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# A cross-sectional study on the association between social media addiction, body image, and social comparison among young adult Filipino women aged 18-25 years old in Metro Manila

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## Abstract

**Introduction:** The Philippines tops globally for time spent on social media. This study aimed to explore the association between social media addiction, body image, and social comparison among young adult Filipino women aged 18-25 years old in Metro Manila.

**Methods:** The Social Media Addiction Scale (SMAS), Body Image Questionnaire (BIQ), and Iowa-Netherlands Comparison Orientation Measure (INCOM) were used to assess social media addiction, body image, and social comparison, respectively. PRR (CI 95%) assessed the association between SMA and BI, and SMA and SC.

**Results:** Majority of participants had social media addiction (91.11%), while most reported a neutral body image (87.64%). Additionally, more than half of the participants exhibited a high tendency towards social comparison (53.15%). The study found a positive association between social media addiction and negative body image, as well as a significant positive association between social media addiction and social comparison. Obesity showed a significant positive association with negative body image perception, while being overweight was significantly associated with a lower likelihood of having a positive body image. Spending at least 4 hours per day on social media was significantly associated with a higher tendency towards social comparison.

**Conclusion:** These findings suggest the presence of social media addiction among young adult Filipino women and its association with body image and social comparison. Awareness of these associations can contribute to the development of targeted interventions and educational programs to promote healthier social media use and positive body image among young adults.

**Key words:** Social media addiction, body image, social comparison

Social media has become a pervasive aspect of modern society, with an increasing number of

individuals engaging in its use. In the Philippines, social media usage is particularly prevalent, with approximately 76 million Filipinos actively using social media, accounting for a significant 71% of the entire population. These users spend an average of 4 hours

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per day across various social media platforms. Notably, the largest group of social media users in the country falls within the 18-24 age range, and females exhibit higher participation rates than males on platforms such as Twitter, Snapchat, Instagram, and Facebook. Young Filipino women emerge as the primary users and consumers of social media, which serves as a modality for them to express their self-identity and social identity. However, the content shared on social media platforms can contribute to both negative and positive perceptions, particularly regarding body image and social comparison.<sup>1</sup>

Despite the widespread use of social media in the Philippines, there is a dearth of information regarding the association between social media addiction and body image and social comparison. Existing studies have independently examined these variables, but their interrelationships remain largely unexplored. Therefore, this research aimed to bridge this gap by investigating the association between social media addiction, body image, and social comparison among young adult Filipino women aged 18-25 years in Metro Manila.

This study aimed to contribute to the understanding of the intricate relationship between social media addiction, body image, and social comparison among young adult Filipino women in Metro Manila. The findings will shed light on the potential influences of social media on body image perceptions and social comparison tendencies, providing valuable insights for researchers, policymakers, and healthcare professionals. Additionally, the study explored the impact of confounding variables on these associations, enhancing one's understanding of the multifaceted nature of these phenomena.

## Methods

This research employed an analytical cross-sectional study design to investigate the association between social media addiction, body image, and social comparison among young adult Filipino women aged 18 to 25 years living in Metro Manila. The participants were selected using non-probability convenience sampling. Data collection was conducted from June 16, 2021, to September 25, 2021.

The following measurement tools were utilized in the study: Social Media Addiction Scale (SMAS), Body Image Questionnaire (BIQ) and Social Comparison.

## Social Media Addiction Scale (SMAS)

The 41-item SMAS, originally developed to detect social media addiction among university students aged 17 to 45 years old, was used to assess the level of social media addiction. Participants responded to items on a five-point Likert scale ranging from 1 ("Never") to 5 ("Always"). Higher scores indicated a higher degree of social media addiction. The manual for the SMAS categorized scores from 41 to 73 as "no addiction" and scores from 74 to 205 as "with addiction"<sup>2</sup>

## Body Image Questionnaire (BIQ)

The 19-item BIQ was employed to evaluate participants' body image. Items were answered on a five-point Likert scale ranging from "Often" to "Very Much." The scoring of the BIQ involved categorizing items as favorable or unfavorable based on the BIQ manual. Favorable items (1, 6, 7, 9, 10, 12, 14, 16, and 18) were scored from 1 to 5, while unfavorable items (2, 3, 5, 8, 11, 13, 15, 17, and 19) were reverse-scored. Additionally, item 4 was reverse-scored specifically for female respondents. Total scores were classified as follows: 19 to 38 represented "negative body image," 39 to 75 represented "neutral body image," and 76 to 95 represented "positive body image".<sup>3</sup>

## Social Comparison

Iowa-Netherlands Comparison Orientation Measure (INCOM): The 11-item INCOM was utilized to assess participants' tendency to engage in social comparison. Items were responded to on a five-point Likert scale ranging from "I disagree strongly" to "I agree strongly." Scores higher than the mean indicated a higher tendency toward social comparisons, while scores lower than the mean indicated a low tendency toward social comparisons. The INCOM demonstrated good internal consistency ( $\alpha=0.83$ ), with all 11 items yielding corrected item-total correlations greater than 0.36. Additionally, the measure showed criterion validity, as it exhibited correlations ( $r=0.33-0.48$ ) with the tendency to socially compare.<sup>4</sup>

## Data Analysis

The responses from each participant were encoded in a Google Spreadsheet and analyzed using IBM SPSS Statistics Software (Version 25). Descriptive statistics,

including frequencies, proportions, and mean scores on the SMAS, BIQ, and INCOM, were calculated. The prevalence rate ratio was employed to test the association between independent and dependent variables with a 95% confidence interval. Furthermore, associations between confounding variables (BMI, duration of social media use, frequency of social media use, average time spent on social media daily, and monthly income) and the dependent variables were examined. Inferential statistics, such as the Chi-square or Fisher's exact test, were used to assess the statistical significance of associations between dependent and independent variables. A p-value of less than 0.05 was considered statistically significant.

Ethical clearance for this study was obtained from the Ethics Review Committee (ERC) of the UERMMMCI Research Institute for Health Sciences (RIHS).

## Results

A total of 461 participants took part in this research, consisting of females aged 18 to 25 years old. Participants who were currently pregnant and/or had medical conditions and/or disabilities were excluded.

Table 1 presents the demographic profile of the research participants. The mean age of the participants was 21.64 years (SD = 1.90). The majority of participants were single (98.7%) and college graduates (70.9%), while only 22.1% were employed. Among the employed participants, 20.6% reported earnings above the monthly minimum wage.

The BMI classification of the participants is summarized in Table 2. According to the WHO classification, the majority of participants (63.77%) had a normal body mass index.

Regarding social media use, the study found that the majority of participants reported having used social media for more than 6 years (93.9%). Additionally, nearly all participants (99.8%) reported using social media on a daily basis, indicating the pervasive and regular nature of their social media engagement. Furthermore, a significant proportion of participants (76.56%) reported spending more than 4 hours per day on social media platforms.

Messenger was identified as the most accessed social networking site, with a staggering 98.9% of participants using it. Facebook and YouTube followed closely, with 97.8% and 93.3% of participants accessing these platforms, respectively.

**Table 1.** Profile of participants.

Characteristics	Frequency	Percentage
Marital Status		
Single	455	98.7
Cohabitation	3	0.7
Married	2	0.4
Separated	1	0.2
Educational Attainment		
College	327	70.9
High School	93	20.2
Graduate School	41	8.9
Occupation		
Student	333	72.2
Working	102	22.1
Non-working	26	5.6
Income per month (in Php)		
Non-working	332	72.0
>16,000 (Above monthly minimum wage)	95	20.6
<16,000 (Below monthly minimum wage)	34	7.4

**Table 2.** Body mass index of participants.

Characteristics	Frequency	Percentage
BMI (kg/m <sup>2</sup> )		
Underweight (<18.5)	62	13.5
Normal (18.5-24.9)	294	63.8
Overweight (25-29.9)	73	15.8
Obese (≥30)	32	6.9

The primary reasons for using social media were entertainment, as reported by 98.9% of participants, followed by keeping in touch with family and friends (97.6%), and finding information (82%).

The summary of participants' social media use is presented in Table 3.

Based on the results obtained from the Social Media Addiction Scale (SMAS), Table 4 illustrates that out of the 461 participants, a significant majority (91.11%) exhibited signs of social media addiction. Only a small number of participants (41 individuals) did not show indications of social media addiction.

Based on the findings derived from the Body Image Questionnaire (BIQ), it was observed that the majority of participants (87.64%) exhibited a neutral body image. In contrast, only a small number of participants

**Table 3.** Social media use of participants.

Characteristics	Frequency	Percentage
Duration of Social Media Use		
>6 years	433	93.9
4-6 years	28	6.1
Frequency of Social Media Use		
Daily	460	99.8
Weekly	1	0.2
Average Time Spent on Social Media Daily		
>4 hours	353	76.56
<4 hours	108	23.43
Social Networking Sites Used*		
Messenger	456	98.9
Facebook	451	97.8
YouTube	430	93.3
Instagram	424	92.0
Twitter	343	74.4
Discord	301	65.3
Telegram	241	52.3
Tiktok	234	50.8
Viber	203	44.0
LinkedIn	113	24.5
Reddit	102	22.1
Whatsapp	55	11.9
Snapchat	40	8.7
Quora	15	3.3
Others	14	3.0
Purpose of Using Social Media*		
Entertainment	456	98.9
Keep in touch with family and friends	450	97.6
Find information	378	82.0
Social events	270	58.6
Make business and professional contact	180	39.1
Create media content and share opinion	175	38.0
Meeting new people	14	30.8

\*Multiple response question

(6 individuals) were identified as having a negative body image. Table 5 offers a concise summary of the participants' body image assessments.

Table 6 displays the scores obtained from the Iowa-Netherlands Comparison Orientation Measure (INCOM). The results indicate that more than half of the participants (53.15%) demonstrated a high degree of social comparison tendencies.

Tables 7 and 8 present the findings related to the association between social media addiction and body image perceptions. Among participants with social media addiction, only 10.14% reported having a positive body image, while a mere 1.59% indicated a negative body image. In contrast, none of the participants without social media addiction reported a negative body image. Although there was a positive association between social media addiction and negative body image, the results were not statistically significant. However, a statistically significant negative association was observed between social media addiction and positive body image perception.

Furthermore, the study revealed a statistically significant positive association between social media addiction and social comparison tendencies. This suggests that individuals who exhibit addictive behaviors towards social media are more likely to engage in frequent social comparison with others.

In Table 10, among the confounding variables analyzed, only obesity exhibited a statistically significant positive association with negative body image perception. While there were positive associations between negative body image and using social media daily for 6 years and having an income below the minimum wage, these associations were not found to be statistically significant.

**Table 4.** Social media addiction among young adult women in Metro Manila.

Degree of Social Media Addiction	Frequency	Percentage	Mean SMA Score ± SD
With addiction	420	91.11%	114.05 ± 25.33
No addiction	41	8.89%	62.34 ± 7.57

**Table 5.** Body image perception of young adult women in Metro Manila.

Body Image	Frequency	Percentage	Mean BIQ Score ± SD
Neutral body image	404	87.64%	62.19 ± 7.64
Positive body image	51	11.06%	81.29 ± 4.18
Negative body image	6	1.30%	36.83 ± 1.94

**Table 6.** Degree of social comparison of young adult women in Metro Manila.

Degree of Social Comparison	Frequency	Percentage	Mean INCOM Score $\pm$ SD
High Social Comparison	245	53.15%	43.13 $\pm$ 4.78
Low Social Comparison	216	46.85%	31.10 $\pm$ 3.81

**Table 7.** Association of social media addiction and negative body image perception.

		Outcome (n,% within exposure)		PRR (95% CI)	p
		Negative Body Image	Neutral Body Image		
Exposure	With addiction	6 (1.59%)	372 (98.41%)	0	>0.9999
	Without addiction	0	32 (100%)		

**Table 8.** Association of social media addiction and positive body image perception.

		Outcome (n,% within exposure)		PRR (95% CI)	p
		Positive Body Image	Neutral Body Image		
Exposure	With addiction	42 (10.14%)	372 (89.86%)	0.462 (0.2426-0.8804)	0.022
	Without addiction	9 (21.95%)	32 (78.05%)		

**Table 9.** Association of social media addiction and social comparison.

		Outcome (n,% within exposure)		PRR (95% CI)	p
		High Social Comparison	Low Social Comparison		
Exposure	With addiction	236 (56.19%)	184 (43.81%)	2.560 (1.4285-4.5671)	<0.0001
	Without addiction	9 (21.95%)	32 (78.05%)		

**Table 10.** Association of confounders and negative body image.

Characteristics	Body Image		PRR (95% CI)	p
	Negative	Neutral		
BMI (kg/m <sup>2</sup> )				
Normal (18.5-24.9)	2	252	1.000	
Underweight (<18.5)	0	57	0	>0.9999
Overweight (25-29.9)	1	69	1.814 (0.1669- 19.7187)	0.5194
Obese ( $\geq$ 30)	3	26	13.138 (2.2888- 75.4144)	0.0002
Duration of social media use				
>6 years	6	380	$\infty$	>0.9999
4-6 years	0	24		
Frequency of social media use				
Daily	6	403	$\infty$	>0.9999
Weekly	0	1		
Average Time Spent on Social Media Daily				
$\geq$ 4 hours	5	314	1.426 (0.1688- 12.0553)	>0.9999
<4 hours	1	90		
Income per month (in Php)				
Below monthly minimum wage	2	27	$\infty$	0.0703
Above monthly minimum wage	0	79		

Moving on to Table 11, a significant negative association was observed between being overweight and positive body image perception. This suggests that individuals who are overweight are less likely to have a positive body image.

In Table 12, no significant associations were found between the confounding variables and social comparison, except for the average time spent daily on social media. Women who spent at least 4 hours per day on social media were 1.44 times more likely to engage in social comparison behaviors.

**Table 11.** Association of confounders and positive body image.

Characteristics	Body Image		PRR (95% CI)	p
	Negative	Neutral		
<b>BMI (kg/m<sup>2</sup>)</b>				
Normal (18.5-24.9)	40	252	1.000	
Underweight (<18.5)	5	57	0.589 (0.2421-1.4313)	0.2264
Overweight (25-29.9)	3	69	0.304 (0.0968-0.9554)	0.0242
Obese (≥30)	3	26	0.755 (0.2490-2.2903)	0.7797
<b>Duration of Social Media Use</b>				
>6 years	48	380	1.009 (0.3361-3.0313)	>0.9999
4-6 years	3	24		
<b>Frequency of Social Media Use</b>				
Daily	51	403	0.453 (0.0405-5.0623)	>0.9999
Weekly	0	1		
<b>Average Time Spent on Social Media Daily</b>				
≥4 hours	34	314	0.615 (0.3582-1.0557)	0.0794
<4 hours	17	90		
<b>Income per month (in Php)</b>				
Below monthly minimum wage	5	27	0.928 (0.3694-2.3299)	0.8727
Above monthly minimum wage	16	79		

**Table 12.** Association of confounders and social comparison .

Characteristics	Social Comparison		PRR (95% CI)	p
	High	Low		
<b>BMI (kg/m<sup>2</sup>)</b>				
Normal (18.5-24.9)	146	148	1.000	
Underweight (<18.5)	39	23	1.267 (1.0134- 1.5833)	0.0579
Overweight (25-29.9)	41	32	1.131 (0.8959- 1.4278)	0.3197
Obese (≥30)	19	13	1.196 (0.8779-1.6283)	0.2965
<b>Duration of Social Media Use</b>				
>6 years	227	207	0.785 (0.5921- 1.0396)	0.1468
4-6 years	18	9		
<b>Frequency of Social Media Use</b>				
Daily	244	216	0.530 (0.4867-0.5781)	>0.9999
Weekly	1	0		
<b>Average Time Spent on Social Media Daily</b>				
≥4 hours	202	151	1.437 (1.1207-1.8433)	0.0015
<4 hours	43	65		
<b>Income per month (in Php)</b>				
Below monthly minimum wage	17	17	1.033 (0.6956-1.5329)	0.8744
Above monthly minimum wage	46	49		

## Discussion

### Demographics

The participants in this study consisted of Filipino adult women aged 18-25 years, representing the largest age group of active social media users (33%) in the Philippines.<sup>1</sup> They were residents of Metro Manila and were excluded from the study if they were pregnant or affected by any medical conditions. Specifically, targeting females was essential as they constitute the primary users and consumers of social media platforms in the country. The majority of participants reported spending at least 4 hours per day on social media for a period of more than 6 years. The most frequently accessed social networking site was Messenger, followed by Facebook and YouTube. The main purposes for using social media were entertainment, staying connected with family and friends, and gathering information. These findings were consistent with a similar study conducted in 2014, which inadvertently contributed to media dependency among Filipino youth.<sup>5</sup>

Regarding their demographic profile, most participants were single and college graduates. Among the participants who were employed, only 22.1% were college graduates, and the majority of them earned above the monthly minimum wage. This profile provides an overview of the education and employment status of the participants and offers valuable context to understand the impact of social media use on this particular demographic group.

By focusing on Filipino adult women, this study sheds light on the social media habits and preferences of a significant segment of the population in Metro Manila. The insights gained from this research can contribute to a better understanding of the role of social media in shaping body image perceptions and social comparison behaviors among young adult females in the Philippines. Additionally, these findings can inform targeted interventions and strategies aimed at promoting positive body image and healthy social media habits among this specific demographic group.

### Social Media Addiction

Social media addiction, which falls under the umbrella of internet addiction, is characterized by excessive reliance on technology due to the

continuous advancements in digital platforms. This addiction is marked by certain behaviors, such as spending excessive amounts of time on social media and constantly seeking immediate notifications of updates. These behaviors can lead to virtual tolerance, wherein individuals require increasing amounts of time on social media to achieve the same level of satisfaction, virtual communication, where online interactions become more prevalent than face-to-face communication, and virtual problems, where the negative consequences of social media addiction begin to impact daily life.<sup>6</sup>

In the field of research, the Social Media Addiction Scale (SMAS) is commonly utilized to assess social media addiction since there is currently insufficient scientific evidence to diagnose individuals with social media addiction using the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) classification for addiction. The DSM-5 is a widely recognized classification system used by mental health professionals to diagnose various mental health conditions, but it does not yet include specific criteria for diagnosing social media addiction.

The findings of this study revealed that a significant majority of respondents (91.11%) exhibited symptoms of social media addiction. The high prevalence of social media addiction can be attributed to the widespread availability of smartphones and internet access among youth, especially during the pandemic. With limited social activities and increased reliance on electronic devices for communication and entertainment, individuals may have turned to social media as a means of connection and distraction.<sup>7</sup>

The study also identified Messenger as the most frequently used social media platform (98.9%), followed closely by Facebook (97.8%). These platforms served as the primary channels for social media interactions among the participants. Moreover, social media platforms were predominantly utilized for entertainment purposes (98.9%), to maintain connections with family and friends (97.6%), and to gather information (82%). This highlights the multifaceted role of social media in the lives of young adults, serving not only as a source of entertainment but also as a means of staying connected and informed. Additionally, Facebook and Twitter were commonly employed for finding information, entertainment, and interpersonal communication. These platforms offer

a wide range of features that cater to different social and informational needs of users, contributing to their popularity and frequent usage.<sup>8</sup>

The results of this study provide valuable insights into the patterns of social media use and addiction among young adults. The high prevalence of social media addiction underscores the need for awareness and interventions to promote responsible and balanced technology use. Additionally, understanding the specific purposes for which social media platforms are utilized can aid in developing targeted strategies to maximize the benefits of these platforms while mitigating potential negative consequences associated with excessive use and addiction. As social media continues to play a central role in modern communication and social interaction, further research and proactive measures are essential to fostering healthy technology habits and promoting overall well-being among young adults.

### Body Image

Body image is a multifaceted concept that encompasses an individual's perceptions, feelings, and thoughts regarding their own body. It involves how one perceives their body size, shape, weight, and height, as well as the emotions and thoughts associated with these physical attributes.<sup>9</sup> Body image is influenced by various factors, including both biological and psychological aspects.<sup>10</sup>

The majority of respondents (87.64%) in this study reported having a neutral body image, while only a small number (6) were identified as having a negative body image. This positive shift could be attributed to the emergence of more "body-neutral" content on social media platforms.<sup>11</sup> Body neutrality aims to move away from the societal emphasis on beauty by encouraging individuals to place less importance on physical appearance and instead focus on what their bodies can do for them, such as giving birth, engaging in physical activities, or carrying groceries.<sup>12</sup>

Additionally, body image is a multidimensional concept influenced by various factors, including peers, family, social environment, social acceptance, social pressure, self-esteem, and body mass index (BMI).<sup>13</sup> In line with this study's findings, out of the 294 participants with a normal BMI, 252 reported a neutral body image. This suggests that having a normal BMI may contribute to a more positive body image among individuals.

### Social Comparison

Social comparison refers to the tendency to use others as a benchmark for determining one's behavior, thoughts, and emotions. This can involve upward comparison, where individuals compare themselves to those they perceive as superior, or downward comparison, where individuals compare themselves to those they perceive as inferior.<sup>14</sup>

In this study, more than half of the participants (53.15%) exhibited a high degree of social comparison. People have a fundamental need for social connection, and they often compare themselves to others to fulfill various needs such as uplifting their self-esteem, evaluating the self, making decisions, being inspired, and regulating emotions and well-being.<sup>14</sup> While social comparison can be beneficial by bringing inspiration or promoting self-improvement, it can also lead to negative perceptions and feelings about oneself.<sup>15</sup>

### Social Media Addiction and Body Image

The majority of respondents (91.11%) in this study were found to have social media addiction. Among them, most had a neutral body image perception (87.64%), while only a small percentage had a positive body image (10.14%), and an even smaller percentage had a negative body image (1.59%). No statistically significant association was found between social media addiction and negative body image. A similar study conducted among female students at a Saudi Arabian public university also found no significant association between these two variables ( $p = 0.22$ ). The researchers attributed this finding to the respondents' use of social media primarily for information-seeking purposes rather than entertainment.<sup>16</sup> Additionally, the content consumed by participants in this study was not predominantly focused on promoting unrealistic beauty standards, as the majority also used social media to stay connected with family and friends and gather information.<sup>16</sup>

Another study suggested that social media addiction has a minimal effect on negative body image due to users perceiving social media content as more idealized compared to traditional media.<sup>17</sup> The level of social media literacy also plays a significant role, as individuals with low commercial social media literacy may experience more dissatisfaction with their body image upon exposure to social media content.<sup>18</sup>



Overall, while social media addiction may not directly correlate with negative body image, exposure to certain types of content and individual factors can still influence body image perception.<sup>19,20</sup>

### **Social Media Addiction and Social Comparison**

Among women with social media addiction, 56.19% exhibited high levels of social comparison. Social networking sites often influence young women to engage in social comparison regarding their body image and satisfaction, which can lead to both negative and positive associations.<sup>21</sup> Young women tend to idealize images of themselves and compare themselves to idealized images of friends, relatives, celebrities, and models, which can contribute to feelings of inadequacy and negative body image.<sup>22</sup> However, positive communication and self-enhancement strategies, such as posting self-enhancing information about oneself, can help overcome these negative effects.<sup>23</sup>

The results of this study indicated that women with social media addiction were 2.56 times more likely to engage in high levels of social comparison compared to those without social media addiction. This finding is supported by a similar study conducted among female university students, which found that the use of social media was positively correlated with appearance comparisons to peers, which, in turn, mediated the relationship between social media use and body dissatisfaction.<sup>24</sup> Another study exploring the impact of attractive celebrity and peer images on body image showed that appearance comparisons were significantly higher when participants viewed such images compared to travel images, and higher appearance comparisons were correlated with post-exposure body dissatisfaction.<sup>25</sup> The desire for continuous updates and high exposure to peers' and celebrities' content among women with social media addiction may contribute to their increased tendency to engage in social comparison, which can ultimately influence negative body image perception.

### **Body Mass Index (BMI) and Body Image**

The results of this study showed a significant positive association between obesity and negative body image perception (PRR=13.138,  $p=0.0002$ ). A cross-sectional study conducted among students aged 18-25 years at the University of Sharjah in the UAE also reported a significant correlation between

actual BMI and body image dissatisfaction ( $r=0.57$ ,  $p<0.001$ ).<sup>26</sup> A meta-analysis similarly demonstrated higher body dissatisfaction among individuals with obesity compared to those with normal weight.<sup>27</sup> A study conducted in the Philippines also found a significant association between body image satisfaction and obesity indices, such as BMI, Waist Circumference, and Waist to Hip Ratio.<sup>7</sup> Specifically, waist to hip ratio appeared to be the most significant factor contributing to the variation in body image satisfaction.<sup>28</sup> Dissatisfaction with one's body image can be attributed to an increase in body fat and weight, as it distorts one's body shape and leads to higher dissatisfaction. However, it is important to note that dissatisfaction with body image is not limited to obese individuals but can also occur among those who are underweight or too thin due to body shape distortion.<sup>28</sup> Additionally, poor body image in obese individuals may be influenced by the internalization of thin beauty ideals, leading to frustration among those with bodies larger than the societal ideal.<sup>19</sup>

Conversely, being overweight was found to have a significant negative association with positive body image perception (PRR=0.304,  $p=0.0242$ ). This finding aligns with a study conducted in Saudi Arabia, which showed an association between body image satisfaction and BMI.<sup>16</sup>

### **Social Comparison and Time Spent on Social Media**

Women who spend at least 4 hours per day on social media are more likely to engage in social comparison. A study conducted in the US found an association between time spent on Facebook and increased body and weight comparison among young women ( $p=0.024$ ). This can be explained by Social Comparison Theory, which suggests that people tend to compare themselves to similar others, such as friends and colleagues, and Facebook provides an ideal platform for such comparisons due to its ability to connect individuals with many "similar others".<sup>29</sup> The more time spent on social media platforms, the greater the opportunity for women to engage in repeated comparisons with others.

### **Income and Body Image**

Although the findings regarding income and body image were not statistically significant (PRR=13.333,  $p=0.0703$ ), there is a strong positive association

between having an income below the minimum wage and negative body image. Various studies have reported different results regarding the relationship between socioeconomic status and body image. One study suggests that obesity is inversely proportional to socioeconomic status, indicating that individuals in higher income groups may have better body image and lower BMI due to their ability to afford a healthier diet and lifestyle.<sup>30</sup> However, a study conducted in Oman showed a significant relationship between positive body image and monthly household income, suggesting that individuals from families with higher household incomes are less likely to appreciate their body image due to increased access to goods and restaurants, including fast food, which can increase the risk of obesity.<sup>31</sup> On the other hand, some studies have found no association between body image and socioeconomic status.<sup>32</sup> Another study on body image satisfaction of economically depressed urban Filipino women showed no difference in the mean income when they grouped their respondents according to body image perception.<sup>28</sup> It is important to recognize that income is not the sole factor influencing body image perception, and other variables may contribute to the complex relationship between income and body image.

## Conclusion

In conclusion, this study sheds light on the complex relationship between social media addiction, social comparison, body mass index (BMI), income, and body image perception among women. The findings suggest that while social media addiction itself may not directly impact negative body image, it increases the likelihood of engaging in social comparison, which in turn can influence body image perceptions. Obesity was consistently associated with negative body image, indicating the importance of addressing body shape distortion and societal beauty ideals. The study did not find a significant relationship between income and body image, suggesting that additional factors may contribute to this relationship. These findings contribute to one's understanding of the factors influencing body image perceptions and can inform interventions aimed at promoting positive body image and well-being among women.

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