

# Prevalence of Online Social Comparison among Undergraduate University Students in Abia State, Nigeria

Uchenna Kalu Agwu<sup>1</sup>, Stephen Asatsa<sup>1</sup>, Joyzy Pius Egunjobi<sup>1,2</sup>

<sup>1</sup>Department of Counseling Psychology, Catholic University of Eastern Africa, Nairobi, Kenya

<sup>2</sup>Psycho-Spiritual Institute of Lux Terra Leadership Foundation, Nairobi, Kenya

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.917PSY0051>

Received: 31 July 2025; Accepted: 08 August 2025; Published: 09 September 2025

## ABSTRACT

Online social comparison pertains to the process of individuals assessing themselves by comparing their appearance, opinion or abilities with those of others via social media platforms. This pervasive phenomenon has implications on the self-perception of university students. This study therefore examined the prevalence of online social comparison among undergraduate students in selected universities in Abia State, Nigeria. Grounded on the social comparison theory of Leon Festinger and self-concept theory of Carl Rogers, the study used a descriptive survey design with a target population of 15, 915 undergraduate university students. The adapted Iowa-Netherlands Comparison Orientation Measure (INCOM) with a reliability score of ( $\alpha.78$ ) was used. Data was analyzed using descriptive statistics with the aid of the Statistical Package for Social Sciences (SPSS) version 25, while qualitative data was analyzed using thematic content analysis. Findings indicated that more than half of the participants (56.6%) had moderate prevalence of online social comparison, while a minority (24.5%) recorded a low prevalence. A smaller proportion of students (18.9%) showed high levels of online social comparison, potentially indicating vulnerability to its effects. The overall average of social comparison dimensions is 2.46 (SD = 0.583). The study therefore recommends that universities should actively promote counseling services to encourage students to seek help and promote healthy online behaviors.

**Keywords:** Online, Social Comparison, Undergraduate, University, Students

## Background of the Study

Social media platforms have become a prime arena for social comparisons, especially in today's digital age. Statistically, as of July 2023, over 5.19 billion people were active internet users representing 64.6% of the world's population, and nearly 4 billion were active social media users globally (Statista, 2023). This massive online presence underscores the potential reach and influence of online social comparison. Verduyn et al. (2020) identifies Facebook as the largest social networking site (SNS) having no less than 2.5 billion monthly active users. However, other SNSs such as Instagram (one billion) and Twitter, presently known as X (330 million) have vast user bases as well.

A growing number of people spend an increasing amount of time on these social network sites. According to Anderson and Auxier (2021), 69% of adults and 81% of teens in the United States of America use social media. A significant proportion of individuals aged 18 to 29 indicate their utilization of platforms such as Instagram or Snapchat, with approximately fifty percent also reporting engagement with TikTok; notably, those at the younger end of this demographic. Specifically, individuals between ages 18 to 24 exhibit a heightened propensity to acknowledge their usage of Instagram (76%), Snapchat (75%), or TikTok (55%). This prevalence positions a considerable segment of the population at an elevated risk of experiencing feelings of anxiety, depression, or other adverse effects associated with their social media engagement.

Social comparison is one of the most common features of human social life. This basic human tendency to look to others for information about how to think, feel, and behave has given human beings the ability to thrive in a highly complex and interconnected modern social world (Baldwin & Mussweiler, 2018). Studies from around

the world have identified the prevalence of social comparison. For instance, in China, Li and Xue (2022), affirms the online space contains a large amount of upward social comparison that disrupts consumers' self-observation and self-judgment, influencing their self-reactions. When individuals explore online consumer information, they encounter likes and comments that can potentially impact their self-assessment regarding shopping choices.

Social media sites like Facebook, Whatsapp, TikTok, Twitter (presently known as X), Instagram and LinkedIn not only allow the users to connect and maintain friendships but also make it convenient for the individuals to develop their personal and specific profiles including their personal accomplishments, activities and daily habits (Boyd & Ellison, 2007). Therefore, it becomes an ideal platform which sometimes results to online social comparisons. For example, in the study by Scully, Swords, and Nixon (2020) which examined appearance-related activity (e.g. looking at photos of friends) on social media and body dissatisfaction among adolescent girls, it showed that the duration spent on social comparisons and upward social comparisons with various female peers while online correlated with body dissatisfaction.

In Africa, there is 43.0% of internet penetration in the region (Statista, 2022). With the popularity of smartphones, which offer internet on the go, the Internet World Stats (2020) reported that Africa had 525 million internet users, with an almost more than half of its population having access to the internet. Despite the high percentage of people who are online in Africa, an increase of the same is being recorded. The study by Pelsler and van Schalkwyk (2023) in South Africa showed that students first compare themselves to their peers and then spend money to feel better about themselves or present an improved image to their peers instead of investing their limited resources in their education. Very often, this spending is funded using credit.

Social media platforms are considered personal outlets in comparison to conventional mass media (Nyambura, 2019). A study by Nyagah et al. (2019) revealed that Kenyans have unrestricted access to the social-networking sites such as Facebook, twitter, Skype, WhatsApp, the video-sharing site YouTube, and the blog hosting site Blogger, thereby contributing to the high prevalence of online social comparison.

Nigeria stands as one of the largest and most populous countries in Africa, with a vibrant and diverse student population and an internet penetration at 51.0% of the total population at the start of 2022. There were 109.2 million internet users in Nigeria as of January 2022. (Statista, 2022). Abia State, located in southeastern Nigeria, is known for its numerous universities and a sizable population of undergraduate students.

Research carried out by Agwu, Draper and Croix (2017), showed that only the student's current body size was the least accepted, whereas the indications for bigger ideal body size, ideal male size and ideal female size was higher. The study then suggested that the preference for big body image among male students might have contributed to more overweight and obesity among this group. These experiences and challenges faced by university students in Abia State may seemingly differ from those in other parts of Nigeria and the African continent due to cultural, socio-economic, and regional factors. Therefore, investigating the relationship between online social comparison and self-concept among university students in Abia State can provide valuable insights into the specific dynamics and nuances of this phenomenon in the local context

## Objective of the Study

The objective of this study was to assess the prevalence of online social comparison among undergraduate students in selected universities in Abia State, Nigeria.

## METHODOLOGY

This study employed a descriptive survey research design. The survey involved asking questions (often in the form of a questionnaire) to a large group of individuals through mail, telephone, or in person. By employing this study design, the research focused on obtaining quantitative data from university students. The quantitative data were analyzed using descriptive statistics including percentages, means and standard deviations.

The target population of 15, 915 undergraduate students, out of which 274 participants were selected using the Yamane (1973) sample size determination formula with the confidence level at 95%, and the margin error at

5%.

The Iowa-Netherlands Comparison Orientation Measure - INCOM developed by Gibbons and Buunk, (1999) is an instrument composed of 11 items that measure individual differences in the tendency to make social comparison within the scope of two dimensions: abilities (six items) and opinions (five items). Nine items were adapted to measure the construct of online social comparison which includes the domains of upward, downward, appearance, ability and opinion social comparison. According to Tigges (2009), the INCOM has demonstrated consistent Cronbach's alphas ranging from .78 to .85 in 10 American samples and .78 to .84 in 12 Dutch samples, including an alpha of .83 when used with American high school students. The total scores on the adapted Iowa-Netherlands Comparison Orientation Measure (INCOM) consisted of 15 questions which were rated on a five-point Likert scale: always, often, frequently, occasionally and rarely and scored 5, 4, 3, 2, and 1 respectively, the minimum score was 15 and the maximum score was 75. The scores were then transformed into two categories and analyzed. The categories of the prevalence of online social comparison were; a score of 15-30 point would indicate low prevalence, 31-45 would mean a moderate prevalence while a score of 46-75 would indicate a high prevalence.

All ethical considerations were followed. Before the data collection, ethical approvals were obtained from the Department of Psychology at the Catholic University of Eastern Africa, the ministry of Education in Abia State and the institutions involved in the study. Consent was also obtained from the participants involved in the study.

## FINDINGS

### Sample Characteristics

Out of the 274 participants involved in the study, 45.6% were male while 54.4% were female, indicating that the genders were complementary. Regarding the age of the participants, majority of them (87.23%) were within the age range of 21 years and above, while the age range of 18 to 20 had the least participants (12.77%), which may indicate that most students within this age range were still joining the university and grappling with the demands of a higher educational environment.

### Prevalence of Online Social Comparison

The result of the prevalence of the student's online social comparison is presented in Table 1.

Table 1 Prevalence of Online Social Comparison among Undergraduate University Students

Prevalence	Frequency	Percentage
Low	67	24.5%
Moderate	155	56.6%
High	52	18.9%

For more details, the subscales were analyzed and results presented using means and standard deviations. Table 2 shows the distribution of the responses in the subscales of online social comparison.

Table 2 Descriptive Statistics of the Subscales of Online Social Comparison

	N	Minimum	Maximum	Mean	Std. Dev
Upward Social Comparison	274	1.00	5.00	3.90	1.328
Downward Social Comparison	274	1.00	5.00	3.15	1.344
Appearance Social Comparison	274	1.00	5.00	2.92	.783
Ability Social Comparison	274	1.00	5.00	2.36	.694

Opinion Social Comparison	274	1.00	5.00	2.09	.761
<b>Composite Mean</b>				<b>2.46</b>	<b>.583</b>

## DISCUSSION OF THE FINDINGS

The results of this study are in line with researches like that of Marinko et al. (2024); Nield et al. (2024); and Gibson et al. (2024) who identified that even body structure might not be an accurate method for determining health or body composition. The overall moderate score in social comparison indicate that the phenomenon is relevant but not overwhelmingly dominant among university students in Abia State, Nigeria. Appearance comparison may be driven by visual platforms like Instagram, while ability comparison might occur in contexts such as academic achievements shared online. This aligns with the Social Comparison Theory of Festinger (1954), which posits that people determine their social and personal worth based on how they measure up against others. Social media serves as a readily available and easily accessible source for such comparisons, reinforcing these behaviors. Constant comparison of social success can lead to feelings of inadequacy, envy, or stress, especially when individuals perceive themselves as less successful than their peers. This can impact self-esteem and social confidence.

Social media has evolved beyond just a platform for entertainment or casual interaction. It is increasingly used as a source of information, advice, and shared experiences. Thus, online social comparisons based on opinions can help individuals make informed decisions and gain different perspectives (Schäfer, et al., 2024; Ziegele, et al., 2020). They can also provide emotional support by showing individuals that they are not alone in their experiences. However, over-reliance on others' opinions or experiences may lead to herd behavior or excessive dependence on external validation, potentially reducing self-confidence or the ability to make independent decisions.

The results seen in table 2 aligns with that of Kashmala et al. (2021) who found that Facebook user's social comparison provoked benign and malicious envy; benign envy, in turn, triggered self-improvement intention, and malicious envy triggered negative emotions. This reinforces the idea that social comparisons extend beyond physical attributes to include attire, which could influence consumer behavior and social pressure regarding fashion. This is also congruent with that of some scholars like Verma, (2024); Xu and Li (2024) who noted that downward comparisons are often used as a coping mechanism to mitigate feelings of inadequacy caused by upward comparisons. However, reliance on this strategy could indicate a fragile self-concept that depends on others' perceived shortcomings for validation (Nasr, Mousavi, & Michaelidou, 2024).

Students are more likely to compare themselves to those they perceive as "better" than themselves, reflecting social media's aspirational influence. This aligns with platforms' tendency to highlight idealized content. While downward comparison occurs, it is less prevalent. This suggests that students are not consistently using social media as a way to validate their self-worth by focusing on others' perceived shortcomings. Both forms of comparison carry emotional risks, with upward comparison potentially leading to dissatisfaction and downward comparison fostering complacency or superficial validation. This balance could indicate a mix of motivations, such as self-improvement (upward) and self-protection (downward).

Social media fosters aspirational environments where users showcase achievements, wealth, physical appearance, or lifestyle highlights (Merino et al., 2024; Somani et al., 2024). This makes upward comparison an almost inevitable reaction for students. Younger individuals, particularly university students, are at a formative stage where they are setting personal, academic, and career goals, increasing their sensitivity to perceived role models or idealized peers.

For some, upward comparison is a source of inspiration, encouraging them to emulate admired qualities or strive for similar achievements. For others, especially those struggling with self-esteem, constant comparison to seemingly unattainable standards can lead to feelings of inadequacy, envy, and anxiety. Students who frequently compare themselves upward may develop unhealthy perfectionistic tendencies, feeling that their worth depends on meeting or exceeding these idealized standards.

Social media platforms are engineered to capture and retain user attention; they achieve this through meticulously designed features and algorithms that exploit psychological tendencies. The 'like' button, personalized feeds, and content recommendations are not arbitrary fixtures but are deliberate choices aimed at optimizing user engagement. The algorithms that power these features are adept at learning what content keeps users scrolling, often prioritizing material that incites emotional responses, including content that fosters social comparison. This is because emotional engagement, whether positive or negative, drives more prolonged interaction and deeper platform immersion (Qiu, 2024).

For example, when users encounter posts depicting idealized lifestyles or the highlight reels of others, it can trigger a comparison against their own lives, an activity that the social media platforms have learned to promote subtly through content curation based on prior user engagement. Social media platforms, through their design and algorithms, sculpt the digital environment to which individuals are exposed. As users navigate their feeds, they are not simply consuming content; they are engaging with a system designed to capture their attention and to draw them into comparison. The intricate relationship between user behavior and algorithmic reinforcement creates a loop whereby social comparisons can be a driver of social media content consumption and production. As users respond to content that elicits comparisons, platform algorithms learn and subsequently surface more such content, creating a feedback loop that perpetuates and intensifies attention to social comparisons.

## CONCLUSION AND RECOMMENDATION

Recognizing the above average prevalence of online social comparison among undergraduate students in Abia State, students will benefit from psychotherapy which will help them resolve emotional issues, and boost their psychological faculties for a healthier and happier online engagements with their peers and others in the virtual world. Though the study was limited in time scope, tracking changes over time would provide valuable insights into effectiveness of interventions and strategies aimed at supporting students who are navigating the complexities of comparison of the online world.

**Conflict of Interest:** Authors declare no conflict of interest exists.

## REFERENCES

1. Agwu, E. M., Draper, S., & Croix, M. D. S. (2017). Social Support, Body Image Perception and Depressive Symptoms, among University Students in Nigeria, by Gender and Ethnicity. *Science Journal of Public Health*. 5, 3, 263-274.
2. Aloka, P. J. O. (2021). Group Polarization in Disciplinary Panel's Decisions among Teachers: An Analysis of Schools' Affiliation Differences. *Pakistan Journal of Psychological Research*, 36 (3), 335–356. doi: <http://doi.org/10.33824/pjpr.2021.36.3.1>
3. Anderson, M., & Auxier, B. (2021). Social Media Use in 2021. Pew Research Center, April.
4. Baldwin, M., & Mussweiler, T. (2018). The Culture of Social Comparison. *Proceedings of the National Academy of Sciences*. <https://doi.org/10.1073/pnas.1721555115>
5. Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of computer-mediated Communication*, 13(1), 210-230.
6. Kashmala, L., Qingxiong, W., Abdul, H. P., Ahmed, A., Asif, W. S., Muhammad, Y. M., & Zara, L. (2021). Social comparison as a double-edged sword on social media: The role of envy type and online social identity, *Telematics and Informatics*, Volume 56, 101470, ISSN 0736-5853, <https://doi.org/10.1016/j.tele.2020.101470>.
7. Merino, M., Tornero-Aguilera, J. F., Rubio-Zarapuz, A., Villanueva-Tobaldo, C. V., Martín-Rodríguez, A., & Clemente-Suárez, V. J. (2024, July). Body perceptions and psychological well-being: A review of the impact of social media and physical measurements on self-esteem and mental health with a focus on body image satisfaction and its relationship with cultural and gender factors. In *Healthcare* (Vol. 12, No. 14, p. 1396). MDPI.
8. Nasr, L. I., Mousavi, S., & Michaelidou, N. (2024). Self-Comparing With Virtual Influencers: Effects on Followers' Wellbeing. *Psychology & Marketing*.
9. Nyagah, S., Nyagah, V., Asatsa, S., & Mwanja, J. (2015). Social Networking Sites and Their Influence on the Self Esteem of Adolescents in Embu County, Kenya. 2. 2408-770.

10. Nyagah, V. W., Mutisya, S., Anyaona, N, J., & Asatsa, S. (2019). Demographic Differences in Online Social Networking Addiction among Undergraduate University Students in Nairobi County, Kenya. *African Journal of Clinical Psychology*. ISSN: 978-9966-936-05-9 Vol. 02, Issue 02
11. Nyambura, I. (2019). Social Media Influence on Body Image Among Female University Students: A Case Study of Instagram. <http://erepository.uonbi.ac.ke>
12. Qiu, Y. (2024). Social Comparison on Social Media Platforms: A media and communication Perspective. *SHS Web of Conferences* 185, 03008. <https://doi.org/10.1051/shsconf/202418503008>
13. Scully, M., Swords, L., & Nixon, E. (2020). Social comparisons on social media: online appearance-related activity and body dissatisfaction in adolescent girls. *Irish Journal of Psychological Medicine*, 40(1), 31-42. <https://doi.org/10.1017/ipm.2020.93>
14. Somani, P. P., Gupta, U., Mahajan, R., Iyer, V., Behare, N., & Singh, M. (2024). Influence of Instagram as a Social Media Platform on Academic Routine and Schedule of Students. In *Advancements in Socialized and Digital Media Communications* (pp. 249-263). IGI Global.
15. Statista. (2023). Nigeria: number of internet users 2023. Statistic. Statista.
16. Verduyn, P., Gugushvili, N., Massar, K., Täht, K., & Kross, E. (2020). Social comparison on social networking sites. In *Current Opinion in Psychology* (Vol. 36). <https://doi.org/10.1016/j.copsyc.2020.04.002>
17. Verduyn, P., & Gugushvili, N., & Kross, E. (2021). The impact of social network sites on mental health: distinguishing active from passive use. *World psychiatry: official journal of the World Psychiatric Association (WPA)*. 20. 133-135. [10.1002/wps.20820](https://doi.org/10.1002/wps.20820).
18. Verma, A. (2024). Impact of Social Comparison on Self-Efficacy & Emotional Regulation among Peers. *International Journal of Interdisciplinary Approaches in Psychology*, 2(5), 58-72.
19. Wang, Q., Song, X., & Hong, JC. (2023). Impact of social comparison on perceived online academic futility: A perspective from parents. *Educ Inf Technol*, 5805–5832 <https://doi.org/10.1007/s10639-022-11402>.
20. Xu, L., & Li, L. (2024). Upward social comparison and social anxiety among Chinese college students: a chain-mediation model of relative deprivation and rumination. *Frontiers in Psychology*, 15, 1430539.
21. Ziegele, M., Quiring, O., Esau, K., & Friess, D. (2020). Linking news value theory with online deliberation: How news factors and illustration factors in news articles affect the deliberative quality of user discussions in SNS' comment sections. *Communication Research*, 47(6), 860-890.