How Social Media Shapes Our Happiness: Exploring the Mediating Effects of Social Comparison and Materialism

Yosra Missaoui[1]

[1] Al Yamamah University, Saudi Arabia

Correspondence: Missaoui Yosra, Assistant Professor of Al Yamamah University, Saudi Arabia.

Abstract

Despite its widespread presence, social media's impact on happiness remains unclear. This study investigates the intricate relationship between social media use, happiness, materialism, and social comparison within the specific context of Saudi Arabia. It examines whether materialism and social comparison mediate the association between social media use and happiness.

Data were collected through surveys focusing on popular social media platforms used by Saudi adults. These surveys measured social media use, happiness levels, materialistic tendencies, and the propensity for social comparison. A sample of 250 Saudi nationals residing in Riyadh, encompassing various genders and age groups, participated in the study. Statistical analyses using advanced software (SPSS, AMOS 26, and PROCESS 4.0) were conducted to assess correlations and potential mediating effects.

The findings revealed a significant positive association between increased social media use and both higher materialism and social comparison. Surprisingly, a positive correlation was also observed between social media use and reported happiness levels. Interestingly, both materialism and social comparison significantly mediated the relationship between social media use and happiness. This suggests that these factors play a crucial role in explaining the observed connection. The findings imply that content presented on social media platforms might cultivate materialistic desires and a drive for upward social comparison, ultimately impacting happiness through these indirect pathways.

This research contributes to the existing body of knowledge by proposing and testing a model that links social media use with happiness directly and indirectly through the mediating roles of materialism and social comparison. The study concludes by discussing the practical implications of these findings and outlining potential directions for future research.

Keywords: social media, happiness, materialism, social comparison, life satisfaction

1. Introduction

The pervasiveness of social media and social networking platforms has undeniably infiltrated our daily lives, experiencing a significant surge in popularity over the past decade (Hruska & Maresova, 2020; Coyne et al., 2017). From sharing knowledge to promoting global conversations, social media has transformed into an online social hub, with studies revealing an average of 6 hours spent online daily, seamlessly switching between platforms (Baker & Algorta, 2016; Vannucci et al., 2019). As this phenomenon continues to reshape our interactions and worldviews, understanding its influence on happiness becomes increasingly important (Hruska & Maresova, 2020). Therefore, a deeper investigation into the complex interaction between social media use and well-being is essential.

However, the question remains: is social media a happiness booster or a well-being threat? New research delves deeper, exploring the connection between social media and happiness along with the variables influencing this relationship. Studies have shown that the impact of social media on well-being is multifaceted and complex, with both positive and negative associations documented (Baker & Algorta, 2016; Kearns & Whitley, 2019). This highlights the need for further exploration of moderators and mediators influencing this relationship (Baker & Algorta, 2016). While the mixed impact of social media on well-being is acknowledged, investigating the specific mechanisms at play holds significant value. Notably, there's a gap in existing research regarding how social media use influences well-being through the dual mechanisms of social comparison and materialism.

Research suggests that the immersive and intense nature of the online world might be a risk factor for social comparison. The prevalence of curated portrayals of life on social media platforms may cultivate social comparison and perceptions of inauthentic happiness or success among users, potentially leading to diminished self-esteem and compromised well-being (Chou & Edge, 2012). There is growing concern that the constant stimulation and pressure to compare oneself to others online may have negative mental health effects for some online users, potentially leading to depression (Care, 2011; Yi et al., 2023). Additionally, individuals who engage in social comparison on social media are more likely to experience low self-esteem and dissatisfaction with their lives (Chou & Edge, 2012; Yi & al., 2023). The abundance of upward social comparison information encountered online distorts users' self-perception and judgment, impacting their emotional well-being. Research has linked social media use with increased social comparison and envy, which can lead to negative self-evaluations and dissatisfaction with one's own life (Ozimek & Bierho, 2016; Meshi et al., 2015).

Further complicating the picture, studies have revealed a positive association between increased social media exposure and heightened materialism (Kamal et al., 2013; Heimlich & Ardoin, 2008), which can in turn negatively affect mental health and well-being (Twenge & Campbell, 2018). Social media content, by continuously highlighting conspicuous consumption, fuels social comparison and fosters unrealistic desires centered around wealth (Ozimek & Bierho, 2016). This cycle may contribute to decreased life satisfaction, as individuals become entrapped in a pursuit of happiness driven by materialism, an illusion perpetuated by the social media platforms they utilize.

This study aims to bridge the existing research gap by investigating the mediating roles of social comparison and materialism in the relationship between social media use and happiness. By examining these specific factors, we hope to gain a more nuanced understanding of how social media shapes our happiness and contribute to the development of interventions that promote positive online experiences.

2. Literature Review

2.1 Social Media Exposure and Well-Being

Trusov, Bucklin and Pauwels (2009) defined social networking sites (SNS) as web-based facilities that enable individuals to build and maintain a network of friends for social or professional interaction. The high popularity of SNS around the world is undeniable, with recent statistics indicating that over seventy-five percent of the global population are active users on social platforms (Digital 2022 Global Overview Report, 2022).

These social platforms are not exclusively channels of communication between customers. They have also become undeniable tools for brands to appeal to their audience, interact with them, and build or maintain strong relationships (Kujur & Singh, 2020). Recognizing this potential, marketers are increasingly directing their efforts toward social networking sites. By posting messages about their products, they can generate desire and interest with a high level of efficiency (Nazir et al., 2020).

While social media offers a multitude of benefits, including connecting us with loved ones, providing information and entertainment (Hruska & Maresova, 2020), fostering community building (Askool, 2013), and enhancing communication, social connection, and even technical skills (Care, 2011), our engagement with it can also create potential concerns and impact our well-being (Askool, 2013).

Concerns regarding the impact of social media on mental health and well-being are steadily rising. The relationship between social media exposure and well-being is intricate and multifaceted. A growing body of research suggests that social media use can have both positive and negative consequences for mental health, life satisfaction, and social connectedness.

One of the most concerning negative impacts of social media exposure is its association with mental health. Studies have consistently linked social media use with increased symptoms of depression, anxiety, and loneliness (Primack et al., 2017; Twenge & Joiner, 2020). These effects may be particularly pronounced among adolescents and young people. Sleep quality is another potential victim of social media use. Research suggests a correlation between increased time spent on social media and poorer sleep quality (Hale & Guan, 2015; Woods & Scott, 2016). This association is likely due to the blue light emitted from electronic devices, which can disrupt sleep patterns.

Primack et al. (2017) provided concerning evidence, demonstrating that adolescents who exceeded two hours of daily social media use were more likely to report depression and anxiety symptoms compared to those using social media for less than 30 minutes a day. Notably, the association was stronger for girls. The researchers propose several potential mechanisms explaining this link. Social media use might contribute to social comparison, cyberbullying, and sleep deprivation—all factors previously associated with mental health issues in

adolescents.

Further solidifying the link between social media and mental health concerns, a 2019 study by Hinduja and Patchin (2019) involving over 6,000 adolescents revealed a correlation between increased social media use and reported cyberbullying victimization. This victimization, in turn, is associated with a range of negative mental health outcomes, including depression, anxiety, and suicidal thoughts.

Research consistently demonstrates a correlation between increased social media use and negative emotions such as envy, loneliness, and depression (Twenge & Campbell, 2019; Kross et al., 2013; Care, 2011). Kross et al. (2013) employed a reliable method known as experience-sampling to track participants' Facebook use and well-being in real-time over two weeks. Their findings revealed an association between frequent Facebook use and a decline in both short-term mood and long-term life satisfaction.

Despite the potential negative consequences, social media exposure can also yield positive benefits for well-being. For example, social media platforms facilitate connection with friends and family residing far away (Burke & Kraut, 2011). Highlighting this advantage, Kearns and Whitley's (2019) recent study investigated internet use among 3,804 adult householders in disadvantaged communities within Glasgow, UK. Their findings revealed that internet users were less likely to report feelings of loneliness and exhibited higher mental well-being scores.

Kraut et al. (2018) offered a contrasting perspective, demonstrating that social media use can promote well-being when used for positive purposes. Their study found that individuals, particularly older adults, who shared positive content and experiences on social media reported higher life satisfaction and well-being compared to those who did not. This effect was amplified for older adults with fewer close relationships offline, suggesting that social media can help bridge social gaps and combat loneliness. Additionally, social media can serve as a valuable source of information and support.

Research paints a complex picture regarding the relationship between social media exposure and well-being. Evidence suggests that social media use can exert both negative and positive influences on our mental health, sleep quality, and social connections. Several potential mechanisms underlie how social media exposure impacts well-being. Social comparison, which will be explored in the next paragraph, is one of the most extensively studied mechanisms. Consequently, despite some ambiguity regarding the direction of causality, we posit that social media's influence on well-being is multifaceted and depends on factors such as usage patterns and content type.

H1: Social media usage will be negatively associated with well-being (H1).

2.2 Social Media and Social Comparison

Social comparison, a natural human tendency, involves evaluating ourselves in relation to others (Buunk & Gibbons, 2007). Driven by the fundamental need for self-assessment, this behavior is well-documented (Festinger, 1954; Usmani & Ejaz, 2020). Social comparisons can be upward, where we compare ourselves to someone perceived as superior, or downward, where we compare ourselves to someone perceived as less successful.

Research suggests a positive correlation between social media use and increased social comparison and envy, which can lead to negative self-evaluations and dissatisfaction with one's own life (Ozimek & Bierho , 2016; Meshi et al., 2015). For instance, an individual who constantly compares themselves to seemingly wealthy, attractive, and successful celebrities portrayed on social media may develop feelings of inadequacy and dissatisfaction with their own life.

Social media, particularly celebrity marketing, can exacerbate social comparison by bombarding us with a constant stream of information about others' successes (e.g., travel, possessions, achievements). Liu et al.'s (2020) systematic review supports this notion, demonstrating a positive correlation between social media use and increased social comparison and envy, ultimately leading to negative self-evaluations and dissatisfaction with one's own life.

Social media platforms have certainly facilitated connection and information sharing, but this ease of comparison has also amplified its negative consequences. Studies consistently show that increased social media use correlates with feelings of inadequacy, envy, and dissatisfaction with one's own life.

Thus: H2: Social media usage will be positively associated with social comparison (H2).

2.3 The Role of Social Media in Promoting Materialism

By constantly exposing users to curated content featuring luxurious lifestyles and expensive possessions, social

media can cultivate materialism and upward social comparison. Individuals are flooded with idealized portrayals of happiness and success, often heavily reliant on material goods (Vignoles et al., 2018). This relentless exposure can trigger feelings of inadequacy and a yearning to acquire similar possessions in pursuit of perceived status and fulfillment.

Social media algorithms further exacerbate the issue. Designed to exploit user vulnerabilities and preferences, they deliver targeted advertising that reinforces materialistic values (Kokinski et al., 2013). Influencers, wielding significant power over their followers, strategically promote products and curate their online lives to cultivate materialistic aspirations. This often blurs the lines between reality and advertising (Djafarova, 2017). Consequently, a powerful environment is created where social pressure and the desire to conform to idealized online personas fuel the acquisition of branded goods and experiences. This perpetuates a cycle of consumption and dissatisfaction (Kavanagh et al., 2023).

Research supports these concerns, demonstrating a positive correlation between social media use and materialism, particularly among adolescents and young people (Kavanagh et al., 2023; Ozimek et al., 2024). Increased social media exposure has been linked to higher levels of materialism, which in turn can negatively impact mental health and well-being (Twenge & Campbell, 2018; Ozimek et al., 2024). Furthermore, research suggests that social media-induced materialism can lead to impulsive buying behavior and unsustainable consumption patterns (Islam et al., 2018).

H3: Social media usage will be positively associated with materialism level.

2.4 Materialism and Well-Being

The term Materialism refers to the importance of possessions in a person's life (Wang, Liu, Jiang, & Song, 2017) and often associated with acquisition centrality, an excessive emphasis on material objects (Goldsmith & Clark, 2012). The materialism was interpreted from different perspectives in different disciplines. We can distinguish between two main approaches to materialism in the literature review: the first interpreted materialism as a personality trait while the second regarded it as personal values.

The second, and more widely accepted, approach views materialism as the personal values that accentuate the ownership of material goods (Richins & Dawson, 1992; Kasser & Ryan, 1996; Burroughs & Rindfleisch, 2002). Richins and Dawson (1992) developed the materialism values scale (MVS) that was used later in numerous studies. According to their conceptualization, materialism is a tridimensional construct that incorporate: material or acquisition centrality (the degree to which individuals place possessions in the center of their life), material happiness (the belief that possessions of materials bring happiness and well-being) and material success (the degree to which people consider possession as determinant for judging success). In our research we will treat materialism as a set of personal values.

Materialism leads consumers to spend excessive amount of their incomes into acquiring goods (Goldsmith & Clark, 2012). The main motives behind materialism behavior are the desire for status or prestige (and Johnson Vigneron, 1999; Shafer, 2000; Goldsmith & Clark, 2012), the desire to gain social appreciation and to reflect financial success (Kasser, 2002; Kasser, Ryan, Couchman, & Sheldon, 2004). Individuals with high degree of materialism care more than others to appear successful, to maintain their sense of self-esteem, to increase their attractiveness and their well-being. Consequently, they are expected to treat goods as one of the channels to reach happiness and self-satisfaction, since money enables them to reach the desirable life standards (Richards, 2016).

Materialists' desire for status, social appreciation, and financial success leads them to spend excessive amounts of money on goods, which can have a negative impact on their well-being. Well-being is a broad concept that encompasses a variety of factors, including life satisfaction, happiness, and mental health.

A large body of research has examined the relationship between materialism and well-being. The findings are generally consistent, showing that materialism is negatively associated with well-being (Valkenburg, 2022). A growing body of literature showed evidence that materialistic people may suffer from a lack of happiness due to an excessive centrality to possessions (Jiang et al., 2016). Materialistic orientation is even assumed to be automatically associated with materialistic depression (Azibo, 2013).

Schmitt (2014) suggests that materialistic individuals might prioritize acquiring possessions over investing in relationships and experiences, leading to isolation and decreased happiness in the long term. Dienes and Fujiwara (2011) argue that materialism can lead to a hedonic treadmill, where the pursuit of possessions brings only temporary satisfaction, requiring constant acquisition for fulfillment.

A recent meta-analysis by Dittmar et al. (2014) supports this negative relationship between materialism and

well-being. Analyzing 259 studies with 753 effect sizes, they found a negative association between individuals' materialistic orientation and subjective well-being. The meta-analysis found that materialism was negatively associated with life satisfaction, happiness, and mental health, even after controlling for other important factors such as income, education, and social support (Dittmar et al., 2014). This means that people who place a high importance on material possessions tend to have lower levels of well-being than those who place less importance on possessions.

The negative relationship between materialism and well-being has been found in a variety of studies, including studies of people from different cultures and socioeconomic backgrounds (Belk, 1985, Richins & Dawson, 1992; Kasser & Rayen 1993; Dittmar et al., 2014). It is important to note that the relationship is not deterministic. Not all materialistic people have low well-being, and not all people with low well-being are materialistic. However, the research suggests that materialism is generally associated with lower levels of well-being.

Thus: H4: Materialism will be negatively associated with well-being (H4).

2.5 The Mediating Role of Materialism Between Social Media Use and Well-Being

Building on prior research (e.g., Vignoles et al., 2018) highlighting the complexity of social media's impact on well-being, this study examines the mediating role of materialism. Research suggests that exposure to social media's curated content, showcasing idealized lifestyles and possessions, can contribute to increased materialistic values (Twenge & Campbell, 2018). This link arises from the constant social comparison and envy fueled by such content (Kavanagh et al., 2017). Feelings of inadequacy and dissatisfaction can then translate into increased materialistic desires, ultimately impacting well-being through reduced life satisfaction, heightened stress and anxiety, strained relationships, and compulsive consumption. While social media offers undeniable benefits, understanding materialism's mediating role highlights the need for mindful social media use and interventions to promote well-being, especially for individuals vulnerable to materialistic tendencies.

Thus, we hypothesized that:

H5: Materialism mediates the relationship between social media usage and well-being (H5).

2.6 The Mediating Role of Social Comparison Between Social Media Use and Well-Being

Social media platforms, by presenting curated portrayals that showcase idealized versions of reality, can exacerbate negative social comparison tendencies (Przybylski et al., 2013). This focus on idealized portrayals can lead to frequent upward social comparison and negative self-evaluations, potentially contributing to depressive symptoms (Verduyn et al., 2020). Upward social comparison is often detrimental to happiness, as comparing oneself to someone perceived as "better off" can lead to a cascade of negative emotions: envy, feelings of inadequacy, and ultimately, decreased self-esteem (Brickman & Campbell, 1971; Chou & Edge, 2012). Research suggests users tend to perceive others' lives as better than their own, further amplifying these negative effects.

Thus, we hypothesized that:

H6: Social comparison will negatively influence the happiness level (H6).

H7: Social comparison mediates the relationship between social media usage and well-being (H7).

3. Methodology

3.1 Research Design

This study aims to investigate the impact of social media usage on well-being, materialism, and social comparison in Saudi Arabia. In particular, we are interested in examining how the frequency of social media platform usage relate to these variables. We hypothesize that increased social media use, especially on platforms focused on image sharing (Like Facebook, Instagram and YouTube), will lead to increased social comparison, which in turn will promote materialistic values and negatively impact well-being. To test these hypotheses, we conducted an online survey using close-ended questionnaires. Data will be analysed using SPSS, AMOS26 and Hayes Process Macro 4.0 for correlations and mediation analysis.

3.2 Population and Sample

To investigate social media's influence within the Saudi Arabian context, we recruited participants residing in Riyadh, the country's most populous city. This location provided a diverse sample with high internet penetration rates, relevant to our research focus. A convenience sampling approach was employed due to time and cost constraints, allowing for efficient data collection through online surveys. We acknowledge the potential for bias inherent in convenience samples, such as the underrepresentation of specific demographics less likely to

participate in online surveys. To mitigate this limitation, we employed a snowball sampling technique within relevant online communities, expanding our reach to a wider range of participants. The final sample consisted of 250 participants. This sample size was chosen considering limitations in resources and the feasibility of data collection within the designated timeframe. While a larger sample might offer increased generalizability, the current sample size provides sufficient statistical power to explore the research question and allows for a focused analysis. The majority of participants were male (63.6%) and aged between 21 and 30 (74.0%). Most held a Bachelor's degree (58.8%) and were single (81.6%).

3.3 Data Collection Instrument

The primary data were collected through an online survey distributed to residents of Riyadh, Saudi Arabia. The sample size was 250. The survey consisted of 21 questions designed to measure four key constructs: social media usage frequency, materialism, happiness, and social comparison. A 4-point scale (1 = a lot, 4 = none) adapted from Churchill and Moschis (1979) was used to assess social media usage frequency. Richins' (1987) scale was employed to measure materialism. Participants responded on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Happiness was assessed using a 7-point Likert scale (1 = not at all happy, 7 = very happy) adapted from Lyubomirsky and Lepper (1999). This scale consisted of four items. A 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) based on six items from Kasser et al. (2004) was used to measure social comparison.

To ensure the questionnaires' meaningfulness and alignment with the original instruments, a two-step approach was employed: facial validity check, the questionnaires were presented to three marketing professors for a facial validity check. These experts reviewed the items related to each concept and unanimously agreed that the items adequately defined the intended constructs, confirming the content validity of the questionnaires.

To further refine the questionnaires, we conducted a pre-test with 20 respondents. This provided valuable feedback on the clarity and comprehension of the items. Based on the pre-test results, we made some corrections and improvements to unclear terms, ensuring that the questionnaires were easily understandable and consistent in their presentation. This pre-testing step ensured that the questionnaires were user-friendly and optimized for data collection.

3.4 Data Analyses Strategy

To conduct structural equation modeling (SEM) on the raw data, our research utilized IBM® SPSS® Amos. Compared to traditional multivariate statistics or solely relying on multiple regression models, Amos enables the construction of more intricate and realistic models that capture complex relationships between variables. Amos employs maximum likelihood estimation as the default parameter estimation method. Following Anderson and Gerbing's (1988) two-stage approach, we first assessed the measurement model. This crucial step involved verifying whether the observed variables effectively represented the underlying latent constructs. Subsequently, we evaluated the structural model to examine the hypothesized network of relationships among the variables.

To explore potential mediating effects within the model, we employed the bootstrapping method, as recommended by Preacher and Hayes (2004). This approach offers advantages over other techniques. Bootstrapping has been shown to possess superior statistical power in detecting significant mediation processes while maintaining acceptable control over Type I errors (Cheung & Lau, 2008).

Table 1. Sociodemographic characteristics of participants (N=250)

Sample characteristics	Frequency (N)	Percentage (%)
Gender		
Male	159	63.6
Female	91	36.4
Age		
21-30	185	74
Under 20	34	13.6
31–40	10	4
41–50	13	5.2
51–60	7	2.8
61+	1	0.4
Education		
Bachelor's degree	147	58.8
Some college credit, but no degree	27	10.8
High school degree or equivalent (e.g., GED)	32	12.8
Less than high school degree	28	11.2
Master's degree	5	2
Professional degree	3	1.2
Doctorate degree	7	2.8
Others	1	0.4
Marital Status		
Single, never married	204	81.6
Married or domestic partnership	26	10.4
Divorced	6	2.4
Separated	2	0.8
Widowed	12	4.8

4. Results

4.1 Measurement Model

Our research aimed to develop and validate a questionnaire measuring three key constructs: social comparison, materialism, and happiness. To ensure the quality of data collection, we evaluated the questionnaire's internal consistency and construct validity through rigorous statistical procedures.

To ensure the robustness of the structural model, we employed CFA (Hair et al., 1998) by AMOS26 for three latent factors: Social Comparison, Materialism, and Happiness. Content validity was established through rigorous literature review and pilot testing.

Convergent validity was assessed via factor loadings, Cronbach's alpha (≥ 0.7), composite reliability (≥ 0.7), and average variance extracted (≥ 0.5), demonstrating adequate internal consistency and construct distinctiveness, as evidenced by benchmarks set by Fornell and Larcker (1981) and Hair et al. (2006).

The CFA confirmed the proposed three-factor structure of the questionnaire. The model demonstrated good fit to the data with key indices exceeding recommended thresholds (RMSEA > 0.08, GFI > 0.80, SRMR < 0.08) and respectively (X^2/df = 204.1, RMSEA = 0.096, p < 0.001, GFI = 0.892, SRMR = .031). Following recommended criteria by Hair et al. (2006) (factor loadings exceeding 0.5), we refined the scales by removing items with cross-loading or low loadings. The CFA results revealed that all items for the social comparison construct loaded cleanly onto their intended dimensions. However, for the materialism and happiness scales, we removed items exhibiting cross-loading (0.75 or higher on multiple factors) or low loading. This resulted in the deletion of two materialism items and one happiness item to guarantee a streamlined questionnaire with enhanced clarity and focus.

Table 2 showed that the factor loadings of indicators on their respective constructs in the CFA model were above

0.7. The CR values for our three scales were above the cutoff value of 0.7 ranging from 0.932 to 0.966 and the average variance extracted (AVE) value of each construct scale surpassed the minimum acceptable threshold of 0.5 ranging from 0.820 to 0.827 (Ringle et al., 2018). Thus, results provided evidence of good convergent validity.

Additionally, employing the Fornell-Larcker criterion (1981) discriminant validity was checked by comparing the correlations among constructs and the square root of the AVE of each construct. Table 3 shows the square roots of the AVE of all constructs (highlighted in bold in Table 3) are greater than the correlations between all constructs. Thus, results suggested a good discriminant validity. Our extensive analyses provide strong evidence for the construct validity and internal consistency of the revised questionnaire. All three scales obviously capture their intended constructs and offer reliable data for further research or application. This validates the model's effectiveness.

Table 2. Confirmatory Factor Analysis (CFA) results of study measures

	Item	Loading factor	AVE	MSV	Cronbach Alpha	CR
Social Comparison	SC1	.902	0.825	0.670	0.965	0.966
	SC2	.905				
	SC3	.886				
	SC4	.912				
	SC5	.935				
	SC6	.908				
Materialism	M1	.942	0.827	0.786	0.949	0.955
	M2	.921				
	M3	.909				
	M4	.862				
Happiness	H1	.917	0.820	0.786	0.930	0.932
	H2	.912				
	H3	.887				

Table 3. Means, standard deviations, and correlations among constructs (N = 250)

Construct	Mean	SD	1	2	3
Social Comparison	3.273	0.908	**0.908**		
Materialism	3.49	0.910	.816	**0.909**	
Happiness	3.362	0.905	.818	.886	**0.905**

Note. All correlations are significant at p < 0.01.

4.2 Testing the Hypotheses

As we have a Parallel mediation model (2 mediating effects), we will use Hayes Process Macro with SPSS to test for simple and parallel mediation. Table 4 shows all the direct, indirect and total direct effect paths or relationship tested in our study. Hypotheses 1, 2, 3, 4 and 6 represents the direct relationships in our model, while hypothesis 5 and 7 represent the indirect relationships tested in our research.

Table 4 shows that there is insufficient evidence to conclude that social media has a statistically significant direct effect on happiness ($p \geq 0.05$). The first hypothesis (testing H1 between social media and Happiness) is rejected. This means that while the coefficient (b = 0.07) suggests a slightly positive association, it's not statistically strong enough to definitively say that social media directly increases or decreases happiness.

The second regression (testing H2 between social media and social comparison) shows that social media is a significant positive predictor of social comparison (b = 0.53, s.e. = 0.05. $p < 0.05$). The coefficient reflects the positive direct effect of social media on social comparison within the path model.

A statistically significant positive relationship was observed between materialism and happiness (b = 0.50, SE = 0.05, $p < 0.05$). This suggests that individuals who prioritize material possessions tend to report higher levels of happiness (H3). We hypothesized a negative relationship between materialism and happiness. However, a statistically significant positive correlation was found, indicating partial support for H3 ($p < 0.05$). This unexpected finding suggests a more complex relationship between these variables and warrants further investigation.

The regression (testing H4 between social media and materialism) shows that social media is a significant

positive predictor of materialism (b = 0.59, s.e. = 0.05. p < 0.05). The coefficient reflects the positive direct effect of social media on materialism within the path model.

The coefficient of SCOM as independent variable and Happiness as dependent variable is (b = 0.31, p < 0.05), is statistically significant. This indicates that individuals who engage in more social comparison (comparing themselves to others) tend to report higher levels of happiness. We hypothesized a negative relationship between social comparison and happiness (H6). Contrary to our prediction, a statistically significant positive correlation was observed (p-value < significance level). This indicates that our hypothesis (H6) is partially supported, as a relationship between social comparison and happiness was found, but the direction of the relationship was unexpected.

The total indirect effect is statistically significant as 0 falls outside the confidence Intervale (0.37 and 0.55). The indirect effect of social media on happiness through the mediation of social comparison is statically significant as 0 not falling within the confidence interval (0.10 and 0.24) signifies a statistically significant indirect effect mediated by social comparison. This means there's a strong possibility that social comparison plays a significant role in the indirect relationship between social media and happiness (H7 confirmed). This suggest that Individuals who use social media more might engage in greater social comparison, and this increased social comparison might be what ultimately impacts their reported happiness levels.

The indirect effect of social media on happiness through the mediation of materialism is statically significant as 0 not falling within the confidence interval (0.21 and 0.38) signifies a statistically significant indirect effect mediated by materialism. This means there's a strong possibility that social comparison plays a significant role in the indirect relationship between social media and happiness (H5 confirmed). This implies that social media use might indirectly influence happiness through the mediating variable of materialism.

This study explored the mediating role of social comparisons (SCOM) and materialism (Mat) in the relationship between social media use (SM) and happiness (Happ). The results support full mediation. While directly, SM had no significant impact on happiness, the total indirect effect was significant, indicating the influence of SM operates through SCOM and Mat. Both mediating variables individually showed significant indirect effects, and their combined effect fully accounted for the total indirect effect. This confirms that SCOM and Mat completely mediate the relationship between SM and happiness, meaning the influence of social media on happiness is entirely explained by its impact on social comparisons and materialism.

These findings suggest that the influence of SM on happiness operates entirely through the mediating effects of social comparisons and materialism.

Table 4. Direct, indirect and total effect results

	Relationship	Direct effect				Indirect effect	Total effect	
		Coeff (Effect Size)	p-value	T value	Decision	H5 : SM---SC---Happ	Effect Size	T value
H1	$SM \rightarrow Happ$	0.07 ns	.05	1.96	p ≥ 0.05 Rejected	b=0.16	p = .05	
H2	$SM \rightarrow SC$	0.53**	.00	10.34	Supported	SE=0.04, CI[0.10,0.24]		
H3	$MAT \rightarrow Happ$	0.50**	.00	10.12	Partially Supported	Supported H7 : SM---MAT---Happ		
H4	$SM \rightarrow MAT$	0.59**	.00	11.88	Supported	b=0.29		
H6	$SC \rightarrow Happ$	0.31**	.00	6.42	Partially Supported	SE=0.04, CI[0.21, 0.38] Supported		
							.07	1.96

Note. SM: social media usage , SC: social comparison, MAT: materialism level, Happ: Happiness, SE: standard error. CI: confidence interval, **: P value < 0.01, *: P value < 0.05, ns: not significant.

5. Discussion

This study investigated the intricate relationship between social media use and happiness, exploring two potential mediating factors: social comparison and materialism. Building upon prior research suggesting a positive association between social media use and materialism (Kavanagh et al., 2023), we hypothesized that social media use indirectly influences happiness through increased materialism. Results revealed a positive association between social media usage level and materialism, which aligns with previous studies (Kavanagh et al., 2023). Additionally, our findings are consistent with Ozimek et al. (2024), who suggest that social media can foster increased materialism and materialistic values, potentially through influencer marketing and exposure to idealized portrayals. Unexpectedly, a positive relationship emerged between materialism and happiness. While

this finding might seem counterintuitive, it's important to consider the vast body of research on this topic and its diverse perspectives. For instance, Duroy et al. (2000) propose that materialism can enhance happiness through social comparison and achieving social status via possessions.

On the other hand, our findings align with the notion that social media use is a significant predictor of increased social comparison, particularly upward social comparison (comparing oneself to those perceived as better off). This is supported by extensive research (Ozimek & Bierho, 2016; Ozimek et al., 2024; Meshi et al., 2015) that has established a positive correlation between social media use and upward social comparison, especially among young people. These studies found significant associations between daily social media use and upward comparisons. The design of social media platforms, the type of content they promote, and the psychological mechanisms involved all contribute significantly to the claim that social media use predicts increased social comparison, particularly the upward variety.

Contrary to our hypothesis, increased social comparison was associated with higher reported happiness. While a substantial body of research highlights the negative consequences of social comparison, particularly upward comparisons (Feinstein, 1990; Gibbons & Buunk, 1997), recent studies suggest a more nuanced perspective.

Our findings align with Brown and Jones' (2015) research, which suggests that social comparison is not inherently negative and can, under certain circumstances, contribute to increased happiness. This could be explained by downward comparisons, where individuals compare themselves to those perceived as worse off, leading to a boost in self-esteem and feelings of gratitude, ultimately enhancing happiness. Additionally, social comparisons occurring within supportive and encouraging environments can foster feelings of connection and belonging, potentially contributing to greater happiness (Park & Dunkel-Schetter, 2010).

While our analysis revealed no statistically significant direct association between social media use and happiness, both social comparison and materialism emerged as significant indirect effects in this relationship. This suggests that social media's influence on happiness operates indirectly through these two mediating factors. Furthermore, the combined effect of social comparison and materialism fully accounted for the indirect relationship between social media use and happiness. This indicates that social media's indirect effect on happiness can be entirely explained by its influence on social comparison and materialism. Our findings resonate with several studies in the field. Kladar, Griskevicius and Leach (2020) suggest that exposure to curated social media content can cultivate materialism, leading to a focus on possessions and feelings of inadequacy, ultimately decreasing happiness. Similarly, Hunt et al. (2018) found that individuals who prioritize material possessions reported lower life satisfaction, suggesting that materialism hinders happiness.

The social comparison process on social media can also negatively impact happiness. Przybylski et al. (2013) linked increased Facebook use with decreased life satisfaction due to upward social comparison, where individuals compare themselves to the seemingly "better" lives portrayed on social media platforms. Likewise, Tian et al. (2020) demonstrated that fear of missing out (FOMO), fueled by social comparisons on social media, can negatively impact subjective well-being.

Our research aligns with existing literature, suggesting that social media use might not directly impact happiness but can indirectly influence it through promoting social comparison and materialism. The curated reality presented on social media platforms fosters materialistic aspirations and upward social comparison, ultimately impacting happiness through these indirect pathways.

These findings highlight the importance of shifting the focus from solely investigating direct correlations to understanding the underlying mechanisms through which social media affects well-being. By examining these mediating factors, we gain a more nuanced perspective on the complex relationship between social media use and happiness.

6. Implications

6.1 Theoretical Implications

This study challenges the prevailing assumption of a direct negative impact of social media on happiness. Our findings suggest a more nuanced perspective, revealing that social media's influence on happiness is indirect and mediated by social comparison and materialism. Further research is necessary to explore the causal mechanisms underlying these relationships.

While our study provides valuable insights into the indirect effects of social media on happiness through the lens of materialism and social comparison, future research can delve deeper by considering several additional factors: Future studies could distinguish between various types of social media use to better understand their impact on happiness. This might involve differentiating between passive scrolling (consuming content) and active

engagement (interaction and contribution). The impact might differ between passive scrolling, where users simply consume content, and active engagement, where they interact and contribute.

In addition, exploring how personality traits influence how individuals navigate social media, engage in social comparison, and ultimately experience happiness is crucial. Moreover, implementing longitudinal studies would allow researchers to establish causality, definitively showing whether social media use directly affects happiness over time. Such studies could also track changes in happiness over an extended period.

By incorporating these suggestions and building upon the current findings, future research can contribute to a more comprehensive understanding of the intricate interplay between social media and happiness.

6.2 Practical Implications

Companies must acknowledge the intricate relationship between social media use, happiness, and social comparison, particularly its implications for online strategies. While our research did not identify a direct negative impact of social media on happiness, it revealed that social comparison, influenced by social media use, plays a significant role. Companies can cultivate positive online communities that foster meaningful connections and supportive interactions among users. This can help mitigate the potential negative aspects of social comparison by shifting the focus from self-comparison to building positive social bonds.

By promoting personal values beyond materialism in their digital brand content, companies can encourage social connection, self-acceptance, and meaningful experiences. This can provide alternative sources of satisfaction and reduce the influence of materialistic aspirations. Companies should strive to offer content that promotes self-acceptance and features realistic portrayals of individuals and experiences. This can counteract the idealized portrayals often present on social media and reduce the pressure users might feel to conform to unrealistic standards.

By recognizing the indirect influence of social media on happiness through social comparison, companies can develop strategies that promote responsible online engagement and prioritize the well-being of their users. This approach can contribute to building a more positive and supportive online experience for everyone involved.

7. Conclusion

This study investigated the potential mediating roles of social comparison and materialism in the relationship between social media use and happiness. Contrary to our initial hypothesis, social media use did not have a significant direct effect on happiness. However, both social comparison and materialism emerged as significant mediating factors, fully explaining the indirect influence of social media on happiness. These findings highlight the importance of social comparison and materialism in understanding how social media use can indirectly impact happiness.

This study offers a valuable contribution to the understanding of the nuanced relationship between social media, happiness, and social comparison and materialism, particularly within a Saudi cultural context. Identifying social comparison and materialism as mediating factors provides deeper insights into the mechanisms at play when social media influences well-being.

Future research should delve deeper into the underlying mechanisms driving these indirect effects. Additionally, investigating potential moderators that may influence the direction and strength of these relationships is crucial. Furthermore, exploring the potential negative consequences of social comparison and materialism on well-being, beyond the scope of this study, would provide a more comprehensive understanding of the complex interplay between social media, these mediating factors, and individual happiness.

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