An Investigation of the Relationship Between Social Media Usage, Social Comparison and Self-Esteem

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Abstract

Aims: The current study attempts to understand the relationship between social media usage, social comparison and self-esteem levels in young adult women in Ireland. The aim of this study was to examine the levels of social media usage and social comparison and how it affected self-esteem. Method: An online survey was administered to participants n = 81 through social media which included several questionnaires such as The Rosenberg Self-Esteem Scale, the INCOM Scale and a social media engagement questionnaire. Results: The results showed that higher levels of social comparison were associated with lower levels of self-esteem and had a 27% variance in common. Social media usage and self-esteem showed a moderate correlation and shared 9% of variance in common. Levels of social media engagement did not have an association with social comparison levels. Conclusion: The findings of this study suggest that individuals with a higher volume of social comparison have a lower self-esteem, but similar studies would benefit from a larger and more diverse sample size in order to get more accurate findings. Social media engagement did not affect levels of social comparison levels.

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Introduction

Social media

Social media is becoming increasingly popular in recent years. There were 3.79million Irish social media users in January of 2021 alone (Data reportal, 2021). This is undeniably quite a substantial number of people considering that the last census revealed the population of Ireland to be at 4.8 million (CSO, Ireland, 2016). Although there are a lot of positives to social media like the ability to spread awareness, fundraise and connect to people all over the world, there is a risk of it having negatively impact on individuals. Many people are influenced by social media whether it is influenced to buy a product due to a celebrity sharing it on their page, or whether they are influenced to lose weight as they wish they looked like someone who gets a lot of likes. It is only recently becoming an idea that people only post the best aspects of their lives, and that young susceptible people should not compare or envy the people they follow. Due to the ease of accessibility to smartphones and social media applications, the dangers that arise are also increasing.

There are many studies looking at social media and the damaging effects it may have on individuals. Research shows that social media use can increase alcohol consumption frequency (Davis et al., 2021; Geber et al., 2021). One study shows that adolescents who use social media intensely are at a high risk for e-cigarette usage due to youth exposure to advertisements and trends (Vogel et al., 2021). Those with a larger following on social media have a higher need for social approval which may have negative effects on their mental health if there is not a sufficient amount of this social approval (Sciara et al., 2021). Social media has been said to cause envy in many young women around the world, and one study found that women who have a low satisfaction with their appearance and use social media

frequently had an increased desire for cosmetic surgery to change their appearance (Walker et al., 2021).

One study looks at whether the overall use of social media for networking has a positive or negative effect (Glaser et al., 2018). They found that the positive or negative effect on an individual's mental health may depend on the level of addiction they have with the internet. It seems the more addicted an individual is to the internet the more of a negative effect it has on their mental health. They believe that more awareness needs to be spread in the safer use of social media and how to limit internet use and to strengthen people's offline connections. This study looks at social media use in terms of level of addiction rather than just the volume of usage, future studies may benefit from looking at volume of usage as a whole to receive a wider range of results.

More recent studies investigated the effects of social media usage due to the current pandemic. As there was a rise in social media levels, including the constant sharing of pandemic-related media, researchers looked further into the effects it has had on individuals. Price et al., (2022) found that the viewing of pandemic-related media resulted in increased psychopathy for vulnerable individuals. Other studies found that during the pandemic, increased social media usage was associated with increased alcohol consumption especially in those with anxiety or depression (Capasso et al., 2021; Bountress et al., 2022). Higher volumes of social media usage during the pandemic resulted in associations with higher volumes of anxiety and stress and predicted increases of depression (Politte-Corn et al., 2022).

Self-Esteem

Research into self-esteem shows that there is a link between self-esteem and many negative constructs like depressive symptoms, hostility, anger, etc. (Gable & Nezlek, 1998),

and it has also shown that levels of self-esteem usually fluctuate over time. Individuals who experience lower feelings of self-esteem can struggle with things such as social identity or depression (Marmarosh, 1999). Low self-esteem has been found to be a factor for the development or maintenance of loneliness (Geukens et al., 2022). There have been many studies that look at overall wellbeing and the important role that self-esteem plays in this (Flemming et al., 2005; Hart et al., 2021). Results show that self-esteem is one of the most important factors for wellbeing in individuals. Studies have found that how low self-esteem can go as far as hindering academic achievement in students (Ayyash & Sánchez, 2012).

There is a lot of research linking social media use with low self-esteem. Some studies focus on specific aspects of social media such as selfie posting and found that those with higher self-esteem appear to post more than those with low self-esteem, and body satisfaction may be predicted by these variables (Biolcati, 2019). Low self-esteem can come from having poor self-image (Parker, 2020) and due to the popularity of social media, women have to look at others whom they think is the "standard" idea of beauty, and therefore create negative thoughts towards their self-image, which leads to lower self-esteem. Vall-Roqué et al., (2021) found that a higher frequency of Instagram usage showed relationships with body dissatisfaction, low self-esteem and a drive towards thinness.

Social Comparison

Social comparison has been around for a very long time. Wheeler & Jules (2020) state that Aristotle believed that social comparisons were a major factor in regard to ethical actions, and that it plays an important role in political and economic outcomes. There are many opportunities to see other people's lives and compare our own to theirs, whether it is someone at work, a family member, a friend, a celebrity, or even a stranger online. Due to the more recent and rising social media outlets being used to share more and more details of an

individual's life, the question arises if it effects the people who follow along and compare how well they are doing, how many friends they have, what job they have, and many more aspects of their lives these strangers and people they know online.

Leon Festinger was the first to attempt a social comparison theory as he believed there was little research that went further than case studies or surveys (Festinger, 1954; Wheeler & Jules, 2020). This theory states that social comparison will greatly impact self-evaluation of behaviours and personal opinions compared to private contexts (Hummer et al., 2014). It is based on the idea that self-evaluations take place in situations where it can be possible to compare the performance of others with one's own performance (Kipnis, 1961), and suggests that an individual's evaluation of their own ability will depend on a significant person's opinion of his ability. Festinger's theory states that one major way an individual judges their abilities is by comparing their performance with those who are members of a similar group.

Since then, there has been a lot more research into social comparison and it has shown that people will choose to compare with those who are superior to them in any way, even if there is a chance it will have a negative effect on their self-esteem (Gerber et al., 2018). Social comparisons are a normal common part of human nature and research has shown social comparisons to affect individuals negatively. It can have an impact on people's emotions and can result in worsened moods (Gerber et al., 2018; Goodmen et al., 2021; Boecker et al., 2022), and social comparison can even lead to an association in suicidal ideation (Spitzer et al., 2022). Social comparison of ability predicted lower clarity of identity for individuals (Yang et al., 2017) and it can even negatively hinder identity formation in young adults. Self-evaluation of perceived group drinking attitudes and behaviours can be influenced by social comparison and can lead to pressurised participation in unwanted alcohol drinking and increase pressure towards uniformity of behaviour and opinion within a group (Hummer et al., 2014).

Overview of Findings

There are many studies in this area of research that investigates the relationship between self-esteem, social media usage and social comparisons. Studies have found that social comparison can be a risk factor for eating disorders, which is also linked with low self-esteem (Corning et al., 2006; Kim et al., 2007). Problematic smart phone use which includes frequent social media usage has shown to indicate lower levels of self-esteem and high levels of social comparison (Wang & Lei, 2021). Alfasi (2019) found that social comparison online can lead to negative psychological outcomes including low self-esteem. Current research has shown a negative association between self-esteem and social media usage (Midgely et al, 2021). Research found that social media is a source of low self-esteem levels and low self-esteem predicts more frequent social media use (Miljeteig & von Soest, 2022). Social media can influence higher levels of social anxiety, social comparison which in turn shows low self-esteem (Parsons et al., 2021). As young adults are becoming more and more exposed to social media platforms, the risk of social comparison is getting larger. Social comparison on Instagram has shown to lead specifically to a lower self-worth, stemming from a low self-esteem (Stapleton et al., 2017).

Research looking at self-esteem and social comparison have found that social comparison can be a risk factor for eating disorders, and this is linked with low self-esteem levels (Corning et al., 2006; Kim et al., 2007). Watt & Konnert (2020) found that upward and downward social comparisons mediated the relationship between self-esteem and body image, each variable had a significant association with higher levels of social comparisons indicating lower levels of self-esteem. Lewis (2021) found that feelings of jealousy or even envy that were associated with upward social comparison showed a decreased self-esteem after viewing enjoyment posts.

More recent studies have shown to find a relationship between the two variables of social comparison and social media (Spitzer et al., 2022; Yue et al., 2022). This could possibly be due to the continuing rise in the use of social media platforms, or more specifically the Covid-19 pandemic, where quarantining and self-isolation was common, which led people to have a higher volume of social media usage which in turn could have led to more social comparisons online. Research found that a simple social media browsing session can cause lower self-esteem, mood and life satisfaction resulting from upward social comparisons (Midgley et al., 2021). The pandemic is something that has affected everyone in one way or another, but it has created an opening for research due to the rise in social media usage during the last two years. It is an ideal time for research to be conducted in order to compare it to previous research where social media was not as popular.

The Current Study

As the popularity of social media continues to increase, more and more studies are being conducted in order to attempt an understanding of the impact this could have on the population. It is not surprising that research is showing negative impacts of social comparison and social media use due to people's tendency to post the best parts of their lives on their social media account. It is easy for someone to look at these posts and think other people's lives are better, or easier when in reality it is only the best version of it. Even though there are many studies that look at social media, social comparison and self-esteem, there are not many that look at the relationship in all three variables together, and in an Irish context in particular there is a lack of research in this area. Current research has found little direct and significant relationships between social comparison and social media usage, and this could be due to previous studies focusing on upward and downward social comparison, rather than social comparison as a whole and not focusing on smaller, more specific populations. This study looks at social comparison as a whole variable.

The focus of this study is on young adult women specifically as there is little to no studies done focusing on this particular population when they are one of the more at-risk or likely populations due to the popularity of social media for this sample in an Irish context. This study will examine the associations and relationships between each variable and investigate if low self-esteem in this population can be predicted by levels of social media usage or social comparison. The existing data in this area could be generalized to Irish women, but it would be interesting to see if the results differed from these existing studies. Previous studies have looked at social media usage in terms of how addicted an individual is to social media, but this study will not assume addiction and solely focus on the volume of usage and use that to see its effects on self-esteem. This study will add an Irish perspective and will focus on the young adult population.

Research Aims and Hypotheses

The aim of the current study is to attempt to understand the if there is a relationship between the three variables social media usage, self-esteem and social comparison within the social media users in the Irish population. This study aims to examine the effect each of these variables have on one another and if social media usage and social comparison can predict self-esteem levels in individuals. From viewing and studying previous research, the following research questions and hypotheses were generated:

Research question 1: How does social comparison and self-esteem associate with each other? Hypothesis 1: A higher level of social comparison will be associated with a lower level of self-esteem

Research question 2: How does social media usage and self-esteem associate with each other? Hypothesis 2: A higher volume of social media usage will associate with a lower level of self-esteem.

SOCIAL MEDIA USAGE, SELF-ESTEEM AND SOCIAL COMPARISON

Research question 3: How does social media usage and social comparison associate with each other? Hypothesis 3: A higher volume of social media usage will indicate higher social comparison levels.

Research question 4: Does social media usage and social comparison levels predict low self-esteem? Hypothesis 4: Social media usage and social comparison will predict lower levels of self-esteem.

Methods

Participants

The research sample for this study consisted of (81) participants. These participants were recruited through convenience and snowball sampling techniques. The researcher used their social media accounts to reach out and it was shared by several individuals. Participants were required to be at a minimum age of 18 in order to follow ethical guidelines and considerations. The maximum age was 25 as the category being looked at was young adult women living in Ireland. Each participant was required to give informed consent before attempting the survey.

Measures

Demographics

The participants are first presented with a demographics questionnaire that asks them their age to ensure there is no one under the age of 18, or over the age of 25, status (full-time employed, student, unemployed), and their ethnicity (White Irish, Asian Irish, etc). (See appendix iii)

Social Media Usage

Participants' social media usage was measured using a validated social media engagement questionnaire used by (Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). This is an established questionnaire. Social media engagement was measured with a series of questions which assessed the levels of usage in participants everyday lives. Each question was answered using an 8-point Likert Scale ranging from 0 = No days last week, to 7 = everyday last week. An example of a question asked is "how often did you use social media within the first 15 minutes after waking up?" A higher score

indicates a higher volume of social media usage, and a lower score indicates a lower volume of usage. (See appendix iv)

Self-Esteem

The Rosenberg Self-Esteem Scale was used to measure participants' levels of self-esteem. It is a 10-piece questionnaire that measures both positive and negative feelings and the self. Each question uses a 4-point Likert scale that ranges from 1 - "strongly agree" to 2 - "strongly disagree". 5 of these questions will need to be reversed scored. Once the scores are added up, a higher score indicates a higher volume of self-esteem, and a lower score indicates a lower volume of self-esteem. (See appendix v)

Social Comparison

The INCOM Scale was used to measure participants' levels of social comparison. This is an 11-piece established questionnaire. Each will be answered on a Likert-scale style from 1-5 which ranges from 1 – "strongly disagree" to 5 "strongly agree". 2 parts will need to be reverse scored. A higher result indicates a higher level of social comparison. (See appendix vi)

Design and Analysis

The present quantitative study is a cross-sectional research design. SPSS was used to store and analyse the data for this study. Descriptive statistics were run to assess normality. Pearson's correlations were conducted to establish a relationship between the social media usage, self-esteem and social comparison. A standard multiple regression was conducted to examine the hypotheses. The two predictor variables (PVs) were social media usage and social comparison. Self-esteem was the dependant variable (DV).

Procedure

The data for this study was collected through an online survey. The link for the survey was sent and shared through social media which gathered the majority of the participants. Others were recruited through friendships whereby the link was sent directly to email addresses. Other friends and family members shared the link. Once this link was opened, the participant was presented with an information sheet (see appendix i) which enabled them to read about the study. Participants were able to withdraw at any moment during the study as stated in the information sheet. Each participant was required to tick a box in order to give their consent to taking part in this study. Once this consent was established, the participant is presented with the survey. The questionnaire was split into four different sections, the first being the demographics questionnaire which asked their age, work/study status, and ethnicity. The second section is the social media engagement questionnaire which asks 5 questions. The third part of the survey is the 10-piece Rosenberg Self-Esteem questionnaire which collected the participants levels of self-esteem. The final questionnaire completed by the participant is the 11-piece INCOM Scale which measures the participants levels of social comparison. Once the participant completed the survey, the participant is presented with a debriefing sheet (see appendix ii) where more information about the study is present along with helpline information and details about the researcher. They are lastly asked to click submit. The data is then collected through a spreadsheet and analysed through SPSS.

Results

Descriptive Statistics

Descriptive Statistics were performed for all variables (See Table 1) The current data is taken from a sample of 81 participants (n = 81). This sample mainly consisted of 46.4% students (n = 39) and 44% full-time employed (n = 37), there were also 4.8% who were both student and full-time employed (n = 4), and 4.8% unemployed (n = 4). The majority of participants were white Irish which made up 88.9% of the sample (n = 72), there was 3.7% Asian Irish (n = 3), 3.7% Black Irish (n = 3) and 3.7% Other White background (n = 3).

The results for the mean values for age was 21.75, total social media usage score 25.38, self-esteem score 22.85, and social comparison score 33.48. (See Table 2)

Table 1Descriptive statistics for all categorical variables

Variable	Frequency	Valid %	
Status			
Student	39	46.4	
Full-time employed	37	44.0	
Student, Full Time employed	4	4.8	
Unemployed	4	4.8	
Ethnicity			
White Irish	72	88.9	
Asian Irish	3	3.7	
Black Irish	3	3.7	
Other white background	3	3.7	

 Table 2

 Descriptive statistics of all continuous variables

Variable	M [95% CI]	SD	Range
Age	21.75	1.89	18-25
Total Social Media Usage	25.38	9.54	0-40
Score			
Total Self-Esteem Score	22.85	6.16	10-37
Total Social Comparison Score	33.48	7.02	12-47

Inferential Statistics

The relationship between Self-Esteem and Social Comparison was investigated using Pearson product-moment correlation coefficient, preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a significant large negative correlation between the two variables Self-Esteem and Social Comparison (r = -.52, n = 81, p < 0.01). This indicates that the two variables share approximately 27% of variance in common. These results indicate that higher levels of Social Comparison are associated with lower levels of Self-Esteem (see Table 3).

The relationship between Self Esteem and Social Media Usage was investigated using a Pearson product moment correlation coefficient, preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a significant, medium, positive correlation between the two variables (r = .30, n = 81, p < 0.01). This indicates that the two variables share approximately 9% of variance in common (see Table 3).

The relationship between Social Media Usage and Social Comparison was investigated using Pearson product-moment correlation coefficient, preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a non-significant, positive correlation between Social Media Usage and Social Comparison (r = 0.03, n = 81, p < 0.01). This indicates that Social Media Usage and Social Comparison are not associated (see Table 3).

 Table 3

 Pearson's Correlation table for continuous variables

Variable	1.	2.	3.	4.
1. Total Social Media	1			
2. Total Self-Esteem	.296**	1		
3. Total Social Comparison	0.0	352**	1	

N = 81; Statistical Significance: **p < 0.01

A standard multiple regression analysis was conducted to determine if Self-Esteem could be explained by two predictor variables (Social Media Usage and Social Comparison). The results show (see Table 4) that there was no significant outcome.

Table 4
Standard multiple regression model predicting Self-Esteem

Variable	\mathbb{R}^2	В	SE	β	t	p
Model	.35					
Social Media Usage		.18	.06	.27	2.94	.004
Social Comparison		47	.08	53	-5.78	.000

Note: $R^2 = R$ squared; B = unstandardized Beta value; SE = Standard errors of B; $\beta =$ standardized beta value

Discussion

The current study aimed to investigate the relationship between Social Media Usage, Self-Esteem and Social Comparison and aimed to examine these associations in an Irish context. This study also aimed to investigate whether self-esteem could be predicted by social media usage and social comparison. Previous findings have shown that social media has significantly impacted individuals, to the extent that it had negative effects on mood, stress and anxiety, depression and even disordered eating (Glaser et al., 2018; Price et al., 2022). Existing research shows a significant association between self-esteem, social media and social comparisons (Ozimek & Bierhoff, 2020; Midgley et al., 2021). Through this existing research, four research questions and hypotheses were formed in order to meet the aims of this study.

From previous research, the first hypothesis was formulated, and it states that a higher level of social comparison would indicate a lower level of self-esteem. This association was analysed through a Person's correlation analysis. The results supported this hypothesis as there was a significant correlation between the two variables. The hypothesis is accepted. This is consistent with existing research that has also found a significant association between these two variables (Corning et al., 2016; Watt & Konnert, 2020). Lower self-esteem is a consequence of social comparison due to the constant exposure to a majority of positive lifestyles being shared. This is damaging to an individual as it can create doubt about their identity and belonging (Yang et al., 2017). This study contributes to the current research by showing that in an Irish context, young adult women who have a higher level of social comparison tend to have a lower self-esteem.

The second hypothesis stated that a higher volume of social media usage will associate with a lower level of self-esteem. A Pearson's correlation was used to examine this hypothesis and surprisingly, the results did not support this hypothesis. Although the correlation analyses did show a moderately significant outcome, it was not in the direction hypothesised. This is not in line with current research that has found a strong significant relationship between these two variables (Ozimek & Bierhoff, 2020; Miljeteig & von Soest, 2022). Findings suggest that there is an associated between the two variables, it just needs to be explored in a different way. There is no way to know exactly why this outcome occurred, but it could be due to the small sample size, or the generalised questionnaires used.

The third hypothesis stated that higher social media usage would indicate higher social comparison levels. This was due to previous research finding a significant association between these two variables (Spitzer et al., 2022). A Pearson's correlation was conducted to explore this association. The results showed no significant results and therefore the hypothesis for this research question is rejected. This also was conflicting with previous research as there have been multiple studies that found a higher level of social media usage indicated a higher level of social comparison (Midgley et al., 2021; Yue et al., 2022). Again, a potential reason for this surprising outcome could be the measure of social media used, as it is different to those used in previous studies looking at similar variables.

The fourth hypothesis stated that social media usage and social comparison would predict self-esteem. A standard multiple regression was used to analyse this hypothesis. There were no significant results from this analysis, so this hypothesis is also rejected. Results indicate that social comparison levels and social media usage does not predict low self-esteem. This is surprising due to previous research although the small sample size needs to be considered and the specific sample size used. A more generalised population may have more significant outcome results.

The majority of recent research found a significant relationship between social comparison, social media use and self-esteem (Midgley et al., 2021; Spitzer et al., 2022; Yue et al., 2022). This study did not fully support these findings as there was no significant correlation between all three of the variables. This may have been due to the small sample size or the variation in results for the social media questionnaire. The range of answers were large and there were several outliers in the total social media usage scores which may have influenced the overall results for analyses run with this variable. By using a better, more established social media questionnaire there may have been more accurate scores which match current research.

The findings of this study did however show similar results to research into self-esteem and social comparison. Research has shown lower self-esteem is a consequence of social comparison due to many reasons including the constant exposure to a majority of positive lifestyles being shared. This is damaging to an individual as it can create doubt about their identity and belonging (Yang et al., 2017). Many other studies found that social comparison can be very damaging to an individual's mental health (Spitzer et al., 2022) including an increase in suicidal ideation. This is an increasing issue that may become more prevalent in our society as social media usage continues to become more and more popular. More research needs to be done in this area in order to attempt a better understanding of ways that negative outcomes may be prevented as there is more danger being associate with the frequent use of social media platforms.

Implications

There is a lot of evidence to suggest that high levels of social comparisons can result in lower self-esteem for individuals. Resources should be made available for those who need help with reducing their levels of social comparison. It is only becoming harder to avoid

seeing other peoples lives due to the rise in social media platforms. Now more than ever people will see the details of an individual's successes as it has become popular for people to post the positive factors of their lives on social media. There has been concerns that vulnerable people may not realise that most people only post the good in their lives, and not the negatives, and start to wish their lives were as good as the people who share it online. More information and awareness should be spread about the susceptibility of negative mental and behavioural effects of social comparison. This study helps to highlight the importance of using social media safely, and to reach out for help if feelings of low self-esteem arise in order to prevent further negative mental health risk factors. If more awareness was spread about the dangers or risks of social media use, it could begin to turn it into a more positive platform.

Strengths and Limitations

A limitation of this study is that it did not reach the aim of 84 participants. Due to the short time frame for recruiting but also due to the restricted sample of participants needing to be a female aged 18 to 25, it was difficult to obtain this number of participants. The requirements for this study may have limited the results from being more generalised as it was specifically looking at females in the young adult age group. The study may have benefited from looking at all genders and then comparing the differences or extending the age limit in order to not only recruit more participants for a larger sample size but also to have a better idea of social media usage levels in general. Another limitation of this study is that the several outliers in the total social media usage scores may have impacted the results and they were not removed before conducting final analyses. If this was to be reconducted it may be of benefit to remove any outliers in order to get more accurate results.

By using self-report scales, the reliability is lessened due to the individual possibly holding back their true feelings. Although this study was anonymous, it is still difficult to admit to yourself that you could be struggling with things such as low self-esteem. Since the variables being examined were sensitive subjects, this may have influenced the participant to not be fully honest. Self-selecting bias is a risk factor for self-report scales, and this could have a major effect on a study with a small sample size. Several studies look at self-report bias as it can be unreliable, and one study found that self-reporting of media exposure is unreliable (Jürgens et al., 2020). Another limitation of this study is that the questionnaire used to measure social media engagement did not efficiently measure an accurate level of usage. The questionnaire used was validated but it was quite small in terms of questions. This may not have been detailed enough to capture the true level of social media use as it did not ask questions other than about specific times an individual used social media. A future study may benefit from using a better-established questionnaire that had more detail.

This study may have benefited from adding another aspect of social comparison such as looking specifically at one area such as body satisfaction or life satisfaction. More accurate comparisons and associations may have been found by not using social comparison as a whole variable, instead looking at upward and downward social comparison. Another limitation of this study was not considering the different social media platforms and the different effects they may have. This study asked participants about social media in general, rather than looking specifically into one area. For example, Instagram is photo or video-based posting, which means there could be more social comparison when discussing this application in particular rather than answering based on other social media applications such as Twitter or Facebook.

Conclusion

This study backs up the current research findings of there being a strong association between self-esteem and social comparison. The findings of this study contribute to the existing literature by showing similar research outcomes in an Irish context and specifically for the young adult women of Ireland. The findings of this study highlight the need for more thorough investigations into the relationship specifically between social media usage and social comparison levels as there is not enough studies looking at these two variables alone. This study highlights the relationship between self-esteem and social media, but the results were not as strong as previous literature suggested. Further research would benefit from improving the current available social media usage questionnaires, as the existing ones may not capture accurate enough results. Distinguishing between different social media platforms may also provide more accurate results depending on the direction of the research, for example the researcher could focus specifically on Instagram if they were looking at body image or try looking at Facebook or Twitter regarding lifestyle comparisons.

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Appendices

Appendix I

Information sheet

Welcome to this research study.

This study will look at your social media usage and general self-esteem and social comparison levels.

This study involves answering 4 questionnaires which will take 10-15 minutes in total. Below I have outlined what each questionnaire will examine.

Demographics questionnaire

Examination of social media usage

Examination of general self-esteem levels

Examination of social comparison levels

You have been asked to take part in this study as you are between the age of 18 to 25 and identify as a woman who is currently residing in Ireland.

You are under no obligation to take part in this research. However, I hope that you will agree to take part and give us some of your time to complete a brief survey. It is entirely up to you to decide if you would like to take part. If you decide to do so, you will be asked to provide consent after you read this information sheet. If you decide to take part, you are still free to withdraw at any time without giving a reason during the questionnaires. You can simply close the browser window and not submit your results. However,

once you have submitted your answers you will not be able to withdraw your information as the information is unidentifiable and anonymous immediately after submission. A decision to withdraw at any time during your participation, or a decision not to take part, will not affect your relationships with the researcher.

All data that is collected in this study will be kept confidential. None of the data collected will be personally identifiable. No names will be identified at any time. The data will be stored safely on a password protected computer accessible only to the researcher. This data may contribute to other research publications and/or conference presentations as well as the primary researcher's final year thesis. It will be retained for 5 years in line with NCI research data guidelines before being destroyed.

Please tick the box below if you consent to	participating in this study.
I consent to taking part in this study	

Appendix II

Debriefing Sheet

Thank you for taking part in this study concerned with social media usage and general self-esteem and social comparison levels. Previous research has suggested that there is a relationship between social media usage and self-esteem and social comparison levels. This study was interested in exploring this potential relationship among young women (aged 18 to 25) in an Irish context.

The results of this study will be written up and presented as a thesis for examination in NCI (National College of Ireland). If you are interested a copy of the research results can be made available to you at the end of the academic year upon making a request to the researcher.

To submit your responses please click the 'Submit' button at the bottom of this page.

Some questions in this study may cause some distress as it looks at the topics of self-esteem and social comparison. If you experience any distress during or following the completion of the survey, you may contact your general practitioner or contact Pieta House freephone 1800 247 247 or text "HELP" to 51444. The services of Pieta House are available 24/7.

If there are any further questions, feel free to contact me (Erin Fogarty) by email: x19458026@student.ncirl.ie

Thank you for your time!

Appendix III

Demographics Questionnaire

- 1. What is your current age?
- 2. Are you currently:

A student

Full-time employed

Unemployed

Prefer not to say

3. What is your ethnicity?

White Irish

White Irish Traveller

Other White background

Black Irish

Black African

Other Black background

Asian Irish

Chinese

Other Asian background

Other

Appendix IV

Social Media Engagement Questionnaire

Please reflect on how you used social media (e.g., Facebook, Twitter etc) in the past week and report the number of times you used it under the circumstances listed below.

0 = no days last week, 1 = 1 day last week, 2 = 2 days last week, 3 = 3 days last week, 4 = 4 days last week, 5 = 5 days last week, 6 = 6 days last week, 7 = 7 days last week

- 1. How often did you use social media in the 15 minutes before you go to sleep?
- 2. How often did you use social media within the 15 minutes after waking up?
- 3. How often did you use social media while eating breakfast?
- 4. How often did you use social media while eating lunch?
- 5. How often did you use social media while eating dinner?

Appendix V

Self-Esteem Scale

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 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree

- 1. On the whole, I am satisfied with myself
- 2. At times I think I am no good at all
- 3. I feel that I have a number of good qualities
- 4. I am able to do things as well as most other people
- 5. I feel I do not have much to be proud of
- 6. I certainly feel useless at times
- 7. I feel that I am a person of worth, at least on an equal plane with others
- 8. I wish I could have more respect for myself
- 9. All in all, I am inclined to think that I am a failure
- 10. I take a positive attitude towards myself

Appendix vi

The INCOM Scale

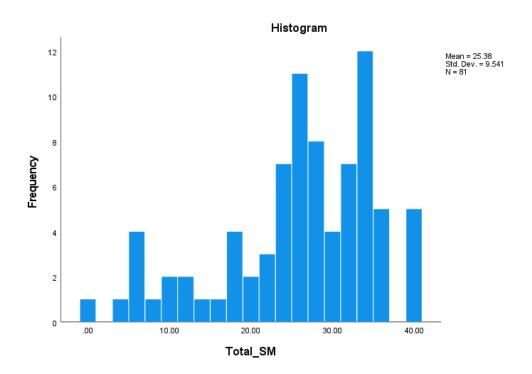
Please indicate your level of agreement or disagreement with each of the following statements:

1 = strongly agree, 2 = agree, 3 = neither agree nor disagree, 4 = disagree, 5 = strongly disagree

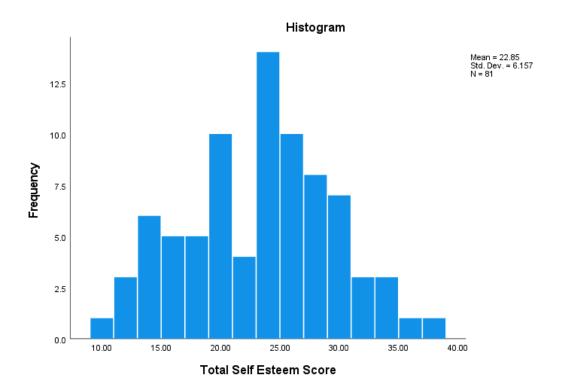
- 1. I often compare myself with others with respect to what I have accomplished in life
- 2. If I want to learn more about something, I try to find out what others think about it
- 3. I always pay a lot of attention to how I do things compared to how others do things
- 4. I often compare how my loved ones (boy or girlfriend, family members etc.) are doing with how others are doing
- 5. I always like to know what others in a similar situation would do
- 6. I am not the type of person who compares often with others
- 7. If I want to find out how well I have done in something, I compare what I have done with how others have done
- 8. I often try to find out what others think who face similar problems I face
- 9. I often like to talk with others about mutual opinions and experiences
- 10. I never consider my situation in life relative to that of other people
- 11. I often compare how I am doing socially (e.g. Social skills, popularity) with other people

Appendix vii

Social Media Usage Histogram



Self-Esteem Histogram



Social Comparison Histogram

