National College of Ireland

Investigating the Impact of Social Media on Body Satisfaction and Self-Esteem in Muslim

Females

Marwa Raguragui

18475292

Supervisor: Dr. Michelle Kelly

B.A (Hons) in Psychology

National College of Ireland

July 2023

Thesis Presented in Partial Fulfillment of the Requirements for the Bachelor of Arts (Hons)

Degree in Psychology, Submitted to the National College of Ireland, July 2023.

Submission of Thesis and Dissertation

National College of Ireland

Research Students Declaration Form

(Thesis/Author Declaration Form)

Name: Marwa Raguragui

Student Number: 18475292

Degree for which thesis is submitted: BA (Hons) in Psychology

Title of Thesis: Investigating the Impact of Social Media on Body Satisfaction and Self-Esteem Levels in Muslim Females

Date: 31st of July 2023

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.

Acknowledgements

Table of Contents

Abstract

Aim: The present study sought to provide a greater understanding of the effects of social media usage on body satisfaction and self esteem in muslim females within an irish context. Previous research has shown that increased social media usage is significantly correlated with decreased levels of body satisfaction and self esteem. The present study sought to expand on previous literature by investigating the impact on muslim females compared to non-muslim females, due to the gap in literature. **Method:** Three questionnaires were administered to the participants (*n*=187) through social media, which consisted of The Body Esteem Scale, The Rosenbery Self-Esteem Scale, and The Perceived Discrimination Scale. **Results:** Results of a standard multiple regression analysis showed that higher social media usage was significantly associated with lower levels of self esteem and body satisfaction. Follow up independent t-tests showed that muslim females scored lower than non-muslim females in self esteem and body satisfaction. **Conclusion:** Findings further illustrate the detrimental effects of excessive social media use supporting a large body of research. Although, this study challenges previous research, in that veiled muslim females experience lower levels of self esteem and are generally more dissatisfied with their bodies. Findings have important implications from a societal and personal level which are discussed. Also note when referring to muslim women throughout the study we are referring to "veiled" muslim women.

Introduction

For the past several years, the attire in which a Muslim female chooses to dress has been a heavily discussed and controversial topic. Prior research indicates females wearing the hijab (religious head covering) had a negative impact on how others perceive them (Byng, 2010),with muslim females reporting more aggressive attitudes and discriminatory acts against them in comparison to non hijab wearing females (Everett et al., 2014). Muslim females have been negatively portrayed in the media, with Terman (2017) reporting a higher chance of media coverage on issues pertaining to the violation of women's rights in the middle east in comparison to womens rights in other societies that are respected. Furthermore, with the increasing presence of social networking sites such as Facebook, Twitter and Instagram, the rate of cyberbullying towards muslim women has increased significantly in the past few years; which can lead to virtual and physical world attacks with muslim females being more likely to be harrassed (Awan & Zempi, 2016). Cyberbullying is a global health issue with the potential to affect the development from adolescence to young adulthood. Within a decade, the percentage of cyberbullying towards young adults aged between 18 and 29 years of age, who use social networking sites, increased from 9% to 89%, from 2004 to 2014 (Gahagen, Vaterlaus, & Frost, 2016). Facebook and Instagram held the largest engagement with 71% and 53% respectively (Duggan et al., 2015). As adolescents and young adults are most susceptible to social media (Vaterlaus, Patten, Roche & Young, 2015), excessive social media use results in low levels of self esteem and body satisfaction in users (Lee, Z. W. Y., & Cheung, C. M. K. 2014). This is greatly influenced by the "thin" standard of beauty hugely displayed on social networking sites (Harper, Tiggemann, 2008). Extensive research is therefore required on the variables affected by social media and the effects they may have on muslim females. This review aims to investigate

the relationship that social media sites and discriminative tendencies have on perceived self esteem and body satisfaction, while also comparing religious factors.

Social comparison theory, first developed by psychologist Leon Festinger (1954), revolves around the idea that individuals determine their own social and personal worth based on how they measure up to others. This theory suggest that individuals compare oneself against other to enhance certain aspects of ones life, using two different forms of social comparisons, social comparisons of ability and social comparisons of opinion. Social comparison is an important characteristic within an individuals social life due to its competitive nature. Social comparisons of ability relate to the comparisons of achievements against others, and due to this, this process is very competitive in nature. Inversely, social comparisons of opinion revolves around beliefs attitudes and most importantly thoughts,therefore, lacking the competitive aspect as with opinion there is no right or wrong opinion. Although, individuals engage in this in order to find out whether their opinions and attitudes are socially acceptable. The social comparison process involves comparison with own peer groups or individuals whom we find similar. This process involves upward social comparison and downward social comparison in relation to attitudes and abilities within our competition. Upward social comparison takes place when an individual compares oneself with other whom they believe have achieved greater or "more" in their lifetime. In contrast, downward social comparison is the process of comparison with individuals "worse" than themselves. Later research has shown that although this process increases motivation, it also increases a form of guilt within the individual(Leahey & Crowther, 2008).

As a results of the rise of social networking sites, social comparison behaviours are taking place at a rapid rate, illustrating the negative impact SNS have on social well-being.

(Verduyn, Gugushvili, Massar, Täht & Kross, 2020). With this increasing presence, it is important to investigate the effects of sites such as Facebook, Instagram and Twitter on the emotional state of females. Social media use has become a popular tool for social interaction between individuals. Social media is typically accessed daily with the average time of 144 minutes spent per day (Georgie, 2020), which risks overexposure of upward comparison to social media influencers. With the rise of marketing opportunities through such networking sites, there has been an increase in reinforcement of the "thin" ideal of beauty (Volonté, 2017). This is shown through the large numbers of thin Instagram models promoting weight loss pills, unhealthy dieting, and excessive exercise regimes(Ahrens et al., 2022). Woods & Scott (2016) found that individuals who are emotionally invested in social media experience several consequences such as poorer sleep quality, lower self- esteem levels and anxiety. With social media becoming a heavily researched area within the last two decades, it is very prevalent from prior studies that internet addiction is seen as having the same pattern to drug addiction (Sholeh & Rusdi, 2019). Findings show that social media use is a significant factor of disordered eating behaviours in females, as a result of unrealistic beauty ideals glamorized by the media(Dane & Bhatia, 2023). Such disordered eating habits are rapidly increasing among females in their twenties (Aparicio-Martinez et al., 2019). Early research has shown adolescent females as young as 13 showing increased levels of body dissatisfaction when shown images of "thin" women (Hargreaves & Tiggemann, 2003). It is clear that the exposure of appearance focused media may lead to body image disturbances in women (Bell & Dittmar, 2011). This is strongly influenced by the ideal of beauty being a young, white, underweight female, with de Freitas, Jordan & Hughes, (2018) illustrating low levels of body diversity among models in fashion magazines. These findings may be still pertinent today as there has been little impact of body diversity in print

media such as magazines (de Freitas, Jordan & Hughes, 2018). Mere "exposure to thin-ideal media images may contribute to the development of eating disorders by causing body dissatisfaction, negative moods, low self-esteem, and eating disorders symptoms among women"(Hawkins, Richards, Granley & Stein, 2004). One study explored the female perception of "thin" models and the effects on body satisfaction. Participants were shown an advertisement of 1. A "thin" model advertising a body cream with a neutral slogan, 2. An average model with a neutral slogan, and 3. An average model with an accepting slogan (designed to show acceptance of any deviations of the social norms in regards to size). Results showed higher levels of body dissatisfaction in females with initial body satisfaction, when shown the "thin" model in comparison to the "average" sized model (Rodgers & Chabrol, 2009). These findings clearly illustrate how females constantly desire the "thin" body shape as it is considered more attractive. Furthermore, current research indicates that there is a connection between excessive social media use and the deterioration of mental health within emerging adults (Rasmussen, Punyanunt-Carter, LaFreniere, Norman & Kimball, 2020).

Body image is a subjective construct that differs for each individual. Schilder (1999) states that body image is " the picture of our own body which we form in our mind, that is to say, the way in which body appears to ourselves". Physical beauty is strongly embedded in females from a young age, with females desiring the "thin" standard of beauty (Bessenoff, 2006). Instagram specifically, has seen to have had extremely negative effects on body image issues within females (Brown & Tiggemann, 2016). Females are seen using unhealthy "dangerous" behaviours to try replicate the thin ideal of beauty (Benton & Karazsia, 2015). This is evident as there has been a rise in pro-ana or pro anorexia websites, which arguably glamorize the condition of anorexia, with an obsession of attaining a slender, "skeletal" figure (Ging & Garvey, 2017).

Such websites are set up by anorexic individuals that have no wish of receiving any stabilizing treatment. Adolescents and young adults have been shown to be more influenced by negative body image than others (Meier, & Gray, 2014). Hawkins et al (2004), through viewing of images, managed to induce higher levels of anorexic symptomology in young females. One particular study conducted by Dittmar and Howard (2004) found that describing images as "average", or slightly overweight, lead to participants reporting lower levels of body dissatisfaction , therefore, suggesting greater use of "average" models may lead to higher levels of body satisfaction within the female population. The author also found that "average" models described as attractive were seen to be as effective as thin models in advertising. Multiple studies have shown that, within muslim women, it has been found that body image is significantly related to religiosity(Akrawi et al., 2015). This being said, muslim females with stronger faith revealed low levels of body dissatisfaction and body self objectification, as well as dietary restrictions, due to the use of modest clothing and reduced social media consumption (Mussap, 2009; Swami, Miah, Noorani & Taylor, 2013)

Body satisfaction is a separate construct to body image that simply means the extent to which an individual is content with their body whether it be within the social norm or not. Females are reported to have immediate negative effects when shown female fashion models that present a thin body type (Pinhas, Toner, Ali, Garfinkel & Stuckless, 1999). Attitudes as such are developed from early childhood, "with girls as young as six desiring a thinner figure" (Dohnt and Tiggemann, 2006). It is in the late adolescence period that females become very impressionable and influenced by social media, in turn, body image disturbances are most likely to occur due to excess weight development as a result of puberty, therefore, leading them away from the "ideal" standard of beauty (Dittmar et al., 2000). According to clinical standards, up to half of all US and

UK females are overweight (Dittmar et al., 2009). With the increase of thin models portrayed in the media and the increase in weight in the general population, higher levels of body dissatisfaction are evident (Halliwell and Dittmar, 2006). Gabe et al (2008) found that high levels of media consumption were directly associated with higher levels of body dissatisfaction. Social media users concerned with outward physical attractiveness orient towards appearance focused media. Interestingly, Muslim females have reported lower levels of body image issues than did Christian or atheist females (Wilhelm et al., 2019). Recent findings give insight into how veiled women (women who wear a headscarf and modest clothing) reported lower levels of "thin ideal internalization" compared to christian or atheist women (Wilhelm et al., 2019). These results are dependent on modest clothing, as unveiled muslim women did not reveal differences in results (Wilhelm et al., 2019).

Self-esteem is defined as "the degree to which the qualities and characteristics contained in one's self-concept are perceived to be positive" ("APA Dictionary of Psychology", 2022). Research has consistently viewed self esteem in a general sense, with relatively few studies exploring individual differences. Exposure to thin models on social media may have different effects on each individual depending on self esteem levels. Highly anxious individuals may sense a threat to their self esteem when observing an image as such. Inversely, stable individuals interpret the image in a positive manner allowing them to daydream (Giles, 2010). Another study predicts that self-esteem levels in adolescence is directly correlated with negative "real-world" consequences during adulthood, which includes poorer mental and physical health, worse economic prospects, and higher levels of criminal behavior during adulthood (Trzesniewski et al., 2006). Although many benefits are associated with social media, one must take into account the myriad of consequences of excessive use, for example, poor body image

perception present in adolescents and young adults (A-Z & Tech, 2020). Muslim women are underrepresented in this field of research, which is observed by the lack of research within this demographic. Interpersonal discrimination according to Every & Pemodest clothing on various social media platforms. Interestingly , McKelvy & Chatterjee (2016) rry (2014) was negatively associated with self esteem in muslim females .

   Systematic discrimination is displayed daily with major effects in countries such as France, regarding the employability, or, lack there of, against veiled muslim females (Thelocal.fr, 2017). French politicians continue to push for new measures to deny veiled women access to jobs, educational institutions and community life (Daley & Rubin, 2015). Discrimination is found as being one of the top stressors that Muslim females encounters that threatens one's mental health (Hassouneh & Kulwicki, 2007). According to Perry (2013), women are not particularly vulnerable in regards to hate crime, however, Muslim females, due to their outward identification, appear to be extremely vulnerable to hate crime and violence. Interestingly, Awan & Zempi, (2016) concluded that anti muslim hostility is present in both the virtual and physical world. Comments posted on social networking sites such as Twitter, have an "extremist and incendiary undertone", disguised in humour or jokes (Awan, 2014). Although surprisingly, social media, with it's downfalls, has created a space of acceptance for muslim females. This is prevalent as seen by the growing number of muslim self made business owners promoting reported high levels of integration, as social networking sites allowed for freedom in outward expression of one's identity.

Overview of the findings

Prior research has mainly focused on the effects of social media on self esteem and body satisfaction in a non muslim female context. Research is therefore required to investigate the effect, of SNS such as Instagram, Facebook and Twitter have, if any, on muslim females within the irish context. With this, determining the causes, and preventative measures can aid in the decrease of body dissatisfaction levels (if any), while increasing self esteem levels in women. Previous findings have suggested that muslim females have higher levels of self esteem and body satisfaction, alongside lower body image issues in comparison to non mulsim females, as a result of modest clothing. However, very little research has been conducted focusing on the impact of religion as a separate construct (Tolaymat & Moradi, 2011) , regarding muslim women's body image, specifically in regards to modesty. In addition, there is a gap in the literature studying the impact of social media on such issues in regards to muslim females within the irish context.

The current study

Prior studies have either focused on the effects of social media on the general population, or the gender differences (Pujazon-Zazik & Park, 2010). Unfortunately, little research has been conducted studying social media and the differences in self esteem and body satisfaction levels while taking into account different religious beliefs. Therefore, the aim of the current study is to examine the impact of social media engagement on levels of self esteem and body satisfaction, while also investigating the differences, if any, between muslim females and non muslim females among these factors. The sample age range selected was 18 to 60 years. This study is important as it will help identify the effects of social networking sites on body satisfaction and self esteem , as social media is linked to several body image issues (Grabe, Ward & Hyde, 2008). Therefore, we hypothesise (H1), based on previous literature, that there will be a relationship between the

predictor variable, social media usage, and the criterion variables, body satisfaction and self esteem. Hypothesis two, states that muslim women will show higher levels of body satisfaction and self esteem levels compared to non muslim females . Finally, hypothesis three states that muslim women will score higher on the Discrimination scale than non muslim women.

Methodology

Participants

The research sample within this study consisted of 187 female participants that came from Ireland, specifically within County Dublin. Participants were recruited using convenience sampling through the researchers social media platforms (Facebook, Instagram, Snapchat). This was also shared voluntarily through participant's personal accounts for further engagement and recruitment. This ensured all participants were active social media users, in which they could therefore provide a more accurate response to the researchers questions. Demographic information such as age, religion and daily social media use were collected prior to beginning the survey. Following ethical guidelines, participants willing to take part in this study were required to be 18 years of age or older. The sample recruited consisted of participants ranging from the ages of 18 to 51. Participants were also asked to give informed consent before taking part in the survey. The female participants taking part were required to identify whether they were muslim or non muslim, as this was the main distinction required within this research.

Materials

The study survey consisted of demographic questions followed by three questionnaires created using Google Forms, an online survey builder. The demographic questions consisted of stating the participants age, religion, and hours per day spent on social media platforms. Such questions were inquired to aid the researcher in answering the research questions at hand.

The Body-Esteem Scale (BES) ($\alpha = .92$) developed by Franzoi & Shields (1984), is a self evaluated 35 item gender specific multidimensional scale designed to measure body esteem levels in females regarding sexual attractiveness, weight concerns and physical condition, while measuring sexual attractiveness, upper body strength and physical condition in males. Each item is measured on a 5-point likert scale, with responses of 1 indicating having strong negative feelings, and 5 indicating having strong positive feelings towards the stated body part and function. Calculating the individual score (body esteem score) consists of adding up all the responses submitted by the participant. Scores range from 35 to 175, with higher scores indicating more positive feelings, and conversely, lower scores indicating strong negative feelings towards the participants body and its functions (see Appendix D). The Cronbach's Alpha was ($\alpha = .94$) which indicates a high level of internal consistency. In addition, 3 body parts and functions were omitted from this scale due to religious beliefs held by the islamic faith, which included, sex drive, sex organs, and sex activities, making the scale a 32 item scale. Therefore, scores within this study will range between 32 and 160.

The Rosenberg Self-Esteem Scale (RSES); Cronbach Alpha: 0.85 to 0.88. (Rosenberg, 1979). The purpose of this self reported, 10 item, uni-dimensional RSE scale is to measure both positive and negative feelings towards one's self. Participants are asked to record appropriate answers to statements using a 4-point likert scale, ranging from strongly agree to strongly disagree. Scoring involves a combination of ratings. This is done by allocating numbers to the appropriate answer, for example: strongly disagree = 1, strongly agree = 4. Additionally, reverse scoring is required to recode 5 responses, so that a high score is transformed into the required corresponding low score within this scale (see Appendix E), due to negatively worded items. Scores within this scale range from 0 to 30, with scores between 15 and 25 indicating normal

range, scores below 15 suggesting low self esteem and scores over 25 suggesting high levels of self esteem. The Cronbach Alpha for the current sample was ($\alpha = .87$) this suggests a high level of consistency on this scale. Due to rulings within the islamic faith, three questions belonging to the Franzoi & Shields (1984) Body Esteem scale were required to be omitted from the study. The body parts and functions in question are as follows: sex drive (Q26), sex organs (Q28), and sex activities (Q31). The omission of the aforementioned items was in regards to the following islamic ruling: "Sex is a private affair between the spouses and should in no case be divulged to outside party/parties"(Khan & Khan, 2015).

The Perceived Discrimination Scale (PDS) ($\alpha = .86$) developed by Williams, Yan Yu, Jackson & Anderson (1997) is a self reported 20-item scale, measuring how often individuals feel unfairly treated by others on the basis of race, ethnicity, gender, age, religion, physical appearance, sexual orientation amongst many more. This 20-item scale consists of 2 separate measures, a 9-point Daily Discrimination Scale (DSS), and an 11-point Lifetime Discrimination Scale (LDS). The DDS records participants' experiences with unfair treatment on a day-to-day basis (e.g People act as if they are afraid of you). Participants complete this scale by indicating on a 4-point scale how often they feel discriminated against, (1 = often; 2 = sometimes; 3 = rarely; 4 = never). Scoring of this scale requires reverse coding on all items, followed by summing all scores together, resulting in higher scores indicating more frequent experiences with discrimination on a daily basis. On a more general outlook, the LDS records how many instances an individual has been discriminated against over the course of their lives (e.g you were not hired for a job) (see Appendix F). To score this scale, the researcher must sum up all events of discrimination, results start at 0 with no maximum score. Higher scores suggest more experiences of lifetime discrimination. Cronbach's alpha for the daily discrimination scale was

(α = .68), indicating good reliability with the current sample. The Cronbach's alpha for the Lifetime Discrimination scale was (α = .94) which indicates a high level of internal consistency for the scale within this sample.

Design

The research design of the present study is a cross sectional design as all data being gathered was collected at one point in time. The study also employed a survey based approach adopting a quantitative research analysis. The predictor variable (PV) was social media usage. There were two criterion variables (CV) which were as follows: Body Satisfaction and Self-Esteem. For hypothesis two and three, a between- subject design was employed as different groups (muslim females and non-muslim females) were compared to one another on their levels of body satisfaction, self esteem, and discrimination.

Procedure

Data was collected through an online questionnaire employing a survey builder, Google Forms. This questionnaire is an anonymous self report style questionnaire, distributed through the researchers social media platforms (Snapchat, Instagram and Facebook) using a link. Majority of the participants were recruited through this method, while a number were recruited through the sharing of this survey by participants upon completion. When participants decided to voluntarily take part in this study, they accessed the survey through a link provided in the bio section of all social media platforms. They were firstly provided with an information sheet detailing what will be required of the participants (see Appendix A) and information regarding the benefits, risks, confidentiality, as well as an estimated time frame (10 to 25 minutes) for the study. Participants were then provided with a consent form and required to "tick" two boxes stating that they are between the ages of 18 and 60, as well as giving informed consent to

participating in this study before continuing on (see Appendix B). A briefing form was then

provided to each participant, summarising all points previously made as well as providing the

contact information for the researcher and supervisor of this study (see Appendix C). Once all

steps have been completed, participants are free to begin the questionnaire. The questionnaire

consisted of three sections. Participants were invited to complete the Body Esteem Scale, the

Rosenberg Self-Esteem Scale and the Perceived Discrimination Scale (see Appendix D, E and

F). Each section was accompanied by brief instructions detailing the methods used for answering

every item. Upon completion of these three scales, participants were provided with a debriefing

form where the contact information for my supervisor and myself were, alongside helplines if

any distress had occurred during the survey. Participants were thanked for their time and

participation, as well as encouraged to share the study with individuals eligible to take part (see

Appendix G).

Ethical considerations

All data collected within this study was in accordance with the ethical guidelines of NCI.

Informed consent was a required field necessary to complete before participation. Benefits and

risks of taking part in the survey were clearly outlined twice (information sheet and debriefing

form) (see Appendix A and G). Participants were under no pressure to take part or complete this

study, which was understood by a "ticking" the box method. Consent was also necessary before

beginning the survey in relation to age and gender, where participants indicated being females

over the age of 18 and under the age of 60. Helplines were provided upon completion of the

questionnaire in the occasion of distress occurring during the study. Participants were informed

that the data collected will be retained for 5 years in accordance with the NCI data retention

policy.

Results

Descriptive Statistics

Descriptive statistics were performed on a sample of 187 female participants ($n = 187$). This consisted of 54% Muslim females ($n = 101$), and 46% Non-Muslim females ($n = 86$). Majority of the sample consisted of 79.67% ($n = 149$) participants aged between 18-25, 10.7% ($n = 20$) aged between 26-30, 5.35% ($n = 10$) aged between 31-40, and 4.28% ($n = 8$) aged between 41-51. There are four continuous variables including, body esteem, self esteem, social media and discrimination, with mean, median,standard deviation and range scores displayed below in table 1.

Table 1

Descriptive statistics of all continuous variables, N= 187

	M [95% Confidence Interval]	Median	*SD*	Range
Social Media	2.83 [2.64-3.01]	3	1.28	6
Body Satisfaction	107.28 [104.05-110.51]	109	22.38	119
Self-Esteem	27.44 [26.63-28.26]	28	5.64	27
Discrimination	32.89[31.84-33.94]	33	7.26	66

Inferential Statistics

A Pearson's correlation coefficient was computed to assess the relationship between Social Media Usage and Body Satisfaction. Preliminary analysis was conducted to ensure no violation for the assumptions of normality, linearity and homoscedasticity. There was a moderate, negative correlation between social media usage and body satisfaction ($r = -.45$, n = 187, $p <$

.001). This indicates that the two variables shared approximately 20% of the variance in common. Results indicate that higher levels of social media usage are associated with lower levels of body satisfaction. (See Table 2).

The relationship between Social Media Usage and self-esteem was conducted using a Pearson's correlation coefficient. Preliminary analysis was conducted to ensure no violation for the assumptions of normality, linearity and homoscedasticity. There was a strong, negative correlation between social media usage and body satisfaction ($r = -.57$, n = 187, $p < .001$). This indicates that the two variables shared approximately 32% of the variance in common. Results indicate that higher levels of social media usage are associated with lower levels of self esteem . (See Table 2).

A Pearson's correlation coefficient was conducted to assess the relationship between Social Media Usage and perceived discrimination. Preliminary analysis was conducted to ensure no violation for the assumptions of normality, linearity and homoscedasticity. There was a weak, negative correlation between social media usage and body satisfaction ($r = -.25$, n = 187, $p < .001$). This indicates that the two variables shared approximately 6% of the variance in common. Results indicate that higher levels of social media usage are associated with lower levels of discrimination. (See Table 2).

Table 2

Pearson's correlation between all continuous variables

Variable	1.	2.	3.	4.
1. Social Media Usage	1			
2. Body Satisfaction	-.449***	1		
3. Self-Esteem	-.568***	.616***	1	

4. Perceived Discrimination	-.254***	.134*	.136*	1

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

A standard multiple regression analysis was performed to determine how well social media usage could be explained by the two predictor variables which include body satisfaction and self-esteem. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity and homoscedasticity. Additionally, the correlations between the predictor variables included in the study were examined. Since no *a priori* hypotheses had been made to determine the order of entry of the predictor variables, a direct method was used for the analysis. The model from table 3 shows that the model explained 33.8% of variance in social media usage ($F_{(2, 184)} = 47.06$, $p < .001$). In the final model both variables were found to uniquely predict social media usage to a statistically significant level: Body Satisfaction ($\beta = -.16$, $p = .037$), and Self-Esteem ($\beta = -.47$, $p < .001$) (See Table 3 for full details).

Table 3

Standard multiple regression model predicting social media usage total score

Variable	R^2	B	SE	β	t	p
Model	.338					
Body Satisfaction		-.01	.00	-.16	-2.1	.037
Self-Esteem		-.11	.02	-.47	-6.17	<.001

Note: R^2 = R-squared; β = standardized beta value; B = unstandardized beta value; SE = Standard error of B; N = 187; *$p < .05$; **$p < .01$; ***$p < .001$

An independent sample t-test was conducted to compare body satisfaction levels between muslim and non-muslim females. The results revealed there was a significant difference in scores, with muslim females ($M = 103.84$, SD = 22.25) scoring lower than non-muslim females

(M = 111.32, SD = 21.98), t (185) = -2.3, p =.02, two-tailed. The magnitude of the difference in the means (mean difference = -7.47, 95% CI: -13.88 to -1.07) was small (Cohen's d = 0.34).

An additional independent samples t-test was conducted to compare differences between muslim and non-muslim females self esteem levels. The results revealed no significant differences in scores, with muslim females (M = 26.94, SD = 5.45) scoring lower than non-muslim females (M = 28.03, SD = 5.83), t (185) = -1.32, p = .19, two-tailed. The magnitude of the difference in means (mean difference = -2.72 to .53) was very small (Cohen's d = 0.19).

A further independent samples t-test was conducted to compare differences between muslim and non-muslim females levels of discrimination. The results revealed significant differences in scores, with muslim females (M = 31.46, SD = 8.91) scoring significantly lower than non-muslim females (M = 34.56, SD = 4.09), t (185) = -3.14, p = .002, two-tailed. The magnitude of the difference in means (mean difference = -5.07 to -1.16) was small (Cohen's d = 0.45).

Lastly, a non-parametric Mann-Whitney U test was conducted to compare social media usage among muslim and non-muslim females. This indicates that discrimination scores were higher in non-muslim females (M = 76.49, n = 101) than for muslim females (M = 114.56, n = 86), U = 6111.5, z = 4.87, p <.001. The result was statistically significant.

To summarize, significant correlations were shown between social media use and two continuous variables, body satisfaction and self esteem. A non significant correlation was found between social media and perceived discrimination. Muslim women were found having lower levels of body satisfaction and self-esteem levels than non muslim women. In contrast to previous research found, muslim women experienced less daily and lifetime discrimination than non muslim women.

Discussion

The current study aimed to investigate the relationship between social media use and body perception, specifically body satisfaction and self-esteem, alongside perceived discrimination. It also aimed to explore previous variables within a muslim and non-muslim context. The current study sought to gain a better understanding of social media use and online comparison within the irish context, while understanding the effects on muslim females. Prior findings have shown that various social media platforms have been associated with cyberbullying leading to mental health concerns, including depression, anxiety, self harm and suicidal thoughts (Pantic, 2014; Vannucci, Flannery & Ohannessian, 2017;Memon, Sharma, Mohite & Jain, 2018; Fu, Cheng, Wong & Yip, 2013). Cyberbullying against muslim females is a global issue present in multiple countries (Noor & Abdul Hamid, 2021, Awan , 2016, Schuster & Weichselbaumer, 2021) Recent findings regarding social media platforms, specifically Instagram, have been associated with high levels of social comparison, in turn increasing one's social anxiety (Jiang & Ngien, 2020). Previous research has also found links between excessive Instagram use and symptoms of eating disorders in particular anorexia nervosa (Turner & Lefevre, 2017) among others.Through this study, three hypotheses were generated to address the aims of this research paper.

It was hypothesized, based on previous research, that (H1) there will be a relationship between social media usage (PV), and self esteem and body satisfaction (CV). This was explored using a correlation analysis, which found a moderate negative relationship between social media usage and body satisfaction, in addition to a strong negative relationship between social media usage and self esteem. Such results are consistent with and support previous research conducted suggesting that high levels of social media usage negatively impacted an individuals self esteem

and body satisfaction. Understanding the impact of "excessive" social media usage is important, as this may not only lead to physical but also mental health concern/issues (Naslund et al., 2020). A standardized multiple regression analysis was conducted and found that both variables uniquely predicted social media usage to a statistically significant level.

For H2, an independent t-test was employed to investigate whether muslim females or non-muslim females scored higher in relation to self esteem and body satisfaction. Surprisingly, muslim females were found to score lower on The Body Esteem Scale and The Rosenberg Self Esteem Scale in comparison to the non-muslim female participants. This contradicts previous research, as muslim females showed higher levels of self esteem and body satisfaction due to modest clothing and the elimination of self objectification (Johnson et al., 2014). This may be due to differences within the methodology of the studies, whereby a scale of level of modesty is employed rather than a general assumption of modesty.

Finally, a further independent t-test was utilized to investigate whether discrimination levels were higher in muslim females or non-muslim females. Result illustrated how muslim females scored significantly lower than non-muslim females. This contradicts a large body of research concluding that muslim females encounter more interpersonal and systemic discrimination than non-muslim females. This may be due to ethnic background within the non-muslim sample as discrimination is present but to non religious reasons.

Findings from this research were both consistent and inconsistent with previous literature and research studies. Consistencies lied within the levels of social media usage and the relationship between self esteem and body satisfaction. But contradictory results were present, illustrating higher levels of self esteem and body satisfaction in non-muslim females compared to muslim females. Undertanding such results and their effects on mental health not only can aid on

a personal level but also a societal level. Interventions such as body positive campaigns and educational health classes within schools can greatly impact younger children and adults in understanding the natural changes which occur in young females bodies, removing the stigma of achieving a "thin" or "curvy" ideal of beauty.

Implications

There is a mounting body of literature which alongside this study proves the impact of excessive social media use and its correlation of lower levels of self esteem and body dissatisfaction within females of any religious background. Photo-based social networking sites such as Instagram and Facebook generate increased levels of eating disorders, self esteem and body image concerns (Santarossa & Woodruff, 2017). In 2019, Instagram made the executive decision to remove likes from users' feeds, due to increased levels of mental health concerns. In addittion, Snapchat utilizes a viewing only option, whereby viewers are not capable of viewing likes or comments on influencers or celebrities posts, which in turn eliminates opportunities of upward comparison. Negative self esteem, lower levels of self worth and comparison anxiety are directly correlated with upward comparison of social media users (Hu et al., 2021, Normand & Croizet, 2013, Butzer & Kuiper, 2006). Upward comparisons were associated with lower body satisfaction levels in women of all racial/ ethnic backgrounds (Rancourt et al., 2015). Therefore, the practical implications of this study suggest that the effects of upward comparison, due to social media usage, should be discussed and tackled through body esteem initiatives to achieve higher levels of self esteem and body satisfaction in females.

From a societal point of view, the Minister of Health (Stephen Donnelly) can highly benefit from implementing a policy detailing the dangers of upward comparison through photo based social networking sites, as this may jumpstart initiatives that may decrease mental health

concerns in addition to body dissatisfaction in females. From an individual level, frequent social

media users should become more mindful of the media they are consuming and make a

conscious effort to consider how specific social media sites effect their mental wellbeing.

Strengths and limitations

This study identifies many limitations. Firstly, this research paper adopts a transversal

approach which cannot prove an accurate correlation between the studied variables. The entirety

of the scales utilized self-reporting measures which could have resulted in inaccuracies, as,

despite its anonymous nature, many participants may feel insecure or embarrassed admitting

certain feelings towards themselves, rendering an inaccurate result. Also, results are not

indicative of general feelings towards oneself as emotions and feelings change and fluctuate

frequently depending on daily struggles or events. Instead, a longitudinal approach is necessary

in predicting a more accurate result to the research questions being put forward, as this will allow

for inaccuracies such as "off" days not to alter the general feeling towards oneself. A controlled

setting in which participants could participate in the study such as a laboratory may prove

effective, in addition to researchers answering any outstanding questions participants may have.

Another limitation present within this study is the uneven age distribution of the

participants. 187 females participated in this study with 90% being from the ages of 18-30.

Although the sample size is quite reasonable the distribution can scew the scores drastically and

cannot accurately represent the results. Secondly, age plays an important role when studying the

effects of social media on body image issues and self esteem. Due to the rise of technology

occurring during the early 2010's, many young adults and teenagers spent their most

impressionable years browsing through the internet due to its easy access. Older adults show

lower levels of body image and self esteem concerns as they spend less time on social networking sites in comparison to younger adults (Rodgers & Rousseau, 2022).

Lastly, levels of modesty were not measured during the study, which in turn may have altered results. Although the research was mainly and solely focused on "veiled" muslim females, as non-veiled muslim females show no difference in results in comparison to non-muslim females, there is no way of ensuring an accurate sample size was achieved throughout the study. Also, monotheistic religions who also adopt hair covering and modest clothing such as christianity and judaism were not accounted for and therefore could have potentially skewed results. Therefore, outlining that only non-veiled non-muslim participants may take part in the study may have allowed for a more accurate response. And lastly, the effects of social media on differing ethnic groups may have played a role in the contradictory results attained throughout this study. Due to cyberbullying, self esteem levels may differ depending on race or ethnic background, which in turn could also be an explanation for the contradictory results.

A strength of the study was the sample size. As mentioned previously 187 females participated within this research study. 54% were muslim females while the remaining 46% accounted for non-muslim females. This allowed for a more accurate result when studying the effects of social media on body satisfaction and self esteem while comparing both groups. This may have been attributed to the sampling technique that was used (snowball sampling). This required publishing the study on the researchers personal online platforms were participants take part in the study. Upon completion, these participants were asked to share the study on their personal social media pages or share with specific people which fit the criteria. This ensured that

participants recruited were all social media users which would provide a more accurate representation of the results.

Future research

Through conducting this study, may alterations or expansions can be utilized in the future. Firstly, studying the association (if any) between levels of modesty in muslim women and levels of self esteem and body satisfaction. This will give a deeper understanding of whether veiled muslim women have higher self esteem and body satisfaction levels in comparison to muslim women who are veiled as well as wear modest attire (which will include a spectrum of levels of modesty) . Levels of discriminatory acts can also be studied in relation to modesty levels, which can shed light on issues such as islamophobia and aid in preventative measures such as educational initiatives. Another study can investigate the effects of social media on self esteem and body satisfaction in muslim females from differing ehnic groups or racial backgrounds. Finally, researching body image within differing ethnic groups could show very insightful results as body satisfaction can be attributed to various body shapes beyond the ideal "thin" beauty portrayed on social media.

Conclusion

Overall findings were consistent with previous research with some partial differences. This research study expands on the current understanding of the effects of social networking sites on self esteem and body satisfaction in muslim females within an irish context. In regards to social media usage and the effects of self esteem and body satisfaction in females (in general), the current study supports a large body of literature, which has continuously found that higher levels of social media use are significantly associated with lower levels of self esteem and body satisfaction. Surprisingly, this study contradicted previous research by concluding that muslim

females have lowere levels of self esteem and body satisfaction compared to non-muslim females, as previous findings have concluded that due to modest clothing females feel less objectified in turn feel increased levels of body satisfaction and self esteem. Body image is an ever evolving construct that can be affected by a social media, trends and culture. Therefore, further research is crucial as staying up to date on such topics due to its negative effects on mental wellbeing can only aid the general public.

References

Ahrens, J., Brennan, F., Eaglesham, S., Buelo, A., Laird, Y., Manner, J., Newman, E., & Sharpe, H. (2022). A longitudinal and comparative content analysis of Instagram fitness posts. *International Journal of Environmental Research and Public Health*, *19*(11), 6845. https://doi.org/10.3390/ijerph19116845

Akrawi, D., Bartrop, R., Potter, U., & Touyz, S. (2015). Religiosity, spirituality in relation to disordered eating and body image concerns: A systematic review. *Journal of Eating Disorders*, *3*(1). https://doi.org/10.1186/s40337-015-0064-0

Aparicio-Martinez, Perea-Moreno, Martinez-Jimenez, Redel-Macías, Pagliari, & Vaquero-Abellan. (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. doi: 10.3390/ijerph16214177

APA Dictionary of Psychology. (2020). Retrieved 9 October 2020, from https://dictionary.apa.org/self-esteem

Awan , I. (2016). Islamophobia on Social Media: A Qualitative Analysis of the Facebook's Walls of Hate. *International Journal of Cyber Criminology*, *10*(1), 1–20. https://doi.org/10.5281/zenodo.58517

Awan, I., & Zempi, I. (2016). The affinity between online and offline anti-Muslim hate crime: Dynamics and impacts, Aggression and Violent Behavior. *Sciencedirect*, *27*, 1-8. doi: 10.1016/j.avb.2016.02.001

Awan, I. (2014). Islamophobia and Twitter: A Typology of Online Hate Against Muslims on Social Media. *Policy & Internet*, *6*(2), 133-150. doi: 10.1002/1944-2866.poi364

Awan, I., & Zempi, I. (2016). The affinity between online and offline anti-Muslim hate crime: Dynamics and impacts. *Aggression And Violent Behavior*, *27*, 1-8. doi: 10.1016/j.avb.2016.02.001

A-Z, T., & Tech, M. (2020). How Using Social Media Affects Teenagers. Retrieved 8 October 2020, from https://childmind.org/article/how-using-social-media-affects-teenagers/

Bell, B.T., Dittmar, H. Does Media Type Matter? The Role of Identification in Adolescent Girls' Media Consumption and the Impact of Different Thin-Ideal Media on Body Image. *Sex Roles* 65, 478 (2011). https://doi.org/10.1007/s11199-011-9964-x

Benton, C., & Karazsia, B. (2015). The effect of thin and muscular images on women's body satisfaction. Body Image, 13, 22-27. doi: 10.1016/j.bodyim.2014.11.001

Bessenoff, G. (2006). Can the Media Affect Us? Social Comparison, Self-Discrepancy, and the Thin Ideal. Psychology Of Women Quarterly, 30(3), 239-251. doi: 10.1111/j.1471-6402.2006.00292.x

Brown, Z., & Tiggemann, M. (2016). Attractive celebrity and peer images on Instagram: Effect on women's mood and body image. *Sciencedirect*, *19*, 37-43. doi: 10.1016/j.bodyim.2016.08.007

Butzer, B., & Kuiper, N. A. (2006a). Relationships between the frequency of social comparisons and self-concept clarity, intolerance of uncertainty, anxiety, and depression. *Personality and Individual Differences*, *41*(1), 167–176. https://doi.org/10.1016/j.paid.2005.12.017

Byng, M. (2010). Symbolically Muslim: Media, Hijab, and the West. *Critical Sociology*, *36*(1), 109-129. doi: 10.1177/0896920509347143

Daley, S., & Rubin, A. (2015). French Muslims Say Veil Bans Give Cover to Bias. *The New York Times*. Retrieved 9 October 2020, from

https://www.nytimes.com/2015/05/27/world/europe/muslim-frenchwomen-struggle-with-discrimination-as-bans-on-veils-expand.html.

Dane, A., & Bhatia, K. (2023). The Social Media Diet: A scoping review to investigate the association between social media, body image and eating disorders amongst young people. *PLOS Global Public Health*, *3*(3). https://doi.org/10.1371/journal.pgph.0001091

de Freitas, C., Jordan, H., & Hughes, E. (2018). Body image diversity in the media: A content analysis of women's fashion magazines. Health Promotion Journal Of Australia, 29(3), 251-256. doi: 10.1002/hpja.21

Dittmar, H. and Howard, S. (2004). Ideal-body internalization and social comparison tendency as moderators of thin media models' impact on women's body focused anxiety. *Journal of Social and Clinical Psychology*, 23, 768-91.

Dittmar, H., Halliwell, E. and Stirling, E. (2009). Understanding the impact of thin media models on women's body focused effect: The roles of thin-ideal internalisation and eight-related self-discrepancy activation in experimental effects. *Journal of social and Clinical Psychology,* 28, 43-72.

Dittmar, H., Lloyd, B., Dugan, S. et al. (2000). The "body beautiful": English adolescents' images of ideal bodies. *Sex Roles*, 42, 887-913.

Dohnt, H.K. and Tiggemann, M. (2006). Body Image Concerns in Young Girls: The Role of Peers and Media Prior to Adolescence. *Journal Of Youth And Adolescence*, *35*(2), 135-145. doi: 10.1007/s10964-005-9020-7

Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). Frequency of social media use. Pew Research Center Retrieved from http://www.pewinternet. org/2015/01/09/frequency-of-social-media-use-2/.

Everett, Jim A. C., Fabian M. H. Schellhaas, Brian D. Earp, Victoria Ando, Jessica Memarzia, Cesare V. Parise, Benjamin Fell, and Miles Hewstone. 2015. "Covered in Stigma? The Impact of Differing Levels of Islamic Head-Covering on Explicit and Implicit Bias toward Muslim Women*." Journal of Applied Social Psychology 45* (2): 90–104.

Every, D., & Perry, R. (2014). The relationship between perceived religious discrimination and self-esteem for Muslim Australians. *Australian Journal Of Psychology*, *66*(4), 241-248. doi: 10.1111/ajpy.12067

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117-140.

Fu, K., Cheng, Q., Wong, P., & Yip, P. (2013). Responses to a Self-Presented Suicide Attempt in Social Media. *Crisis, 34*(6), 406-412. doi: 10.1027/0227-5910/a000221

Gahagan, K., Vaterlaus, J. M., & Frost, L. R. (2016). College student cyberbullying on social networking sites: Conceptualization, prevalence, and perceived bystander responsibility. *Computers in Human Behavior, 55*(Part B), 1097–1105.

Georgie, D. (2020). How Much Time Do People Spend on Social Media in 2020? [Blog]. Retrieved 9 October 2020, from https://techjury.net/blog/time-spent-on-social-media/#gref.

Giles, D. (2010). *Psychology of the Media* (1st ed., pp. 80-81). Red Globe Press.

Ging, D., & Garvey, S. (2017). 'Written in these scars are the stories I can't explain': A content analysis of pro-ana and thinspiration image sharing on Instagram. *New Media & Society*, *20*(3), 1181-1200. doi: 10.1177/1461444816687288

Grabe, S., Ward, L., & Hyde, J. (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. doi: 10.1037/0033-2909.134.3.460

Halliwell, E., & Dittmar, H. (2006). Associations Between Appearance-Related Self-Discrepancies and Young Women's and Men's Affect, Body Satisfaction, and Emotional Eating: A Comparison of Fixed-Item and Participant-Generated Self-Discrepancies. *Personality And Social Psychology Bulletin*, *32*(4), 447-458. https://doi.org/10.1177/0146167205284005

Hargreaves, D., & Tiggemann, M. (2003). The Effect of "Thin Ideal" Television Commercials on Body Dissatisfaction and Schema Activation During Early Adolescence. Journal Of Youth And Adolescence, 32(5), 367-373. doi: 10.1023/a:1024974015581

Harper, B., Tiggemann, M. The Effect of Thin Ideal Media Images on Women's Self-Objectification, Mood, and Body Image. *Sex Roles* 58, 649–657 (2008).

Hassouneh, D., & Kulwicki, A. (2007). Mental health, discrimination, and trauma in Arab Muslim women living in the US: A pilot study. Mental Health, Religion & Culture, *10*(3), 257-262. doi: 10.1080/13694670600630556

Hawkins, N., Richards, P., Granley, H., & Stein, D. (2004). The Impact of Exposure to the Thin-Ideal Media Image on Women. Eating Disorders, 12(1), 35-50. doi: 10.1080/10640260490267751

Hu, Y., Zhou, M., Shao, Y., Wei, J., Li, Z., Xu, S., Maguire, P., & Wang, D. (2021). The effects of social comparison and depressive mood on adolescent social decision-making. *BMC Psychiatry*, *21*(1). https://doi.org/10.1186/s12888-020-02928-y

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. Doi: 10.1177/2056305120912488

Johnson, K., Lennon, S. J., & Rudd, N. (2014). Dress, body and self: Research in the social psychology of Dress. *Fashion and Textiles*, *1*(1). https://doi.org/10.1186/s40691-014-0020-7

Leahey, T. M., & Crowther, J. H. (2008). An ecological momentary assessment of comparison target as a moderator of the effects of appearance-focused social comparisons. *Body Image*, *5*(3), 307–311. https://doi.org/10.1016/j.bodyim.2008.03.002

Lee, Z. W. Y., & Cheung, C. M. K. (2014). Problematic use of social networking sites: The role of self-esteem. International Journal of Business and Information, 9(2), 143.

McKelvy, L., & Chatterjee, K. (2016). Muslim Women's Use of Internet Media in the Process of Acculturation in the United States. *Qualitative Research Reports In Communication*, *18*(1), 18-26. doi: 10.1080/17459435.2016.1247112

Meier, E. P., & Gray, J. (2014). Facebook photo activity associated with body image disturbances in adolescent girls. *Cyberpsychology, Behaviour, and Social Networking,* 17(4), 199-206.

Memon, A., Sharma, S., Mohite, S., & Jain, S. (2018). The role of online social networking on deliberate self-harm and suicidality in adolescents: A systematized review of

literature. *Indian Journal Of Psychiatry, 60*(4), 384-392. Doi:

10.4103/psychiatry.IndianJPsychiatry_414_17

Mussap, A. (2009). Strength of faith and body image in Muslim and non-Muslim women.

Mental Health, Religion & Culture, 12(2), 121-127. doi: 10.1080/13674670802358190

Naslund, J. A., Bondre, A., Torous, J., & Aschbrenner, K. A. (2020). Social Media and

Mental Health: Benefits, risks, and opportunities for research and Practice. *Journal of*

Technology in Behavioral Science, *5*(3), 245–257. https://doi.org/10.1007/s41347-020-00134-x

Noor, N., & Abdul Hamid, B. (2021). Cyberbullying in the name of god: Critical

discourse analysis of online responses to the Act of de-hijabbing in Malaysia. *3L The Southeast*

Asian Journal of English Language Studies, *27*(4), 219–233.

https://doi.org/10.17576/3l-2021-2704-15

Normand, A., & Croizet, J.-C. (2013). Upward social comparison generates attentional

focusing when the dimension of comparison is self-threatening. *Social Cognition*, *31*(3),

336–348. https://doi.org/10.1521/soco.2013.31.3.336

Pantic, I. (2014). Online Social Networking and Mental Health. *Cyberpsychology,*

Behavior, And Social Networking, 17(10), 652-657. doi: 10.1089/cyber.2014.0070

Perry, B. (2013). Gendered Islamophobia: hate crime against Muslim women. *Social*

Identities, *20*(1), 74-89. doi: 10.1080/13504630.2013.864467

Pinhas, L., Toner, B., Ali, A., Garfinkel, P., & Stuckless, N. (1999). The effects of the

ideal of female beauty on mood and body satisfaction. *International Journal Of Eating*

Disorders, 25(2), 223-226. Doi:

10.1002/(sici)1098-108x(199903)25:2<223::aid-eat12>3.0.co;2-b

Pujazon-Zazik, M., & Park, M. (2010). To Tweet, or Not to Tweet: Gender Differences and Potential Positive and Negative Health Outcomes of Adolescents' Social Internet Use. *American Journal Of Men's Health*, *4*(1), 77-85. doi: 10.1177/1557988309360819

Rancourt, D., Schaefer, L. M., Bosson, J. K., & Thompson, J. K. (2015). Differential impact of upward and downward comparisons on diverse women's disordered eating behaviors and body image. *International Journal of Eating Disorders*, *49*(5), 519–523. https://doi.org/10.1002/eat.22470

Rasmussen, E., Punyanunt-Carter, N., LaFreniere, J., Norman, M., & Kimball, T. (2020). The serially mediated relationship between emerging adults' social media use and mental well-being. *Computers In Human Behavior*, *102*, 206-213. doi: 10.1016/j.chb.2019.08.019

Rodgers, R. F., & Rousseau, A. (2022). Social media and body image: Modulating effects of social identities and user characteristics. *Body Image*, *41*, 284–291. https://doi.org/10.1016/j.bodyim.2022.02.009

Rodgers, R., & Chabrol, H. (2009). L'impact de l'exposition à des images de minceur idéalisée sur l'insatisfaction corporelle chez des jeunes femmes françaises et italiennes. L'encéphale, 35(3), 262-268. doi: 10.1016/j.encep.2008.05.003

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

Schilder, P. (1999). *The image and appearance of the human body* (p. 11). London: Routledge.

Schuster, J., & Weichselbaumer, D. (2021). "Just take it off, where's the problem?" how online commenters draw on neoliberal rationality to justify labour market discrimination against women wearing headscarves. *Ethnic and Racial Studies*, *45*(11), 2157–2178. https://doi.org/10.1080/01419870.2021.1991969

Sholeh, Achmad & Rusdi, Ahmad. (2019). A New Measurement of Instagram Addiction: Psychometric Properties of The Instagram Addiction Scale (TIAS). 91-97.

Swami, V., Miah, J., Noorani, N., & Taylor, D. (2013). Is the hijab protective? An investigation of body image and related constructs among British Muslim women. British Journal Of Psychology, 105(3), 352-363. doi: 10.1111/bjop.12045

Terman, R. (2017). Islamophobia and Media Portrayals of Muslim Women: A Computational Text Analysis of US News Coverage. *International Studies Quarterly, 61*(3), 489-502. doi: 10.1093/isq/sqx05

Thelocal.fr. (2017). French firms told they can ban staff from wearing Muslim headscarves at work. Retrieved 8 October 2020, from https://www.thelocal.fr/20170314/french-firms-told-they-can-ban-the-muslim-headscarf-at-work

Trzesniewski, K., Donnellan, M., Moffitt, T., Robins, R., Poulton, R., & Caspi, A. (2006). Low self-esteem during adolescence predicts poor health, criminal behavior, and limited economic prospects during adulthood. *Developmental Psychology, 42*(2), 381-390. doi: 10.1037/0012-1649.42.2.381

Turner, P., & Lefevre, C. (2017). Instagram use is linked to increased symptoms of

orthorexia nervosa. *Eating And Weight Disorders - Studies On Anorexia, Bulimia And Obesity,*

22(2), 277-284. doi: 10.1007/s40519-017-0364-2

Vannucci, A., Flannery, K., & Ohannessian, C. (2017). Social media use and anxiety in

emerging adults. *Journal Of Affective Disorders, 207*, 163-166. doi: 10.1016/j.jad.2016.08.040

Vaterlaus, J., Patten, E., Roche, C., & Young, J. (2015). #Gettinghealthy: The perceived

influence of social media on young adult health behaviors. *Sciencedirect*, *45*, 151-157. doi:

10.1016/j.chb.2014.12.013

Verduyn, P., Gugushvili, N., Massar, K., Täht, K., & Kross, E. (2020). Social comparison

on social networking sites. Current Opinion In Psychology, 36, 32-37. doi:

10.1016/j.copsyc.2020.04.002

Volonté, P. (2017). The thin ideal and the practice of fashion. *Journal of Consumer

Culture*, *19*(2), 252–270. https://doi.org/10.1177/1469540517717775

Wilhelm, L., Hartmann, A., Becker, J., Kisi, M., Waldorf, M., & Vocks, S. (2019). Thin

Media Images Decrease Women's Body Satisfaction: Comparisons Between Veiled Muslim

Women, Christian Women and Atheist Women Regarding Trait and State Body Image. Frontiers

In Psychology, 10. doi: 10.3389/fpsyg.2019.01074

Woods, H., & Scott, H. (2016). #Sleepyteens: Social media use in adolescence is

associated with poor sleep quality, anxiety, depression and low self-esteem. *Journal Of

Adolescence,* 51, 41-49. doi: 10.1016/j.adolescence.2016.05.008

Appendices

Appendix A

Information Sheet

You are being invited to take part in a research study. Before deciding whether to take part, please take the time to read this document, which explains why the research is being conducted and what it would involve from you. If you have any questions about the information provided, please do not hesitate to contact me using the details at the end of this sheet.

I am a final year student in the Bachelor of Arts in Psychology programme at The National College of Ireland. As part of our degree, we must carry out an independent research project. For my project, I aim to investigate whether body satisfaction and self-esteem are associated with social media use in Muslim females.

WHAT WILL TAKING PART CONSIST OF:

If you decide to take part in this study, you will be asked to complete an online survey that consists of three questionnaires/ scales. These scales include the Body Self Esteem scale which tests an individual's feeling towards their body. This will ask participants to rate from one (having strong negative feelings) to 5 (having strong positive feelings) in accordance to how they feel about a certain body part such as their waist or legs. The second scale being the Rosenberg scale which tests individuals' feelings about themselves. In this, participants must indicate how strongly they agree or disagree with the statement put forward. For example, "I feel that I have a number of good qualities". And finally, the Perceived Discrimination Scale, which measures how often they feel others treat them differently or unfairly on the basis of race, ethnicity, religion and physical appearance. This study consists of two answer formats. Firstly, indicating how many instances in your life you have been discriminated against. For example, being harassed by the police. And finally a tick the box format, with statements such as, "people acting as though they are afraid of you", where participants must choose an option ranging from often to never. These scales will take approximately 10 to 25 minutes depending on each individual's speed. You are able to take as long of a break between the tests if you wish.

You can take part in this study if you are a female aged between 18 and 60, and use at least one of the following forms of social media: Facebook, Instagram, Snapchat, Twitter, Tumblr, TikTok, Reddit, Pinterest, or LinkedIn.

DO YOU HAVE TO TAKE PART?

Participation in this research is voluntary; you do not have to take part, and a decision not to take part will have no consequences for you. If you do decide to take part, you can withdraw from participation at any time. Unfortunately, once you have submitted your questionnaire, it will not be possible to withdraw your data from the study, as the questionnaire is anonymous and individual responses cannot be identified.

BENEFITS OF PARTICIPATION:

There are no direct benefits to you for taking part in this research. However, the information gathered will contribute to research that helps us better understand the impact social media has

on Muslim females in regards to body image. There is no risk of harm while taking these scales, but if the rare chance an individual does suffer emotional or mental harm, contact information for relevant support services are also provided at the end of the questionnaire.

CONFIDENTIALITY

The questionnaire is anonymous, it is not possible to identify a participant based on their responses to the questionnaire. All data collected for the study will be treated in the strictest of confidence. Responses to the questionnaire will be stored securely in a password protected/encrypted file on the researcher's computer. Only the researcher and their supervisor will have access to the data. Data will be retained for 5 years in accordance with the NCI data retention policy.

 WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?

The results of this study will be presented in my final Thesis, which will be submitted to The National College of Ireland.

CONTACT INFORMATION:

For further information or inquiries please feel free to contact me, Marwa Raguragui at marwargrg00@gmail.com or my supervisor Dr April Hargreaves at April.Hargreaves@ncirl.ie.

Appendix B

<div align="center">

Consent Form

</div>

In agreeing to participate in this research I understand the following:

- This research is being conducted by Marwa Raguragui, an undergraduate student at the School of Business, National College of Ireland.
- The method proposed for this research project has been approved in principle by the Departmental Ethics Committee, which means that the Committee does not have concerns about the procedure itself as detailed by the student. It is, however, the above-named student's responsibility to adhere to ethical guidelines in their dealings with participants and the collection and handling of data.
- If I have any concerns about participation I understand that I may refuse to participate or withdraw at any stage.
- I have been informed as to the general nature of the study and agree voluntarily to participate.
- There are no known expected discomforts or risks associated with participation.
- All data from the study will be treated confidentially. The data from all participants will be compiled, analyzed, and submitted in a report to the Psychology Department in the School of Business. No participant's data will be identified by name at any stage of the data analysis or in the final report.
- At the conclusion of my participation, any questions or concerns I have will be fully addressed.
- I may withdraw from this study at any time and may withdraw my data at the conclusion of my participation if I still have concerns.

Researcher: Marwa Raguragui
Supervisor: Dr April Hargreaves

Appendix C

<div align="center">

Briefing Form
</div>

Dear participant,

You have chosen to voluntarily take part in this study that aims to answer the question "What is the Impact of Social Media on Body Satisfaction and Self Esteem Levels in Muslim Females?". This study aims to see whether social media influences Muslim females' body satisfaction and their self-esteem levels, and to what degree it impacts them. Our expectations are that younger females will be more likely to be influenced by social media in regards to body image than older females, and therefore resulting in lower self-esteem and body satisfaction.

This study requires you to take two tests, the Body Self Esteem Scale, the Rosenberg Self Esteem Scale, and the Perceived Discrimination Scale, which will take no longer than half an hour to complete. These scales will have a number of statements to which you must pick which relates to you the most. All data collected will be kept confidential. Please note that if at any point you would like to withdraw from the study, that is within your rights and you will not be forced to continue.

Taking part in this study will help us greatly, and aid us in future research in this field. If you have any outstanding questions please feel free to contact me at:
Marwa Raguragui: marwargrg00@gmail.com or my supervisor Dr April Hargreaves at
April.Hargreaves@ncirl.ie.

Thank you,
National College of Ireland student.

- ❏ I agree that I am voluntarily participating in this study conducted by Marwa Raguragui. I understand the aim of this study, and that I am free to withdraw at any time. I recognize that all data collected from this study will be kept confidential and will not be shared with any other parties. I fully understand that I am agreeing to take part in this study that investigates the impact of social media on Body Satisfaction and Self Esteem levels in females. Finally, I understand that this study follows the American Psychological Association Ethical Guidelines.
- ❏ I agree that I am over the age of 18 and under the age of 60.

Appendix D

The Body-Esteem Scale
Franzoi & Shields (1984)

Instructions: On this page are listed a number of body parts and functions. Please read each item and indicate how you feel about this part or function of <u>your own body</u> using the following scale:

1 = Have strong negative feelings
2 = Have moderate negative feelings
3 = Have no feeling one way or another
4 = Have moderate positive feelings
5 = Have strong positive feelings

Factor loading (see below)

	Male	Female
1. Body scent		SA
2. Appetite	PC	WC
3. Nose	PA	SA
4. Physical stamina	PC	PC
5. Reflexes	PC	PC
6. Lips	PA	SA
7. Muscular strength	UBS	PC
8. Waist	PC	WC
9. Energy level	PC	PC
10. Thighs	PC	WC
11. Ears	PA	SA
12. Biceps	UBS	PC
13. Chin	PA	SA
14. Body build	UBS	WC
15. Physical coordination	UBS, PC	PC
16. Buttocks	PA	WC

17. Agility	PC	PC
18. Width of shoulders	UBS	
19. Arms	UBS	
20. Chest and breast	UBS	SA
21. Appearance of eyes	PA	SA
22. Cheeks/ cheekbones	PA	SA
23. Hips	PA	WC
24. Legs		WC
25. Figure and physique	UBS, PC	WC
26. Feet	PA	SA
27. Appearance of stomach	PC	WC
28. Health	PC	PC
29. Body hair		SA
30. Physical coordination	PC	PC
31. Face	PA	SA
32. Weight	PC	WC

Appendix E

<div align="center">

Rosenberg Self-Esteem Scale (RSE)
Rosenberg (1965)

</div>

Instructions
Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.
   Strongly Agree   Agree   Disagree   Strongly Disagree

2. At times I think I am no good at all.
   Strongly Agree   Agree   Disagree   Strongly Disagree

3. I feel that I have a number of good qualities.
   Strongly Agree   Agree   Disagree   Strongly Disagree

4. I am able to do things as well as most other people.
   Strongly Agree   Agree   Disagree   Strongly Disagree

5. I feel I do not have much to be proud of.
   Strongly Agree   Agree   Disagree   Strongly Disagree

6. I certainly feel useless at times
   Strongly Agree   Agree   Disagree   Strongly Disagree

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

8. I wish I could have more respect for myself.
   Strongly Agree   Agree   Disagree   Strongly Disagree

9. All in all, I am inclined to feel that I am a failure.
   Strongly Agree   Agree   Disagree   Strongly Disagree

10. I take a positive attitude toward myself.
    Strongly Agree   Agree   Disagree   Strongly Disagree

Appendix F

Perceived Discrimination Scale
Williams, Yu, Jackson, & Anderson (1997)

Answer Format:
This survey uses multiple answer formats. Please see the scoring instructions below for more information.

Scoring:
The Lifetime Discrimination subscale items are Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, and Q11. The answer format for these items is fill in the blank. The Daily Discrimination subscale items are Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, and Q20. The answer format for these items is: 1 = often, 2 = sometimes, 3 = rarely, 4 = never.

Instructions:
How many times in your life have you been discriminated against in each of the following ways because of such things as your race, ethnicity, gender, age, religion, physical appearance, sexual orientation, or other characteristics? Write the number of times each event occurred next to each statement for questions 1-11 and circle your response for questions 12-20.

1. You were discouraged by a teacher or advisor from seeking higher education. ____
2. You were denied a scholarship.____
3. You were not hired for a job.____
4. You were not given a promotion.____
5. You were fired.____
6. You were prevented from renting or buying a home in the neighborhood you wanted.____
7. You were prevented from remaining in a neighborhood because neighbors made life so uncomfortable.____
8. You were hassled by the police.____
9. You were denied a bank loan.____
10. You were denied or provided inferior medical care.____
11. You were denied or provided inferior service by a plumber, care mechanic, or other service provider.____
12. You are treated with less courtesy than other people.
Often   Sometimes   Rarely   Never
13. You are treated with less respect than other people.
Often   Sometimes   Rarely   Never
14. You receive poorer service than other people at restaurants or stores.
Often   Sometimes   Rarely   Never
15. People act as if they think you are not smart.
Often   Sometimes   Rarely   Never
16. People act as if they are afraid of you.
Often   Sometimes   Rarely   Never
17. People act as if they think you are dishonest.
Often   Sometimes   Rarely   Never
18. People act as if they think you are not as good as they are.

Often	Sometimes	Rarely	Never

19. You are called names or insulted.

Often	Sometimes	Rarely	Never

20. You are threatened or harassed.

Often	Sometimes	Rarely	Never

Appendix G

Debriefing Form

Thank you for your participation as a research participant in the present study concerning your views on body satisfaction and self esteem levels in Muslim females as a result of mass media. The present study tests whether mass media plays a role in body image and self esteem in females.

Confidentiality

The information gathered from this study is completely anonymous and therefore cannot be traced back to the participant at any time. With that being said, submitted responses cannot be withdrawn after submission. The results of this study will be solely used by myself and submitted to The National College of Ireland for my final year thesis.

Again, we thank you for your participation in this study. If you know of any friends or acquaintances that are eligible to participate in this study, we will very much appreciate it if you would share this study with them, but we request that you not discuss the content of the study with them until after they have had the opportunity to participate. Prior knowledge of questions asked in this study may invalidate the results. We greatly appreciate your cooperation.

Contact Information

If you have any concerns regarding this study, please feel free to contact myself Marwa Raguragui at marwargrg00@gmail.com or the supervisor for this research Dr April Hargreaves at April.Hargreaves@ncirl.ie.

In the event that you feel psychologically distressed by participation in this study, we encourage you to call your local GP or one of the following services provided.

Support Services:
BodyWhys: Body satisfaction issues
PO Box 105, Blackrock, Co Dublin.
Tel: 01-2834963
Helpline: 01-2107906
E-mail (office): info@bodywhys.ie
E-mail support services: alex@bodywhys.ie

Aware: self-esteem issues
Tel: 1800804848
E-mail: supportmail@aware.ie

Mind and Body Works: self esteem issues
Address: 15 Wicklow Street, Dublin 2, D02Y765
10 Main Street, Donnybrook, Dublin 4, D04X8A0
Tel: 016771021
E-mail: info@mindandbodyworks.com

Again, we thank you for your participation in this study.

Appendix H

Evidence of data set and SPSS output

	Name	Type	Width	Decimals	Label	Values
1	ID	Numeric	8	0	Participant_Nu...	None
2	Age	Numeric	3	0	Age	None
3	ReligiousBe...	Numeric	10	0	Religious Belief	{1, Muslim}...
4	HoursPerDay	Numeric	2	0	How many hour...	{0, less tha...
5	BES1	Numeric	2	0	1. Body Scent	{1, Having s...
6	BES2	Numeric	2	0	2. Appetite	{1, Have str...
7	BES3	Numeric	2	0	3. Nose	{1, Have str...
8	BES4	Numeric	2	0	4. Physical Sta...	{1, Have str...
9	BES5	Numeric	2	0	5. Reflexes	{1, Have str...
10	BES6	Numeric	2	0	6. Lips	{1, Have str...
11	BES7	Numeric	2	0	7. Muscular Str...	{1, Have str...
12	BES8	Numeric	2	0	8. Waist	{1, Have str...
13	BES9	Numeric	2	0	9. Energy Level	{1, Have str...
14	BES10	Numeric	2	0	10. Thighs	{1, Have str...
15	BES11	Numeric	2	0	11. Ears	{1, Have str...
16	BES12	Numeric	2	0	12. Biceps	{1, Have str...
17	BES13	Numeric	2	0	13. Chin	{1, Have str...
18	BES14	Numeric	2	0	14.Body Build	{1, Have str...
19	BES15	Numeric	2	0	15. Physical C...	{1, Have str...
20	BES16	Numeric	2	0	16. Buttocks	{1, Have str...
21	BES17	Numeric	2	0	17. Agility	{1, Have str...
22	BES18	Numeric	2	0	18. Width of Sh...	{1, Have str...
23	BES19	Numeric	2	0	19. Arms	{1, Have str...
24	BES20	Numeric	2	0	20. Chest or Br...	{1, Have str...
25	BES21	Numeric	2	0	21. Appearance...	{1, Have str...
26	BES22	Numeric	2	0	22. Cheeks or ...	{1, Have str...
27	BES23	Numeric	2	0	23. Hips	{1, Have str...
28	BES24	Numeric	2	0	24. Legs	{1, Have str...
29	BES25	Numeric	2	0	25. Figure or P...	{1, Have str...
30	BES26	Numeric	2	0	26. Feet	{1, Have str...
31	BES27	Numeric	2	0	27. Appearance...	{1, Have str...
32	BES28	Numeric	2	0	28. Health	{1, Have str...
33	BES29	Numeric	2	0	29. Body Hair	{1, Have str...
34	BES30	Numeric	2	0	30. Physical C...	{1, Have str...
35	BES31	Numeric	2	0	31. Face	{1, Have str...
36	BES32	Numeric	2	0	32. Weight	{1, Have str...
37	RSES1	Numeric	2	0	1. On the whol...	{1, Strongly ..
38	RSES2	Numeric	2	0	2. At times I thi...	{1, Strongly ..
39	RSES3	Numeric	2	0	3. I feel that I h...	{1, Strongly ..
40	RSES4	Numeric	2	0	4. I am able to ...	{1, Strongly ..
41	RSES5	Numeric	2	0	5. I feel I do not...	{1, Strongly ..
42	RSES6	Numeric	2	0	6. I certainly f	{1, Strongly

Thesis outup.spv [Document2] - IBM SPSS Statistics Viewer

File Edit View Data Transform Insert Format Analyze Graphs Utilities Extensions Window Help

T-Test

Group Statistics

	Religious Belief	N	Mean	Std. Deviation	Std. Error Mean
BES_Total	Muslim	101	103.8416	22.24892	2.21385
	Non-Muslim	86	111.3140	21.98356	2.37055

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
BES_Total	Equal variances assumed	.010	.921	-2.302	185	.022	-7.47237	3.24669	-13.87767	-1.06707
	Equal variances not assumed			-2.304	180.937	.022	-7.47237	3.24355	-13.87242	-1.07232

Independent Samples Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval Lower	Upper
BES_Total	Cohen's d	22.12739	-.338	-.627	-.048
	Hedges' correction	22.21761	-.336	-.624	-.047
	Glass's delta	21.98356	-.340	-.631	-.047

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.