

Social Media Usage and Mental Health Outcomes Among University Students: A Systematic Literature Review

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Abstract- *This systematic literature review examines the relationship between social media usage and mental health outcomes among university students, a group increasingly exposed to both the benefits and risks of digital engagement. The review synthesizes evidence from 52 peer-reviewed studies published between 2015 and 2025, retrieved from databases such as Wiley Online Library, ScienceDirect, PubMed, PubMed Central, MDPI, IEEE. Findings indicate that excessive social media use is predominantly associated with negative outcomes, including anxiety, depression, loneliness, sleep disturbances, and compulsive behaviours, with female students often reporting greater vulnerability. At the same time, social media usage at moderate levels enables social connectedness, peer-to-peer cooperative interaction, and accessibility of mental health materials, revealing the dual role of social media for the well-being of students. Cross-cultural variations further highlight how contextual factors shape usage patterns and psychological effects. Overall, the evidence reveals the complex and bidirectional nature of the social media–mental health relationship and emphasizes the need for balanced interventions. These include but do not limit digital literacy programs and institutional support systems, that will mitigate risks while enhancing positive outcomes for university students.*

Keywords: Mental Health, Social Media, Sri Lanka, Undergraduates, University Students

I. INTRODUCTION

At present, social media plays a major role in university students' lives by facilitating connectivity, entertain themselves and even support their academic tasks through platforms like Facebook, Instagram, WhatsApp, YouTube, and TikTok ([Abbas et al., 2019](#); [Al-Rahmi, 2022](#); [Rao & Kalyani, 2022](#)). A recent study on Indian university students, uncovered that WhatsApp and overall social media use was positively correlated with academic performance, but Facebook, Instagram, and LinkedIn were not significantly correlated ([K et al., 2023](#)). The rapid growth of smartphone accessibility has further driven extensive engagement, with many students spending considerable hours per day on these platforms ([Ali et al., 2023](#); [Alnjadat et al., 2019](#)). The extensive usage shapes students' behaviors, interactions, and patterns of information consumption, thereby highlighting the significance of investigating its overarching influence on their academic and personal lives.

Globally, the rate of mental health ailments among college students is on the rise, whilst social media seems to have taken a leading role in students' lives holistically. According to cross-sectional and longitudinal studies, higher levels of social media usage (problematic or addictive use) are consistently linked to worse psychological outcomes. However, impacts are usually small to moderate and vary from study to study ([Ahmed et al., 2024](#); [Shannon et al., 2022](#)). Mental health challenges like anxiety, depression, and stress, are increasingly seen among

university students worldwide, potentially undermining academic performance and quality of life ([Anto et al., 2023](#); [Booker et al., 2018](#)). Since early adulthood is a fundamentally important stage in the life development, social transitions and academic pressures contribute towards students being vulnerable to situations of psychological distress ([Balasubramanian, 2023](#); [Chandrasena & Ilankoon, 2022](#)), addressing these issues is essential for promoting retention, academic success, and long-term well-being of the university students.

The relationship between social media usage and mental health is complex and multifaceted. While social media platforms can foster social support, learning opportunities, and increased connectivity ([Abbas et al., 2019](#); [Anderson et al., 2024](#)), its maladaptive or extreme usage has been linked to anxiety, depression, loneliness, attention difficulties, and sleep disturbances ([Ahmed et al., 2024](#); [Anto et al., 2023](#); [Appel et al., 2019](#)). Social comparison, cyberbullying, and fear of missing out (FOMO) are some well-known contributors toward these adverse outcomes ([Ali et al., 2023](#); [Verduyn et al., 2020](#)). During Covid-19 Pandemic the excessive social media use among college students was linked to worse mental health, especially depression. However, adaptive use of social media for aspects such as purposeful communication in turn has contributed to mitigating these impacts ([Haddad et al., 2021](#)). Meanwhile, digitally delivered interventions are associated in reducing anxiety and depression symptoms ([Madrid-Cagigal et al., 2025](#)). Conversely, studies have also reported positive effects, where moderate and purposeful use enhances connectedness, collaboration, and access to peer or institutional support networks ([Abbas et al., 2019](#); [Al-Rahmi, 2022](#)). Although research in this area has expanded significantly, results remain mixed. Some studies emphasize the detrimental impacts of problematic social media use, such as compulsive behaviors, FOMO, and harmful social comparisons ([Anto et al., 2023](#); [Appel et al., 2019](#); [Balasubramanian, 2023](#)). While others highlight its role in reducing loneliness, fostering collaboration, and promoting supportive communities ([Abbas et al., 2019](#); [Al-Rahmi, 2022](#); [Anderson et al., 2024](#)). These contradictions point to the bidirectional nature of social media's influence on mental health.

Importantly, most existing literature has focused on global or Western contexts, providing limited insights into undergraduates in Sri Lanka, where cultural, social, and educational dynamics may uniquely shape patterns of use and their mental health implications ([Chandrasena & Ilankoon, 2022](#)). Accordingly, this review seeks to synthesize empirical evidence on how social media influences mental health outcomes among university students, examining both its positive and negative effects, as well as gender and cultural variations. In doing so, it addresses the central question of what mental health outcomes have been associated with social media use in existing global literature, while also highlighting implications for the underexplored Sri Lankan context.

II. METHODOLOGY

This systematic literature review was conducted to comprehensively identify and evaluate relevant studies on the impact of social media on mental health outcomes among university students. The process followed the PRISMA guidelines to ensure transparency and reproducibility.

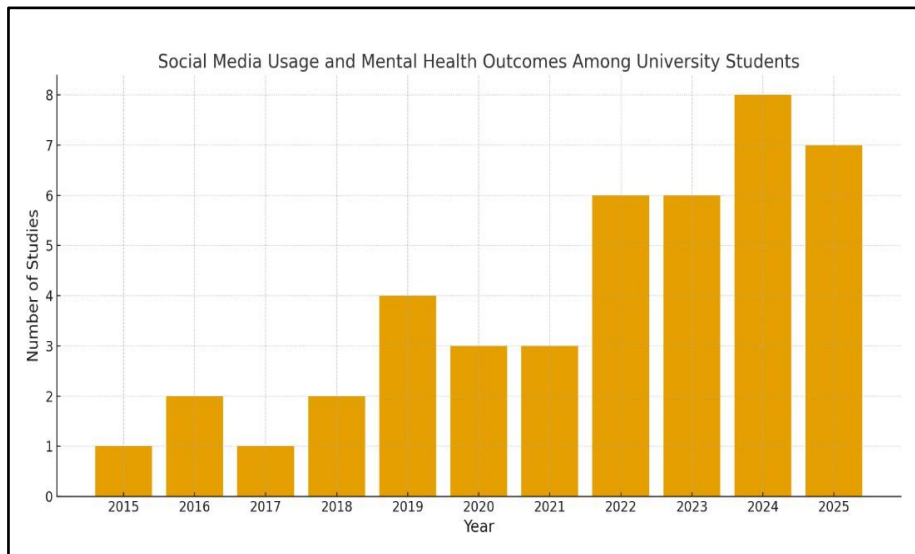
A rigorous search strategy was employed using credible academic databases including but not limited to *Wiley Online Library*, *ScienceDirect*, *PubMed*, and *PubMed Central (PMC)*, *IEEE*, *Emerald*. A total of 52 peer-

reviewed studies were included after applying strict inclusion and exclusion criteria, ensuring comprehensive representation across different geographic and academic contexts. Furthermore, the data analysis section was expanded to justify the use of thematic synthesis for integrating qualitative and quantitative findings and VOS Viewer software for keyword co-occurrence analysis, enabling the identification of dominant research themes and interconnections within the reviewed literature. The search was guided by predefined eligibility criteria, with inclusion and exclusion parameters clearly specified to ensure relevance. To ensure an in-depth search, the following keywords and Boolean operators were combined to form the search strings for each database, for example: (“student” OR “university students” OR “undergraduates”) AND (“social media” OR “social network” OR “digital media”) AND (“mental health” OR “wellbeing” OR “psychological distress”).

The review process began with defining the research question using frameworks such as PICO to establish focus. The initial search retrieved studies which were screened in multiple stages. The title and abstract screening were followed by a full-text review conducted by independent reviewers. Eligible studies were then subjected to data extraction using standardized tools.

Figure.1 depicts the overview of annual publications on social media use and mental health in university students (2015–2025).

Figure 1. Number of publications by year

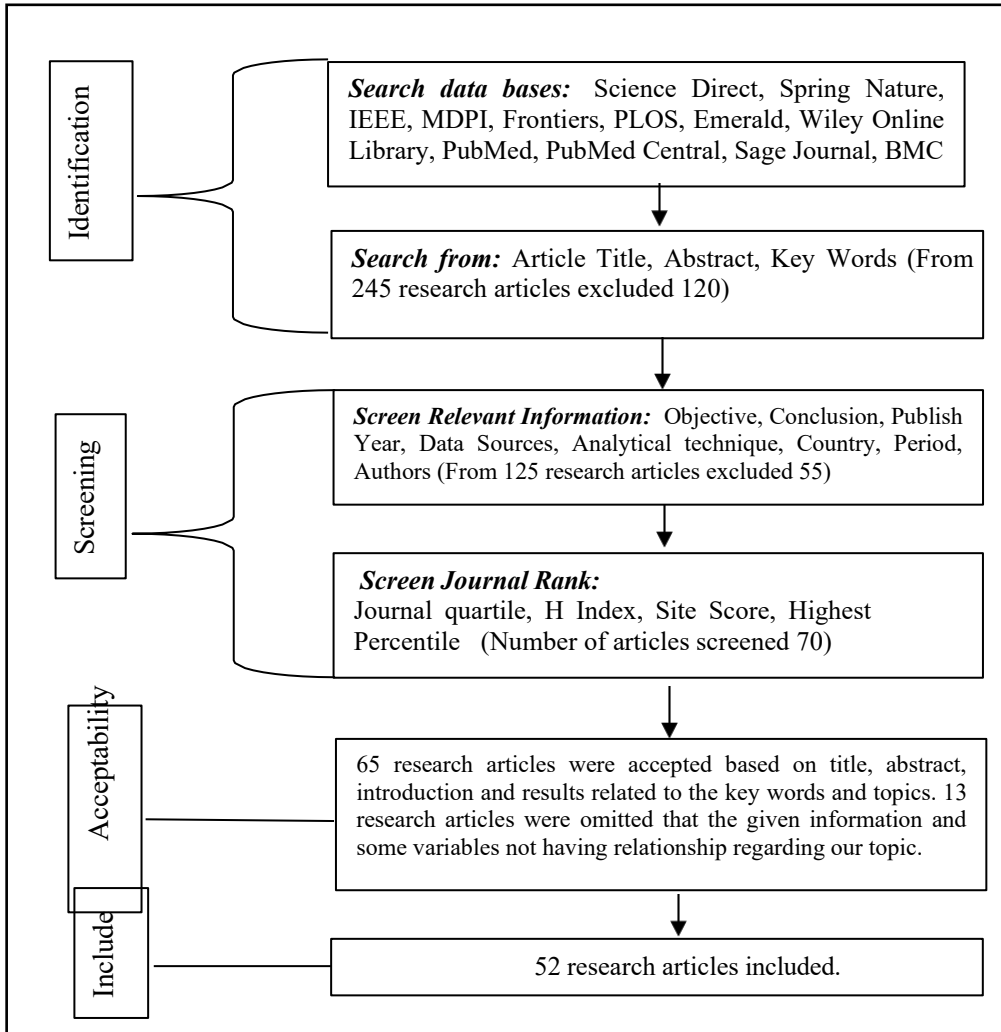


Source: Author’s compilation based on reviewed literature.

A. PRISMA Flow Chart

This PRISMA flow chart indicated in Figure 2 outlines the process of selecting research articles for a study. It began with 245 articles identified from databases like Science Direct, Springer Nature, IEEE, MDPI, Frontiers, PLOS, Emerald, Wiley Online Library, PubMed, PubMed Central, Sage Journal and BMC. After screening for relevance and applying exclusion criteria (e.g., objective, conclusion, publication year, data sources, analytical technique, country, period, authors), 125 articles were excluded, leaving 120. Further screening based on journal rank, h-index, site score, and highest percentile reduced the number to 70. Of these, 5 were excluded for not meeting the study's specific topic and relationship criteria, after omitting 13 articles 52 articles included in the final study.

Figure 2. PRISMA flow chart

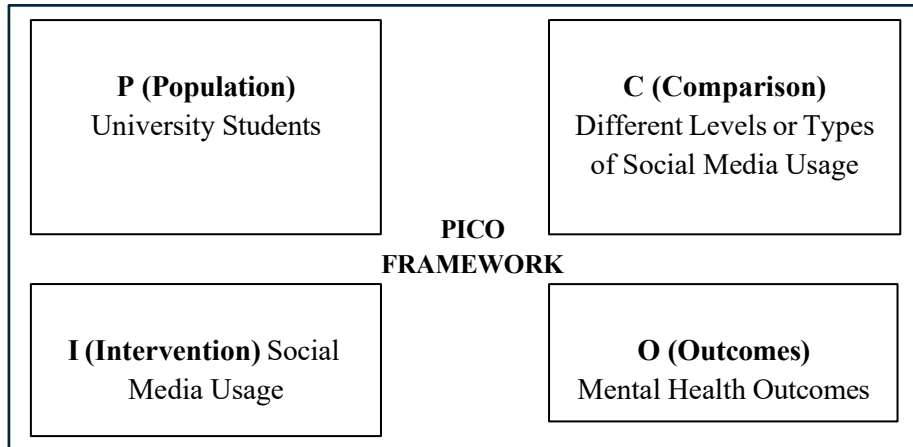


Source: Author's compilation.

B. PICO Framework

Quality assessment was performed to evaluate the risk of bias based on established frameworks such as the PICO Framework and PRISMA Checklist. The PICO Framework in Figure.3 is a method to formulate questions as it breaks down a research question into four parts: population, intervention, comparison and outcome. It reduces selection bias and assists researchers to develop well defined questions. The PRISMA checklist and flow diagram were created to enhance the transparency and dissemination of the systematic review.

Figure 3. PICO Framework



Source: Author’s compilation.

Finally, data synthesis was carried out through both narrative discussion and, where appropriate, thematic consolidation of findings. The process concluded with reporting structured according to PRISMA, ensuring the review’s reliability and replicability. Recurring themes, conclusions, and results from the papers included were found and categorized into common groups using theme coding. In fact, an analysis of key word co-occurrence was conducted with the aid of VOS viewers, to identify key research themes from reviewed literature. This overall effort made it possible to combine numerous findings into logical themes, giving the evidence a structured overview.

III. RESULTS AND DISCUSSION

A. Social Media Usage Patterns Among University Students

According to a study conducted in Bangladesh, students used social media frequently, with a notable percentage of the sample spending a considerable amount of time with these social media platforms. Specifically, the results revealed that 23.5% of students used social media for more than eight hours each day, while 27.9% spent four to less than eight hours. Facebook, Instagram, and WhatsApp were the most popular platforms ([Chowdhury, 2024](#)). The rise of smartphone accessibility has further fueled these high engagement levels, influencing behaviors, social interactions, and academic routines ([Ali et al., 2023](#); [Alnjadat et al., 2019](#)).

Usage patterns are shaped by age, gender, academic discipline, and cultural context, with female students often reporting higher levels of use, particularly for social and expressive purposes ([Alnjadat et al., 2019](#); [Anto et al., 2023](#)). A study conducted among undergraduate students in Asam demonstrates that 96% of undergraduates actively use social media platforms, mainly accessed through smartphones and the internet. The findings of that study highlights that the students learn new things and gather new knowledge using social media especially it says that students use social media improve their skills in English language ([Rezau Karim et al., 2022](#)). Beyond leisure and communication, social media is increasingly integrated into academic collaboration and information sharing

([Abbas et al., 2019](#); [Al-Rahmi, 2022](#); [Lakmali et al., 2021](#)). A study involved Pakistan university students, revealed that majority of the students are regularly use social media platforms including Facebook, YouTube, and WhatsApp for entertainment, education, and spiritual reasons. This study shows that male students are the one who using more social media use, while it shows undergraduates and students who studying engineering and applied science are more likely to use social media ([Bashir et al., 2021](#)). However, problematic behaviors such as addiction and overuse are also reported, raising concerns regarding potential consequences for learning and well-being([Ali et al., 2023](#); [Balasubramanian, 2023](#)).

A study shows that 97% of university students use social media, including sites like Instagram, Twitter (X), and Snapchat, for non-academic purposes. However, the addictive nature of social media is demonstrated by the fact that 52% of university students reports negative effects on learning, 66% feel more pulled to social media than studies, and 66% report delayed bedtime as a result of excessive social media use ([Kolhar et al., 2021](#)). According to a study done in Jordan, the most preferred social media sites of medical university students were Instagram, Facebook, and YouTube, within 61.3% of them using by these students for three hours or more per day. With 54.8% of students taking part in online study groups and 57.3% accessing courses, most of the students used it for both educational and entertainment objectives. However, they reported losing focus, delayed everyday duties and found it distracting ([Taha et al., 2025](#)). As per a study of 16,472 university students revealed a negative relationship between academic performance and social media addiction. Because of their higher level of addiction due to the high internet literacy, lack of parental supervision, flexible schedules and unique personality characteristics. Study highlights how important time management on social media is for undergraduates to enhance their academic performance ([Salari et al., 2025](#)). More than 64% of Ghanian undergraduates reported having computer vision syndrome due to long term digital device use, and about 62% reported having poor sleep quality due to this ([Akowuah et al., 2021](#)).

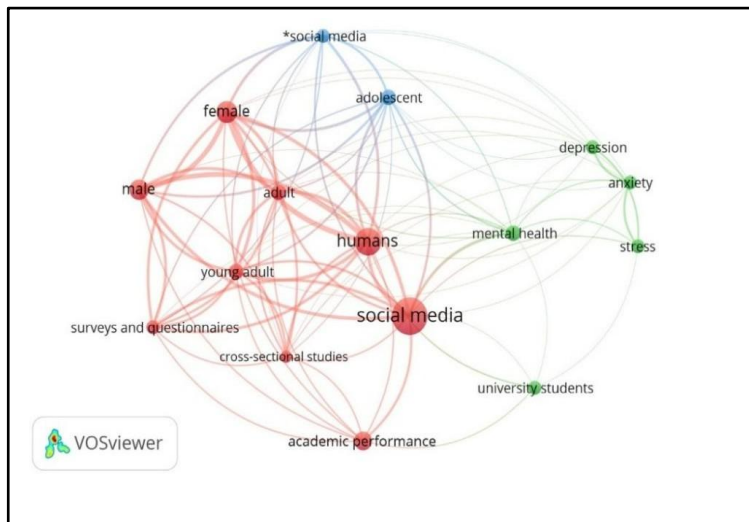
These findings underscore the dual nature of social media as both a facilitator of academic engagement and a risk factor for maladaptive use among undergraduates. Across studies, excessive social media use consistently correlated with increased symptoms of anxiety, depression, and disrupted sleep cycles, largely attributable to social comparison, cyberbullying, and fear of missing out. Conversely, moderate usage was associated with improved social support and engagement, suggesting a dose-dependent relationship. Notably, gender differences emerged, with female students reporting higher vulnerability to negative effects, highlighting the need for gender-sensitive analyses and interventions.

B. Key Word Co-Occurrence Analysis

Figure.4 denotes the keyword co-occurrence map generated via VOS viewer. It shows that there are three primary research streams. The red cluster focuses on demographics, study design, and academic outcomes, where keywords are male, female, adult, young adult, surveys, and cross-sectional studies, which shows that it is concerned with participant characteristics and research methodology. The blue cluster revolves around social media and adolescence, with a focus on the research of the engagement of adolescents with social media. Mental health outcomes, such

as stress and anxiety, depression, and university students, are included in the green cluster, which illustrates the relationship between social media use and psychological well-being. Cross-links between clusters indicate that social media connects academic performance and mental health, and the methodological keywords in the surveys and questionnaires serve to bridge across studies. Overall, the map proves that literature addresses the impacts of social media on mental health and academic performance, considering age, gender, and research techniques.

Figure 4. Keywords Co-Occurrence Analysis



Source: Author's compilation based on reviewed literature.

Negative Mental Health Outcomes Associated with Social Media

Excessive use of social media is consistently associated with negative mental health indicators, including heightened anxiety, depression, loneliness, and disrupted sleep patterns ([Anto et al., 2023](#); [Appel et al., 2019](#); [Chandrasena & Ilankoon, 2022](#); [Verduyn et al., 2020](#)). The mechanisms behind these effects include social comparison, cyberbullying, Fear of Missing Out (FOMO), and information overload, which collectively exacerbate psychological distress ([Ali et al., 2023](#); [Appel et al., 2019](#); [Verduyn et al., 2020](#)). Late night involvement and excessive usage of social media subsequently result in disturbed sleeping patterns among university students. This further becomes a contributing factor towards inability to regulate emotions and deteriorated academic performance ([Zer et al., 2024](#)). Gender differences are evident, with female students often reporting stronger negative impacts due to differing motives and social pressures ([Aran-Ramspott et al., 2024](#); [Booker et al., 2018](#)). According to research, adolescents in Norway who use social media, particularly those who have had unpleasant experiences like isolation and unwanted attention, are more likely to self-report having anxiety and sadness ([Skogen et al., 2023](#)). Negative social comparisons were the main mechanism, according to a study on Facebook's implementation at American universities. This effect was especially noticeable for students who felt they were comparing themselves negatively to their peers. Academic performance was negatively impacted, and the negative impacts grew as more people were exposed to the

platforms ([Braghieri et al., 2021](#)).

Use of social media is linked to a number of negative effects on mental health, particularly for those who have a deep emotional attachment to these sites. According to research, this emotional investment may result in a decrease in mental health and overall well-being. A person is more likely to experience anxiety and depression symptoms the more they utilize these platforms. By replacing important in-person connections with less virtual ones, these platforms can potentially increase the feeling of loneliness. Social isolation, bullying involvement, and social comparison pressure are additional concerns. Additionally, some form of participation, such as passive observing or “vaguebooking” have been linked to negative effects on well-being and may even raise the possibility of suicidal thoughts ([Bekalu et al., 2019](#); [Naslund et al., 2020](#)).

Other studies have emphasized broader risks, including privacy concerns, cyberbullying, and the erosion of academic focus, which can lead to increased distress, self-harm, and suicidality ([Khalaf et al., 2023](#)). Chronic sleep loss, a common effect of prolonged engagement, impairs cognition, socio-emotional functioning, and performance ([Carter et al., 2016](#); [Khalaf et al., 2023](#)). Links have also been established between problematic social media use (PSMU) and depression, anxiety, low life satisfaction, and eating disorders ([Ahmed et al., 2025](#); [Holland & Tiggemann, 2016](#); [Marino et al., 2018](#); [Shannon et al., 2022](#)). A study indicates that social media effectively involves improving mental health outcomes such as depression and anxiety. The review highlights that problematic social media use is prevalent among young adults and associated with poorer mental well-being ([Plackett et al., 2023](#)). Social media, especially Reddit, serves as a tool to monitor mental health among college undergraduates. A transfer learning model achieves 97% accuracy in detecting mental health expressions. The Mental Well-being Index (MWI) highlights a 16% increase in expression from 2011 to 2015, with trends rising during the academic year and falling in summer. MWI is lower in large public universities with higher female enrollment, showing no correlation with academic prestige ([Bagroy et al., 2017](#)).

According to an Australian study with university students has found that social media usage of university students leads to stress. Negative self-reflection, continuous demand, exposure to negativity and addictive behaviors were shown to be the four key themes. Moreover, 75% said that they were under some stress. The study also highlights that although social media usage can enhance identity expressions and social connections, there is a complicated relationship between social media use and mental health ([Hurley et al., 2024](#)).

Collectively, these findings suggest that while social media is pervasive in student life, excessive and unregulated use significantly undermines mental health and academic outcomes.

C. Positive Mental Health Outcomes of Social Media

Social media renders clearly visible positive outcomes towards the wellbeing of university students, amidst the risks it projects. The said positivity springs from aspects such as enhancing social networking and collaborations, which in turn serves multiple beneficial purposes such as peer support, exposure towards resources and sources who provide mental wellbeing support, which subsequently help reduce the stigma and loneliness, considered as detrimental towards the mental wellbeing of students. ([Abbas et al., 2019](#); [Anto et al., 2023](#)). In fact, interactions

via social media has proven positive academic outcomes supported by social media platform mediated peer connectivity and support as well as sharing of educational and learning resources informally ([Al-Rahmi, 2022](#); [Lakmali et al., 2021](#)). Seeing in this manner, these social media platforms have supported in reaping healthier mental health outcomes among the university students, due to a better level of felt social and peer support, in turn rendering a higher sense of personal wellbeing among these students. Being active users of social media enables students to have better access to virtual support and company through networking, subsequently harnessing wellness as well as generation of positive emotions due to the feeling of belonging triggered virtually, through social media platforms. This remains a great mental and emotional relief to those students suffering from different kinds of emotional unease and mental disorders ([Godard & Holtzman, 2024](#); [Naslund et al., 2020](#)).

Perceived social support (PSS) is vitally accepted as a fundamental factor in promoting individual resilience. It buffers the impact of stress and contributes to psychological well-being by enabling individuals to feel belonged, trusted and accompanied. Since social media enables interpersonal connections and virtual communities, it enhances PsyCap (psychological capital) and boosts its positive effects on the mental health of students ([Khan et al., 2024](#)). Beyond academic and psychological benefits, social media supports identity formation, self-expression, and entertainment, while reducing loneliness through expanded connections and online friendships ([Khalaf et al., 2023](#)). Social media yields to positive outcomes such as building peer-support networks for students, offering emotional support and confidence via platforms like Facebook, enabling collaboration and idea sharing in virtual communities to enhance learning and academic performance through effective multitasking, time management, and instructor-led communication for better study activities ([Maqableh et al., 2015](#)).

These positive outcomes have been linked to higher well-being and self-esteem among adolescents and young adults. Together, these findings illustrate that the effects of social media are not uniformly negative, but depend on how, why, and to what extent platforms are used. Study which examined the connection between adolescents' use of social media and their mental health revealed that even though the majority of research has linked social media use to negative outcomes related to mental health, it also highlights positive aspects including creating supportive online communities, offering social support, and possibly having benefits for those with mental health conditions. Increased well-being and better social connections are linked to moderate social media use. Social media's influence varies on personal and according to usage patterns ([Agyapong-Opoku et al., 2025](#)).

D. Theoretical Perspectives and Interpretations

The complex interplay between social media usage and mental health among undergraduates is explained from multiple theoretical perspectives. The literature identifies several theoretical frameworks that help explain the dual effects of social media.

Some studies indicate integrates foundational frameworks such as Social Comparison Theory (Festinger, 1954), emphasizing how SNSs amplify upward and downward social comparisons, which via assimilation and contrast drive emotional responses like envy and ultimately influence users' subjective well-being. Social

comparison theory highlights how image-based platforms, particularly Instagram, contribute to body image dissatisfaction and anxiety through upward comparison (Verduyn et al., 2020). Social media creates a variety of idealized comparison targets. A meta-analysis shows that greater online social comparison is linked higher body image concerns and eating disorder symptoms and to lower positive body image this article mainly used social comparison theory to indicate how female and male comparing themselves in virtual platforms (Bonfanti et al., 2025).

It was discovered that user experiences of social comparison are shaped by complex interactions of individual characteristics like age, gender, self-esteem and media literacy and platform features like content genres and affordances (Derbaix et al., 2025). Uses and Gratifications lens students use social media to satisfy social, hedonic and informational values (Nand & Ali, 2022).

Some of studies perspectives focus on smartphone addiction and FOMO as mechanisms driving maladaptive use and impairing well-being (Balasubramanian, 2023). Conversely, concepts such as Psychological Capital (PsyCap) and Perceived Social Support (PSS) explain how social media fosters resilience and buffers stressors by creating trust and cooperation in online networks (Khan et al., 2024). Emerging approaches, including gamification and artificial intelligence, are also being explored as tools to promote balanced and positive engagement with social media (Marzo et al., 2024).

These theoretical insights deepen understanding of why social media produces both risks and benefits and provide direction for designing interventions within higher education.

E. Cross-Cultural and Gender Variations

Findings indicate that both cultural context and gender significantly shape the mental health effects of social media use. Gendered experiences are consistently reported, with female students more likely to experience negative psychological outcomes, including heightened anxiety and body image concerns (Alnjadat et al., 2019; Aran-Ramspott et al., 2024; Booker et al., 2018). A study observed that male and female students interacted differently in the educational social media setting. Although the platform was beneficial for both groups, their usage patterns differ, indicating that men and women use social media features like commenting, liking, and posting and viewing in different ways. Despite behavioral differences, the study found that both parties experienced similar gains in developing social media related skills, suggesting that platform is equally effective in improving competencies regardless of gender (Theophilou et al., 2024). A study reported that females had higher level of social media addiction and relational aggression while male reported higher levels of overt aggression, indicating a gender-specific bidirectional relationship (Lin et al., 2025).

Cultural and contextual differences further influence usage patterns and outcomes. For instance, students in Pakistan, the UAE, the UK, and Ghana demonstrate varying behaviors and consequences shaped by local accessibility and social norms (Abbas et al., 2019; Alnjadat et al., 2019; Anderson et al., 2024; Booker et al., 2018; Odoom et al., 2025). In Saudi Arabia study they reported that higher social media addiction towards women and slightly worse mental health. Women's higher engagement with appearance-focused platforms (e.g., Instagram) correlated with body image concerns, increasing anxiety, and depression risks. Men faced less pressure but showed compulsive use linked to escapism (Merino et al.,

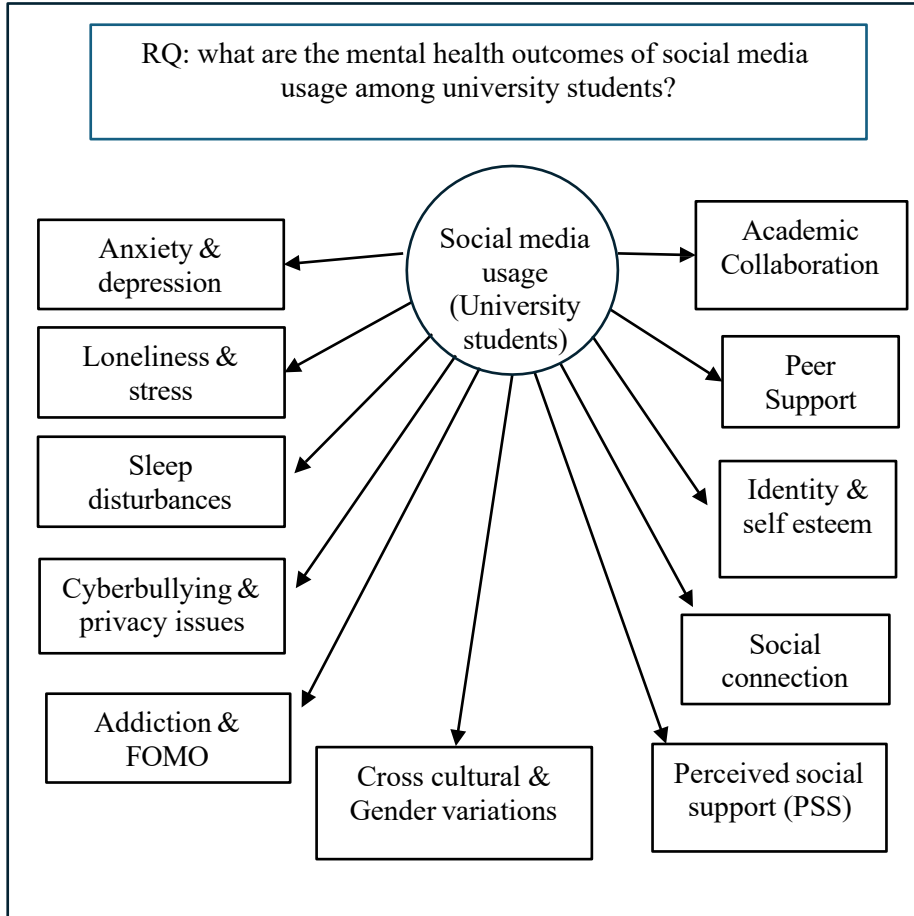
2024). In Pakistan cultural context, Gender plays a pivotal role, as women primarily use platforms for entertainment and socializing within trusted networks, fostering bonding social capital that mediates positive mental health effects like emotional support and autonomy (He et al., 2024).

Sri Lankan undergraduates also exhibit unique patterns, with mixed impacts on academic performance and social relations (Chandrasena & Ilankoon, 2022). These findings stress the importance of culturally sensitive and gender-responsive strategies when addressing the mental health effects of social media in higher education.

F. Mental Health Outcomes of Undergraduates

The conceptual framework below illustrates the relationship between social media usage among university students and their mental health outcomes, framed within the research question (RQ): *"What are the mental health outcomes of social media usage among university students?"* Central to the model is "Social Media Usage by University Students," which influences both negative and positive mental health domains. Negative outcomes encompass anxiety and depression, loneliness and stress, sleep disturbances, addiction and fear of missing out (FOMO), and cyberbullying and privacy issues. Positive outcomes include social connectedness, peer support, academic collaboration, and perceived social support (PSS). The framework indicated in Figure.5 further incorporates cross-cultural and gender variations as moderating factors, alongside theoretical perspectives such as identity and self-esteem. This structure highlights the dual-edged nature of social media in higher education contexts, underscoring the need for nuanced empirical investigation in systematic reviews.

Figure 5. Mental health outcomes of undergraduates



Source: Author's compilation based on reviewed literature.

IV. IMPLICATIONS

The findings of this review carry valuable implications worthy of being considered by stakeholders involved in higher education provision and administration, policymakers, and support systems for students. Universities must understand that social media is more than just a communication tool but a critical influencer of student wellbeing and academic interaction. This demands special programs of awareness that move beyond the predictable do's and don'ts, equipping students with coping strategies for social comparison, FOMO, and compulsive use causing anxiety and underachievement academically. Institutional policies must address excessive use of social media specifically through endorsing mindful usage and at the same time benefiting from its facilitative ability for group work, support among peers, and access to informational and material resources. University mentoring and counselling services must be improved for early intervention for students who are at risk for social media-induced distress, and digital literacy integrated into the curriculum can help undergraduates to critically appraise online content, become more resistant to misinformation, and adopt healthier online habits.

These implications become strongly relevant and hint out a timely call, specifically in the Sri Lankan context. The recent sudden growth of smartphone

usage and the prominent social dynamics of Facebook, WhatsApp, and TikTok have had immense implications for the lives of undergraduates, both enabling the potential for education and risking mental health issues. Sri Lankan universities, which often struggle with under-resourced mental health support, must be focused on cost-effectively centered strategies like the integration of peer support programs and digital literacy to protect the mental health of students. As emphasis on achievement and collectivism is of great importance, it is essential that interventions are culturally competent, tackling the distress of social comparison and the pressure of the performance expectations of parents whilst reinforcing the positive aspects of online collaboration too. In tackling such concerns within a culturally competent framework, institutions formulating the Sri Lankan higher education system can make social media an instrument of academic success and psychological resilience and not let it be labeled as an instrument of psychological distress.

V. LIMITATIONS

Despite the insights revealed by this review, it is important to note its limitations as well. The heterogeneity of study designs, methodologies, and outcome measures limited the possibility of conducting a meta-analysis, reducing the precision of synthesis. Many included studies relied on self-reported data, which are subject to recall and social desirability bias, potentially skewing findings. The search strategy, while rigorous, was limited to articles indexed in high quality databases, meaning that relevant studies in other repositories or grey literature may have been excluded. Additionally, the rapid evolution of social media platforms make some findings time-sensitive, raising questions about their long-term relevance. These limitations should be considered when interpreting the conclusions of this review.

VI. FUTURE RESEARCH DIRECTIONS

Future research should move beyond predominantly cross-sectional designs and adopt longitudinal approaches to establish causal relationships between social media usage and mental health outcomes. Such studies would clarify not only whether social media drives anxiety, depression, or well-being, but also how these effects unfold over time. Greater attention should also be paid to underrepresented regions, particularly South Asia and Sri Lanka, as current evidence is heavily dominated by Western and cross-cultural studies. Including diverse cultural settings will improve the generalizability of findings and highlight context-specific dynamics.

Further work is also needed to examine platform-specific effects. Applications such as Instagram, TikTok, WhatsApp, and emerging platforms differ significantly in content style, interaction patterns, and social norms, which in turn may produce distinct psychological outcomes. Objective measures, including digital trace data, app usage analytics, and even physiological indicators, should be incorporated to reduce reliance on self-reported surveys, thereby improving accuracy. In addition, experimental and intervention-based research could provide stronger evidence on the effectiveness of digital literacy programs, coping skills training, and institutional support systems in mitigating risks. This comprehensive review underscores the dual impact of social media on university students' mental health, emphasizing the importance of balanced usage and the role of contextual factors such as cultural norms and gender. Effective interventions will require a

multifaceted approach integrating policy, education, and mental health services tailored to students lived realities.

Finally, future studies should take gender and cultural sensitivities into account when designing interventions. Female students have consistently been shown to be more vulnerable to anxiety and body image pressures, while collectivist cultural contexts, such as Sri Lanka, may amplify comparison pressures and academic stress. Addressing these differences explicitly will ensure that recommendations are not only evidence-based but also socially and culturally responsive. Future research should prioritize longitudinal designs and objective usage metrics to deepen understanding and inform more targeted, evidence-based strategies for promoting healthy digital engagement in academic settings.

VII. CONCLUSION

This review of literature gathered evidence from 52 peer-reviewed studies published between the years 2015 and 2025 and examined the degree to which social media usage influences the mental health outcomes among university students. The findings described a noteworthy negative association between social media usage and mental health outcomes, where high usage correlated with higher anxiety, depression, addictive behaviors such as smartphone addiction and FOMO, which in turn lowered their overall wellbeing ([Anto et al., 2023](#); [Balasubramanian, 2023](#)). These outcomes were often mediated by social comparison, information overload, and disrupted sleep routines. Moreover, gender differences add complexity to these findings, as female students were denoting greater vulnerability towards anxiety and diminished academic performance compared to their male students ([Alnjadat et al., 2019](#); [Aran-Ramspott et al., 2024](#); [Booker et al., 2018](#)). However, the results of this review also draws on the positive contributions of social media, such as improved academic collaboration, enhanced social connectedness, and increased access to social support as perceived by students ([Abbas et al., 2019](#); [Lakmali et al., 2021](#)). Cross- cultural variations, with examples from Pakistan, the UAE, the UK, Ghana, and Sri Lanka, in fact, testified that social and cultural contexts strongly influence how students experience both the benefits and risks of social media use ([Anderson et al., 2024](#); [Chandrasena & Ilankoon, 2022](#); [Odoom et al., 2025](#)). Seen through these lenses, the results of the current analysis validate the proposition of a complex and bidirectional interaction between social media and the mental health of university students, such that more carefully framed strategies for benefiting from its advantages can cushion their undesirable outcomes.

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