. P., Ates, H. H., & Sharpe, H. (2020). Exploring changes in body image, eating and exercise during the COVID-19 lockdown: A UK survey. *Appetite*, *159*(1), 105062. https://doi.org/10.1016/j.appet.2020.105062

Rodgers, R. F., Lombardo, C., Cerolini, S., Franko, D. L., Omori, M., Fuller-Tyszkiewicz, M., Linardon, J., Courtet, P., & Guillaume, S. (2020). The impact of the COVID -19 pandemic on eating disorder risk and symptoms. *International Journal of Eating Disorders*, *53*(7), 1166–1170. https://doi.org/10.1002/eat.23318

Rodgers, R. F., Paxton, S. J., & Chabrol, H. (2009). Effects of parental comments on body dissatisfaction and eating disturbance in young adults: A sociocultural model. *Body Image*, *6*(3), 171–177. https://doi.org/10.1016/j.bodyim.2009.04.004

Rogoza, R., Brytek-Matera, A., & Garner, D. (2016). Analysis of the EAT-26 in a non-clinical sample. *Archives of Psychiatry and Psychotherapy*, *18*(2), 54–58. https://doi.org/10.12740/app/63647

Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., Truby, H., & McCaffrey, T. A. (2019). Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutrition & Dietetics*, *77*(1).

https://doi.org/10.1111/1747-0080.12581

Ryding, F. C., & Kuss, D. J. (2019). The use of social networking sites, body image dissatisfaction, and body dysmorphic disorder: A systematic review of psychological research. *Psychology of Popular Media Culture*. https://doi.org/10.1037/ppm0000264

Saiphoo, A. N., & Vahedi, Z. (2019). A meta-analytic review of the relationship between social media use and body image disturbance. *Computers in Human Behavior*, *101*(1), 259–275. https://doi.org/10.1016/j.chb.2019.07.028

Santarossa, S., & Woodruff, S. J. (2017). #SocialMedia: Exploring the Relationship of Social Networking Sites on Body Image, Self-Esteem, and Eating Disorders. *Social Media + Society*, *3*(2), 205630511770440. https://doi.org/10.1177/2056305117704407

Schaefer, L. M., & Thompson, J. K. (2018). Self-objectification and disordered eating: A meta-analysis. *International Journal of Eating Disorders*, *51*(6), 483–502. https://doi.org/10.1002/eat.22854

Serra, G., Lo Scalzo, L., Giuffrè, M., Ferrara, P., & Corsello, G. (2021). Smartphone use and addiction during the coronavirus disease 2019 (COVID-19) pandemic: cohort study on 184 Italian children and adolescents. *Italian Journal of Pediatrics*, *47*(1). https://doi.org/10.1186/s13052-021-01102-8

Seyed Alireza Hosseini, & Padhy, R. K. (2019, September 9). *Body Image Distortion*. Nih.gov; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK546582/

Sidani, J. E., Shensa, A., Hoffman, B., Hanmer, J., & Primack, B. A. (2016). The association between Social Media Use and Eating Concerns among US Young Adults. *Journal of the Academy of Nutrition and Dietetics*, *116*(9), 1465–1472. https://doi.org/10.1016/j.jand.2016.03.021

Silva, D., Ferriani, L., & Viana, M. C. (2019). Depression, anthropometric parameters, and body image in adults: a systematic review. *Revista Da Associação Médica Brasileira*, *65*(5), 731–738. https://doi.org/10.1590/1806-9282.65.5.731

Snyder, R. (1998). Self-Discrepancy Theory, Standards for Body Evaluation, and Eating Disorder Symptomatology Among College Women. *Women & Health*, *26*(2), 69–84. https://doi.org/10.1300/j013v26n02_05

Statista. (2021, January 28). *Number of social media users worldwide 2010-2021*. Statista. https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

Statista Research Department. (2022). Social media average daily usage by U.S. users 2022. In *Statista*. https://www.statista.com/statistics/1018324/us-users-daily-social-media-minutes/

Stice, E. (2002). Risk and maintenance factors for eating pathology: a meta-analytic review. *Psychological Bulletin*, *128*(5), 825–848. https://doi.org/10.1037/0033-2909.128.5.825

Stojcic, I., Dong, X., & Ren, X. (2020). Body Image and Sociocultural Predictors of Body Image Dissatisfaction in Croatian and Chinese Women. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.00731

Strother, E., Lemberg, R., Stanford, S. C., & Turberville, D. (2012). Eating Disorders in Men: Underdiagnosed, Undertreated, and Misunderstood. *Eating Disorders*, *20*(5), 346–355. https://doi.org/10.1080/10640266.2012.715512

Swami, V., Frederick, D. A., Aavik, T., Alcalay, L., Allik, J., Anderson, D., Andrianto, S., Arora, A., Brännström, A., Cunningham, J., Danel, D., Doroszewicz, K., Forbes, G. B., Furnham, A., Greven, C. U., Halberstadt, J., Hao, S., Haubner, T., Hwang, C. S., & Inman, M. (2010). The attractive female body weight and female body dissatisfaction in

26 countries across 10 world regions: results of the international body project I. *Personality & Social Psychology Bulletin*, *36*(3), 309–325. https://doi.org/10.1177/0146167209359702

Swami, V., Horne, G., & Furnham, A. (2021). COVID-19-related stress and anxiety are associated with negative body image in adults from the United Kingdom. *Personality and Individual Differences*, *170*, 110426. https://doi.org/10.1016/j.paid.2020.110426

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics*. Boston Pearson.

Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance.* American Psychological Association. https://doi.org/10.1037/10312-000

Thornborrow, T., Onwuegbusi, T., Mohamed, S., Boothroyd, L. G., & Tovée, M. J. (2020). Muscles and the Media: A Natural Experiment Across Cultures in Men's Body Image. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.00495

Thygesen, H., Bonsaksen, T., Schoultz, M., Ruffolo, M., Leung, J., Price, D., & Geirdal, A. Ø. (2022). Social Media Use and Its Associations With Mental Health 9 Months After the COVID-19 Outbreak: A Cross-National Study. *Frontiers in Public Health*, *9*. https://doi.org/10.3389/fpubh.2021.752004

Tiggemann, M., Polivy, J., & Hargreaves, D. (2009). The Processing of Thin Ideals in Fashion Magazines: A Source of Social Comparison or Fantasy? *Journal of Social and Clinical Psychology*, *28*(1), 73–93. https://doi.org/10.1521/jscp.2009.28.1.73

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

Turel, T., Jameson, M., Gitimu, P., Rowlands, Z., Mincher, J., & Pohle-Krauza, R. (2018). Disordered eating: Influence of body image, sociocultural attitudes, appearance anxiety and depression - a focus on college males and a gender comparison. *Cogent Psychology*, *5*(1). https://doi.org/10.1080/23311908.2018.1483062

Vall-Roqué, H., Andrés, A., & Saldaña, C. (2020). *The impact of COVID-19 lockdown on social network sites use, body image disturbances and self-esteem among adolescents and young women*. https://doi.org/10.21203/rs.3.rs-71386/v1

van den Berg, P., Paxton, S. J., Keery, H., Wall, M., Guo, J., & Neumark-Sztainer, D. (2007). Body dissatisfaction and body comparison with media images in males and females. *Body Image*, *4*(3), 257–268. https://doi.org/10.1016/j.bodyim.2007.04.003

Voges, M. M., Giabbiconi, C.-M., Schöne, B., Waldorf, M., Hartmann, A. S., & Vocks, S. (2019). Gender Differences in Body Evaluation: Do Men Show More Self-Serving Double Standards Than Women? *Frontiers in Psychology*, *10*. https://doi.org/10.3389/fpsyg.2019.00544

Whatnall, M. C., Patterson, A. J., Siew, Y. Y., Kay-Lambkin, F., & Hutchesson, M. J. (2019). Are Psychological Distress and Resilience Associated with Dietary Intake Among Australian University Students? *International Journal of Environmental Research and Public Health*, *16*(21), 4099. https://doi.org/10.3390/ijerph16214099

Wilksch, S. M., O'Shea, A., Ho, P., Byrne, S., & Wade, T. D. (2019). The relationship between social media use and disordered eating in young adolescents. *International Journal of Eating Disorders*, *53*(1). https://doi.org/10.1002/eat.23198

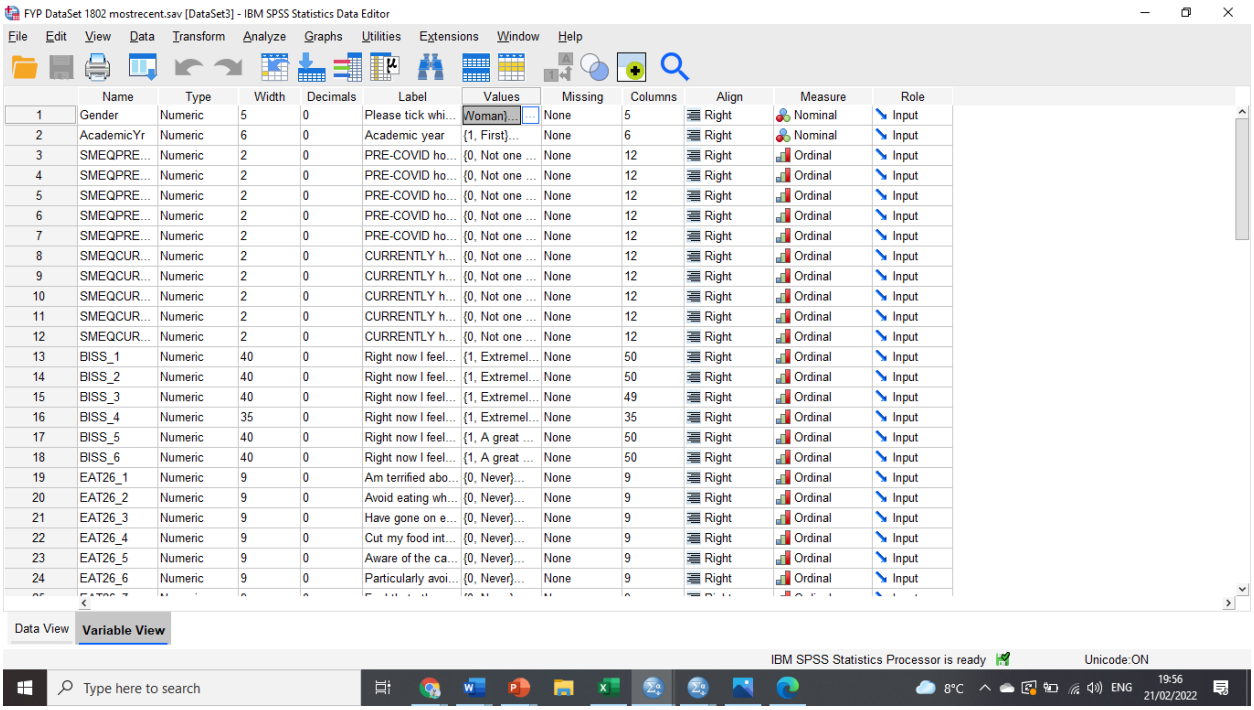
Zhang, J., Wang, Y., Li, Q., & Wu, C. (2021). The Relationship Between SNS Usage and Disordered Eating Behaviors: A Meta-Analysis. *Frontiers in Psychology*, *12*.

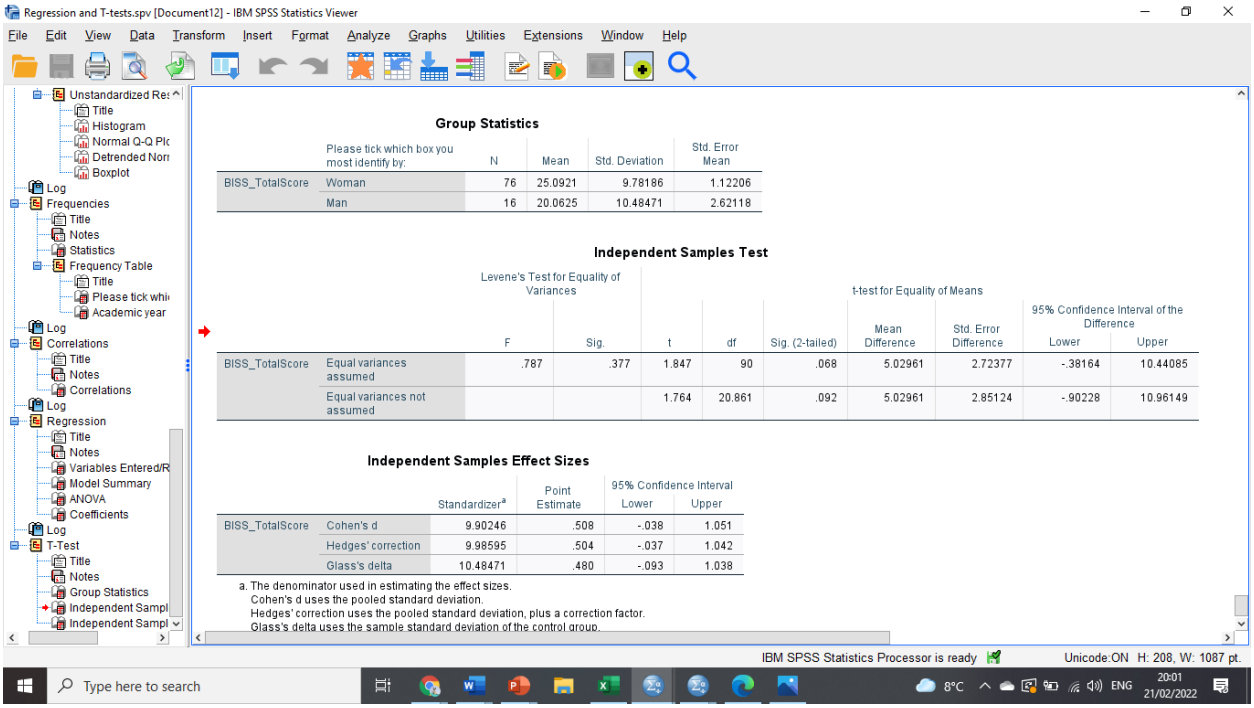
https://doi.org/10.3389/fpsyg.2021.641919

Appendices

Appendix A

Evidence of SPSS data and output




Regression and T-tests.spv [Document12] - IBM SPSS Statistics Viewer
File Edit View Data Transform Insert Format Analyze Graphs Utilities Extensions Window Help
Unstandardized Res
Title
Histogram
Normal Q-Q Plc
Detrended Norr
Boxplot
Log
Frequencies
Title
Notes
Statistics
Frequency Table
Title
Please tick whi
Academic year
Log
Correlations
Title
Notes
Correlations
Log
Regression
Title
Notes
Variables Entered/R
Model Summary
ANOVA
Coefficients
Log
T-Test
Title
Notes
Group Statistics
Independent Sampl
Independent Sampl
Group Statistics
Please tick which box you most identify by: N Mean Std. Deviation Std. Error Mean
BISS_TotalScore Woman 76 25.0921 9.78186 1.12206
Man 16 20.0625 10.48471 2.62118
Independent Samples Test
Levene's Test for Equality of Variances
t-test for Equality of Means
95% Confidence Interval of the Difference
F Sig. t df Sig. (2-tailed) Mean Difference Std. Error Difference Lower Upper
BISS_TotalScore Equal variances assumed .787 .377 1.847 90 .068 5.02961 2.72377 -.38164 10.44085
Equal variances not assumed 1.764 20.861 .092 5.02961 2.85124 -.90228 10.96149
Independent Samples Effect Sizes
Standardizer[a] Point Estimate 95% Confidence Interval Lower Upper
BISS_TotalScore Cohen's d 9.90246 .508 -.038 1.051
Hedges' correction 9.98595 .504 -.037 1.042
Glass's delta 10.48471 .480 -.093 1.038
a. The denominator used in estimating the effect sizes.
Cohen's d uses the pooled standard deviation.
Hedges' correction uses the pooled standard deviation, plus a correction factor.
Glass's delta uses the sample standard deviation of the control group.
IBM SPSS Statistics Processor is ready
Unicode:ON H: 208, W: 1087 pt.
Type here to search
8°C
ENG
20:01
21/02/2022

Appendix B

Social Media Engagement Questionnaire: SMEQ **(Adapted version)**

Przybylski, Murayama, DeHann, & Gladwell (2013)

Participant Instructions

Please reflect on how you used social media (e.g., Instagram or TikTok) both **PRE-COVID** and **CURRENTLY** and respond to the following items.

Response Anchors

Not one day | 0

One day | 1

Two days | 2

Three days | 3

Four days | 4

Five days | 5

Six days | 6

Every day | 7

Items

1. (i) Pre-Covid how often did you use social media in the 15 minutes before you go to sleep?

   (ii) Currently how often did you use social media in the 15 minutes before you go to sleep?

2. (i) Pre-Covid how often did you use social media in the 15 minutes after you wake up?

   (ii) Currently how often did you use social media in the 15 minutes after you wake up?

3. (i) Pre-Covid how often did you use social media when eating breakfast?

   (ii) Currently how often did you use social media when eating breakfast?

4. (i) Pre-Covid how often did you use social media when eating lunch?

   (ii) Currently how often did you use social media when eating lunch?

5. (i) Pre-Covid how often did you use social media when eating supper?

   (ii) Currently how often did you use social media when eating supper?

Scoring

Responses are added of all ten items to create a dependable measurement current study (a = .88).

Appendix C

BODY IMAGE STATES SCALE (BISS)

Participant Instructions

For each of the items below, check the box beside the one statement that best describes how you feel **RIGHT NOW AT THIS VERY MOMENT.** Read the items carefully to be sure the statement you choose accurately and honestly describes how you feel right now. Please choose ONE answer.

1. Right now I feel . . . **Extremely dissatisfied** with my physical appearance

Mostly dissatisfied with my physical appearance

Moderately dissatisfied with my physical appearance

Slightly dissatisfied with my physical appearance

Neither dissatisfied nor satisfied with my physical appearance

Slightly satisfied with my physical appearance

Moderately satisfied with my physical appearance

Mostly satisfied with my physical appearance

Extremely satisfied with my physical appearance

2. Right now I feel . . . **Extremely satisfied** with my body size and shape

Mostly satisfied with my body size and shape

Moderately satisfied with my body size and shape

Slightly satisfied with my body size and shape

Neither dissatisfied nor satisfied with my body size and shape

Slightly dissatisfied with my body size and shape

Moderately dissatisfied with my body size and shape

Mostly dissatisfied with my body size and shape

Extremely dissatisfied with my body size and shape

3. Right now I feel . . . **Extremely dissatisfied** with my weight

Mostly dissatisfied with my weight

Moderately dissatisfied with my weight

Slightly dissatisfied with my weight

Neither dissatisfied nor satisfied with my weight

Slightly satisfied with my weight

Moderately satisfied with my weight

Mostly satisfied with my weight

Extremely satisfied with my weight

4. Right now I feel . . . **Extremely** physically attractive

Very physically **attractive**

Moderately physically **attractive**

Slightly physically **attractive**

Neither attractive nor **unattractive**

Slightly physically **unattractive**

Moderately physically **unattractive**

Very physically **unattractive**

Extremely physically **unattractive**

5. Right now I feel . . . A great deal worse about my looks than I usually feel

Much worse about my looks than I usually feel

Somewhat worse about my looks than I usually feel

Just slightly worse about my looks than I usually feel

About the same about my looks as usual

Just slightly better about my looks than I usually feel

Somewhat better about my looks than I usually feel

Much better about my looks than I usually feel

A great deal better about my looks than I usually feel

6. Right now I feel that I look . . . **A great deal better** than the average person looks

Much better than the average person looks

Somewhat better than the average person looks

Just slightly better than the average person looks

About the same as the average person looks

Just slightly worse than the average person looks

Somewhat worse than the average person looks

Much worse than the average person looks

A great deal worse than the average person looks

Appendix D

Eating Attitudes Test-26 (EAT-26)

Participant Instructions

This is a screening measure to help you determine whether you might have an eating disorder that needs professional attention. This screening measure is NOT designed to make a diagnosis of an eating disorder or take the place of a professional consultation. Please fill out the below form as accurately, honestly and completely as possible. There are no right or wrong answers. All of your responses are confidential.

Part B: Please check a response for each of the following statements:	Always	Usually	Often	Sometimes	Rarely	Never
1. Am terrified about being overweight.	❑	❑	❑	❑	❑	❑
2. Avoid eating when I am hungry.	❑	❑	❑	❑	❑	❑
3. Find myself preoccupied with food.	❑	❑	❑	❑	❑	❑
4. Have gone on eating binges where I feel that I may not be able to stop.	❑	❑	❑	❑	❑	❑
5. Cut my food into small pieces.	❑	❑	❑	❑	❑	❑
6. Aware of the calorie content of foods that I eat.	❑	❑	❑	❑	❑	❑
7. Particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc.)	❑	❑	❑	❑	❑	❑
8. Feel that others would prefer if I ate more.	❑	❑	❑	❑	❑	❑
9. Vomit after I have eaten.	❑	❑	❑	❑	❑	❑
10. Feel extremely guilty after eating.	❑	❑	❑	❑	❑	❑
11. Am preoccupied with a desire to be thinner.	❑	❑	❑	❑	❑	❑
12. Think about burning up calories when I exercise.	❑	❑	❑	❑	❑	❑
13. Other people think that I am too thin.	❑	❑	❑	❑	❑	❑
14. Am preoccupied with the thought of having fat on my body.	❑	❑	❑	❑	❑	❑
15. Take longer than others to eat my meals.	❑	❑	❑	❑	❑	❑
16. Avoid foods with sugar in them.	❑	❑	❑	❑	❑	❑
17. Eat diet foods.	❑	❑	❑	❑	❑	❑
18. Feel that food controls my life.	❑	❑	❑	❑	❑	❑
19. Display self-control around food.	❑	❑	❑	❑	❑	❑
20. Feel that others pressure me to eat.	❑	❑	❑	❑	❑	❑
21. Give too much time and thought to food.	❑	❑	❑	❑	❑	❑
22. Feel uncomfortable after eating sweets.	❑	❑	❑	❑	❑	❑
23. Engage in dieting behavior.	❑	❑	❑	❑	❑	❑
24. Like my stomach to be empty.	❑	❑	❑	❑	❑	❑
25. Have the impulse to vomit after meals.	❑	❑	❑	❑	❑	❑
26. Enjoy trying new rich foods.	❑	❑	❑	❑	❑	❑

Part C: Behavioral Questions. In the past 6 months have you:	Never	Once a month or less	2-3 times a month	Once a week	2-6 times a week	Once a day or more
A. Gone on eating binges where you feel that you may not be able to stop?	❑	❑	❑	❑	❑	❑
B. Ever made yourself sick (vomited) to control your weight or shape?	❑	❑	❑	❑	❑	❑
C. Ever used laxatives, diet pills or diuretics (water pills) to control your weight or shape?	❑	❑	❑	❑	❑	❑
D. Exercised more than 60 minutes a day to lose or to control your weight?	❑	❑	❑	❑	❑	❑
E. Lost 20 pounds or more in the past 6 months		❑ Yes			❑ No	

• Defined as eating much more than most people would under the same circumstances and feeling that eating is out of control.

Appendix E

Information sheet

The current study is being carried out to examine whether social media use impacts individuals' body image and eating behaviours/attitudes, and to see if there's a relationship between body image, social media usage, and eating attitudes/behaviour in the context of the COVID-19 pandemic. Due to the nature of the research topic, some individuals may be prone to slight distress. Feel free to dismiss the study if food/mention of eating behaviour is triggering. The researcher understands this completely. Social media is used by most individuals daily, and therefore it's always an important area to focus research towards to examine the effects of exposure. This research project is being conducted by Carla Quinn, a psychology student at the National College of Ireland (NCI), for my final year thesis. If you agree to partake in the questionnaire, it should take approximately 10 minutes to complete. Please proceed before agreeing to take part in the study.

I have read this information and wish to continue □

Participation

It is essential to understand that your participation in this study is entirely voluntary. There are no penalties if you decide not to participate or would like to exit before completing the online questionnaires. The researcher has chosen to focus on the age range of 18 to 29 years of age and examine the research topic in college students. Your information will be completely anonymous; therefore, your privacy will remain, and your confidentiality is respected. However,

once you submit your data, the researcher cannot retrieve it as it is then stored within large amounts of data.

Are there any benefits or risks in participating?

There are no direct benefits from partaking in the study. However, you will aid the researcher in understanding the research question. Understanding these concepts, particularly in the Covid-19 pandemic, will help build upon future studies. Your participation will also aid me, the researcher, in completing her thesis.

For some individuals, the topics discussed may be sensitive, triggering, or embarrassing. Therefore, it is essential to know that you are never obliged to finish participating if you feel distressed in any way. A participant may always withdraw without penalty, and you mustn't state any confidential or personal information on the forms. In the debriefing form, support services are listed to aid participants in becoming distressed and seeking help or assistance.

Is my information kept confidential?

Your information is entirely confidential and will be kept anonymous throughout the entirety of the study. The researcher respects the privacy of every individual.

Appendix F

Consent Form

Consent to take part in research

Is my information kept confidential? Where is my data stored? Yes. Your information is always confidential. The researcher takes full responsibility for the research data. Your information is entirely confidential and will be kept anonymous throughout the entirety of the study. Data will be stored on the researcher's personal laptop in a secure encrypted file in a manner that respects participant privacy and security. The data will be accessible only to the researcher and their allocated supervisor and used for research purposes only. Your anonymous data will be stored for up to 5 years, in compliance with the NCI data retention policy, whereby data will be destroyed after this period.

Please tick which box you most identify by:

Man □

Woman: □

Non-binary: □

Academic Year:

First □

Second □

Third □

Fourth □

If you understand each step and wish to continue, please tick the following box:

I agree □

Appendix G

Study debriefing

Thank you for finding the time to participate in the questionnaire. Just to remind you, your anonymity will remain. The interest in analysing body image and its effect on eating behaviours/attitudes concerning social media usage has always been present, particularly among college students. During the pandemic, a lot of individuals and groups were affected. Many areas of life were also affected, including our mental health, diet, and attitudes towards foods. As a student myself, I could also relate to many of the issues I wanted to explore. Therefore, I believed it was necessary to conduct this study and specifically examine this research question. Below are support services if you wish to seek help on any of the topics discussed in the study.

Support Services

Crisis Textline Ireland: 50808 is a free 24/7 text service that helps if an individual is going through a difficult time.

Aware

T: Freephone 1800 80 48 48 (available 7 days, 10am-10pm)

W: https://www.aware.ie/

BodyWhys

T: 01-2107906

W: www.bodywhys.ie

YoungMinds

W: https://www.youngminds.org.uk/

Shine

W: www.shine.ie

E: info@shine.ie

For further information

Feel free to contact me, the researcher, Carla Quinn, at 19400982@student.ncirl.ie or my supervisor Michelle Kelly at Michelle.Kelly@ncirl.ie if you have any concerns or questions concerning the current study. Please always note that the researcher respects confidentiality and participants rights and dignity.