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The relationship between social media use and social isolation in young adults: a systematic review

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ABSTRACT

Social isolation has become a growing public health concern, with increasing attention to the potential role of social media in shaping social connection and disconnection. This systematic review synthesises 21 empirical studies published between 2000 and 2024 that examined associations between social media use and social isolation among young adults. Following the PRISMA guidelines, studies were selected from five databases: PubMed, Web of Science, Scopus, EBSCOhost, and Google Scholar. Thematic analysis identified three major categories: (1) motivations and patterns of social media use, (2) Effects of Text-based and Visual Communication Channels, and (3) No Association Between Social Media and Social Isolation. While 15 studies reported a positive association between certain patterns of social media use and increased feelings of isolation, four identified potential benefits, and two found no significant relationships. Specifically, excessive or passive use without interaction was more commonly linked to negative outcomes, whereas purposeful and interactive use appeared to support social connection. Differences in platform specifics (e.g., text-based vs. image-based) and contextual variables such as the COVID-19 pandemic contributed to the variability of results. Most studies adopted cross-sectional designs and applied varied measurement tools, which may have influenced the consistency and comparability of results.

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KEYWORDS
Social isolation; social media use; young adults; SLR

Introduction

In an era where digital connections are ubiquitous, social media such as Facebook, Instagram, Snapchat, and WhatsApp, also known as social networking sites (SNSs), have become a cornerstone of modern communication (Wang et al., 2025). As of February 2025, 5.56 billion people were internet users worldwide, representing 67.9% of the global population, which is projected to reach around six billion by 2027 (Kemp, 2025a). Young adults aged 18–29 constitute a particularly active segment of social media users (Furlong,

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2017; Wilson & Stock, 2021), frequently engaging across multiple platforms and spending substantial time online (ROI, 2022; Kemp, 2025b). For many young adults, social media has become a primary channel for peer interaction and social coordination (Nesi et al., 2018), raising concerns about its potential to displace face-to-face engagement (Rachidi & Yangzom, 2022).

In turn, this overdependence on social media has been linked to social isolation (Santini et al., 2025). Social isolation has emerged as a growing public health concern, defined as 'a state of social disconnection characterised by infrequent social contacts' (Holt-Lunstad, 2020, p. 1; Wister & Kadowaki, 2021), which occurs when individuals lack true social engagement and quality relationships with others (Meshi et al., 2020). In Australia, for instance, 33% of young adults report experiencing significant levels of social isolation (Australian Institute of Health and Welfare, 2025). The consequences of prolonged social isolation are severe, including increased risks of depression, loneliness, dementia, poor physical health, and higher mortality rates (Lei et al., 2024), highlighting the need to find strategies to mitigate social isolation in young adults. Although often used interchangeably, social isolation and loneliness are conceptually distinct and reflect different forms of social vulnerability (Van Tilburg & de Jong Gierveld, 2023). Specifically, social isolation is an objective, measurable lack of contact with social networks, while loneliness refers to the subjective emotional experience of dissatisfaction with one's social relationships, even when objective contact (i.e., social connectedness) may be present (Wister & Kadowaki, 2021; Van Tilburg & de Jong Gierveld, 2023).

Most of our current understanding of the interaction between social media use and social isolation comes from research on the elderly, who are highly disconnected from social media platforms (Wang et al., 2024). Reviews exploring the effects of social media use on the elderly predominantly highlight positive outcomes (Fu & Xie, 2021). In contrast, existing literature emphasises the dual role of social media as both a facilitator of connection and a contributor to social isolation among young adults (Paakkari et al., 2021); the causal mechanisms underlying this relationship remain inadequately understood (Santini et al., 2025). While older adults are often isolated due to limited use of social media (Lei et al., 2024), young adults face a paradox: despite their high digital connectivity, they are more vulnerable to social isolation (Laursen & Hartl, 2013), which underscores the difference between online engagement through social media and being socially connected.

Unlike older adults, young people experience social isolation not from digital exclusion but from within the dynamics of digitally mediated interactions themselves (Setty, 2023). This highlights the need for a targeted synthesis of evidence examining how social media shapes social isolation in this population. Accordingly, this study employs the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to systematically review and classify existing empirical research, with the aim to answer the research question: How does social media influence social isolation among young adults?

Background

A growing body of research has documented a complex and paradoxical relationship between social media use and social isolation among young adults. While some studies report that social media use is associated with higher levels of social isolation (Sucharitha et al., 2020), other research suggests that social media also facilitates social connection

and relational maintenance, particularly under conditions of maintaining physical distance (Primack et al., 2017; Szeto et al., 2024). These contradictory findings indicate that the relationship between social media use and social isolation is not unidirectional, highlighting the need to examine underlying patterns and mechanisms.

One critical dimension concerns patterns of social media use, commonly distinguished as active (e.g., messaging, commenting) versus passive (e.g., browsing without interaction) engagement (Stevic & Matthes, 2021). While social media provides frequent opportunities for interaction, excessive or predominantly passive use has been linked to problematic usage patterns and social media addiction (Santini et al., 2025; Volpe et al., 2022). Among young adults, social media is often used to maintain peer and family relationships (Sponcil & Gitimu, 2013); however, when online engagement becomes highly frequent or displaces offline interaction, it has been associated with greater social isolation (Grieve et al., 2013). These findings indicate that social isolation is shaped not merely by the amount of social media use, but by how digital interactions are balanced with offline social engagement.

Beyond usage patterns, platform-specific features play a central role in shaping social experiences online. Visual-oriented platforms such as Instagram, Snapchat, and TikTok emphasise self-presentation and exposure to curated social content, intensifying opportunities for upward social comparison (Chou & Edge, 2012; Meier & Johnson, 2022). In contrast, messaging-based platforms such as WhatsApp prioritise dyadic communication and relational maintenance, and have been more consistently associated with perceived social support and reduced isolation (Primack et al., 2017; Szeto et al., 2024). Meta-analytic evidence suggests that social comparison processes are pervasive across social media environments and may increase vulnerability to perceived social disconnection, particularly among young adults (Meier & Johnson, 2022; McComb et al., 2023).

At the psychological level, social comparison and fear of missing out (FOMO) have been identified as key mechanisms linking social media use to social isolation. According to Social Comparison Theory, individuals frequently evaluate themselves relative to others, a tendency that is amplified in digital environments saturated with idealised content (Chae, 2015). Repeated exposure to others' curated social lives may foster perceptions of social inadequacy and exclusion, particularly during passive engagement (Chou & Edge, 2012; Meshi et al., 2020; Shensa et al., 2016). In addition, pressures associated with constant connectivity, such as expectations of immediate responsiveness, may strain digitally mediated relationships and contribute to feelings of misunderstanding or exclusion, often mediated by FOMO (Fumagalli et al., 2021; West et al., 2024). These processes have been linked to increased perceptions of social isolation among young adults (Primack et al., 2019).

At the same time, social media is inherently interactive and has also been recognised as a means of promoting engagement and alleviating social isolation (Primack et al., 2017; Siddiq et al., 2024). Platforms such as Facebook enable users to maintain contact with friends and family across geographical boundaries and were particularly important for preserving social ties during the COVID-19 pandemic, when physical distancing restrictions were imposed (Primack et al., 2017; Szeto et al., 2024). Empirical evidence also suggests that social media can reinforce existing friendships through increased digital interaction (Lenhart, 2015). Beyond close relationships, these platforms facilitate broader community engagement by allowing users to share personal achievements and social

goals within their networks, fostering a sense of belonging and collective purpose (Bordini & Korn, 2020; Jayakody et al., 2022). These findings highlight that social media's impact on social isolation depends on whether it facilitates meaningful interaction or primarily promotes observation and comparison.

Finally, young adulthood represents a distinct developmental context characterised by identity exploration and substantial changes in social networks, including transitions into higher education, employment, and intimate relationships (Primack et al., 2017). During this period, social media often serves as a central infrastructure for peer communication and social coordination. However, many studies include young adults within broader age groups, obscuring age-specific mechanisms and vulnerabilities. Despite being the most digitally connected demographic, young adults remain particularly susceptible to social isolation (Laursen & Hartl, 2013; Setty, 2023). This underscores the need for focused synthesis of evidence examining how social media use shapes social isolation specifically within this population.

Method

Search strategy and study selection

A systematic search strategy was developed to address the research objectives of this review. The PRISMA procedure was followed for the study objectives. Data collection occurred in March 2025. Study eligibility was determined using the PICO framework (Population, Intervention, Comparison, Outcome) (Eriksen & Frandsen, 2018). The target population was young adults, typically aged 18–29 years. The intervention was defined as the use of social media, broadly encompassing various platforms or applications that facilitate digital interaction in this review. Comparison referred to differences in the frequency, intensity, or nature of social media use. The primary outcome was social isolation. Studies were included when outcomes were explicitly framed and discussed in terms of social isolation or social disconnectedness in relation to social media use, and excluded when loneliness was defined primarily as an affective or emotional outcome. This approach ensured conceptual consistency with the review objectives while retaining relevant empirical evidence.

A comprehensive search was conducted in five major databases (PubMed, Web of Science, Scopus, EBSCOhost, and Google Scholar) to identify relevant studies. The search strings were adapted to the syntax of each database and included combinations of terms related to 'social isolation', 'social media' or 'digital communication' or 'social network*' and youth-related populations, including 'young adults', 'youth' and 'students'. To maximise sensitivity at the search stage, population-related keywords were kept intentionally broad (e.g., 'students') and eligibility was subsequently determined based on age criteria during the screening process. Only studies with these terms in the title, abstract, or equivalent fields were included. The detailed search strategies and number of records retrieved are summarised in Table 1.

Search filters applied included: year (2000–2025), language (English), age group (young adults 18 + years), and publication type (journal articles or conference papers). The search from the 5 different databases first produced 2,027 results in total. After removing duplicate results (245 duplicates), the data consisted of 1,782 entries. All papers

Table 1. Database-specific search strings and number of records retrieved.

Database	Search string (Title/Abstract or equivalent)	Records
EBSCOhost	(TI 'social isolation') AND (TI 'social media' OR TX 'social network*' OR TX 'digital communication') AND (TI 'young adults' OR TX 'youth' OR TX 'student')	754
Scopus	TITLE-ABS-KEY('social isolation') AND (TITLE-ABS-KEY('social media') OR TITLE-ABS-KEY('social network*') OR TITLE-ABS-KEY('digital communication')) AND (TITLE-ABS-KEY('young adults') OR TITLE-ABS-KEY('youth') OR TITLE-ABS-KEY('student'))	571
Web of Science	(AB = 'social isolation') AND (AB = 'social media' OR 'digital communication' OR 'social network*') AND (AB = 'young adults' OR 'youth' OR 'students')	548
Google Scholar	intitle:'social isolation' AND (intitle:'social media' OR 'social network*' OR 'digital communication') AND (intitle:'young adults' OR intitle:'youth' OR intitle:'student')	84
PubMed	('social isolation'[Title/Abstract]) AND ('social media'[Title/Abstract] OR 'digital communication'[Title/Abstract] OR 'social network*'[Title/Abstract]) AND ('young adults'[Title/Abstract] OR 'youth'[Title/Abstract] OR 'student'[Title/Abstract])	70

Table 2. Inclusion and Exclusion Criteria.

Inclusion Criteria	**Exclusion Criteria**
Empirical studies using qualitative, quantitative, or mixed methods	Theoretical articles, literature reviews, or theses
Focused (fully or partially) on young adults	Studies not focused on young adults
Published in journals or conference proceedings	Non-academic formats (books, editorials,commentaries, patents)
Explicitly examined social isolation	Studies not addressing social isolation
Explored how social media use is associated with social isolation	Studies only mentioning social media without examining its effect on isolation

were screened according to the predefined inclusion and exclusion criteria, as shown in Table 2.

Empirical studies explicitly examining social media use in relation to social isolation among young adults were included. Studies focusing solely on communication enhancement, without assessing social isolation outcomes, were excluded. We acknowledge that some studies operationalise perceived social isolation using loneliness-labelled measures such as the UCLA scale, due to the limited availability of widely validated instruments explicitly designed to capture social isolation in digitally mediated environments. For this reason, our inclusion criteria were based not on the instrument label alone, but on the conceptual framing and interpretive use of the outcome within each study. Studies were included when the outcome was explicitly discussed in terms of social disconnectedness, reduced interaction, or weakened social ties, and excluded when loneliness was framed primarily as an affective or clinical outcome, irrespective of the measurement tool used.

Titles, abstracts, and keywords were independently screened by the first two authors according to predefined inclusion and exclusion criteria. Discrepancies were resolved through discussion until consensus was reached; when necessary, a third author was consulted. Although dual independent screening was employed to minimise selection bias, the possibility of residual bias cannot be fully excluded. In addition, the restriction to peer-reviewed English-language publications may have introduced publication and language bias. A total of 21 articles met the eligibility criteria and were included in the review. The full screening process is shown in the PRISMA flow diagram (Figure 1), which ensures transparency and replicability.

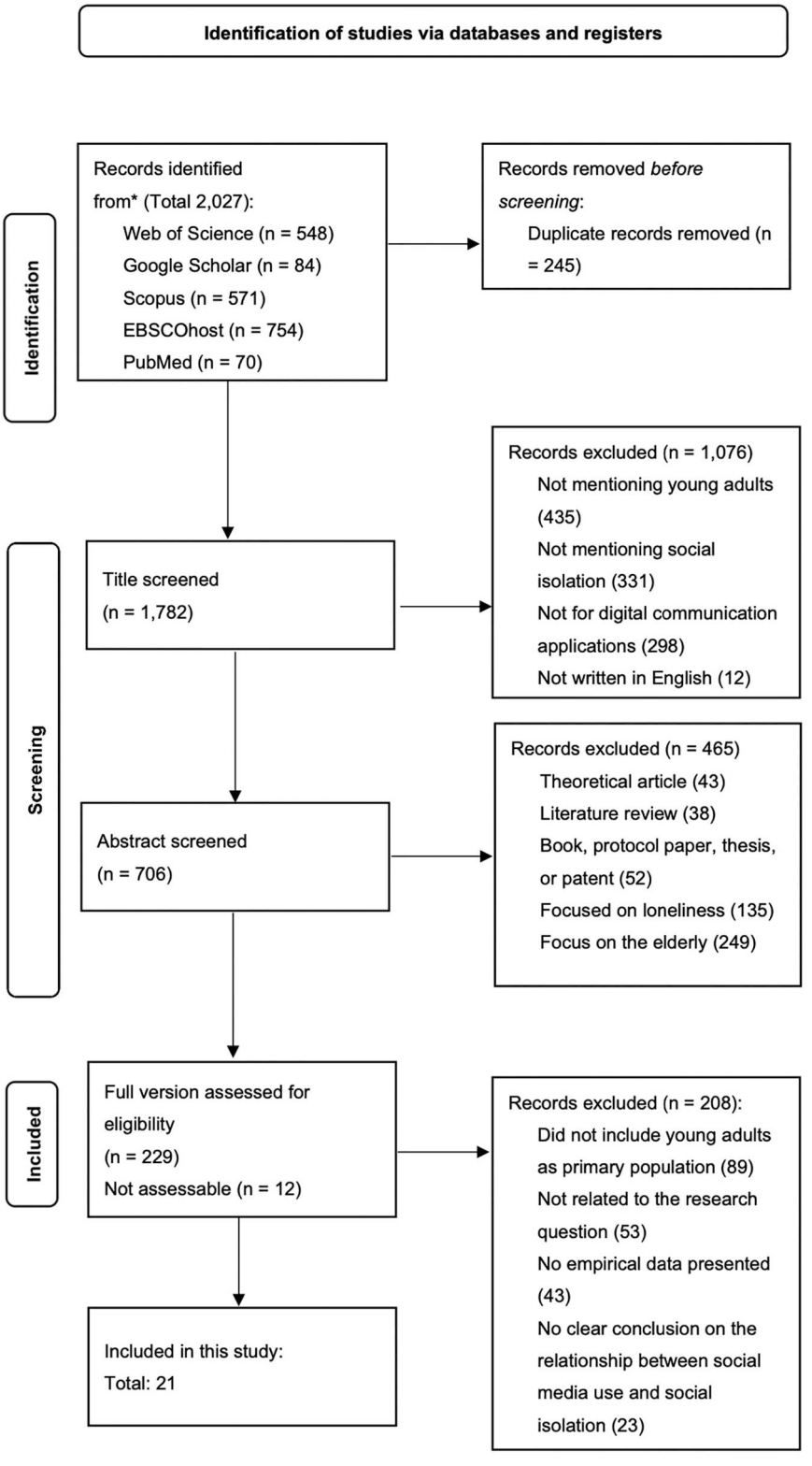

Figure 1. Review process detailing inclusion/exclusion using the PRISMA process.

Data extraction and synthesis

We extracted descriptive information from each included study using a structured Microsoft Excel, including research objectives or questions, research method (qualitative, quantitative, or mixed-methods), research design, measurements of social media use and social isolation, sample size, participant characteristics (age range), gender distribution, and main findings.

To synthesise the results, we analyse patterns of social media use (e.g., passive, addictive, compulsive) and social media platform-specific characteristics. These themes were iteratively refined through coding rounds to identify convergences and divergences across the included studies. Contradictory results and relevant themes were also noted to inform the discussion.

21 studies were included, which reflects a deliberately stringent inclusion strategy. We prioritised empirical studies that explicitly examined the relationship between social media use and social isolation among young adults.

Results

Descriptive details of the reviewed studies

A total of 21 studies published between 2000 and 2025 were included in the final dataset. Notably, 19 of these were published after 2020. However, 10 of them were related to the pandemic, reflecting a surge in research interest following the COVID-19 pandemic. This trend is not a coincidence because the pandemic was characterised by widespread lockdown and social distancing policies, fundamentally altering how people connected socially and experienced isolation (Figure 2).

Geographically, most studies were conducted in the United States ($n = 6$), India ($n = 3$), and Pakistan ($n = 2$), while others included data from Kuwait, Nigeria, the UK,

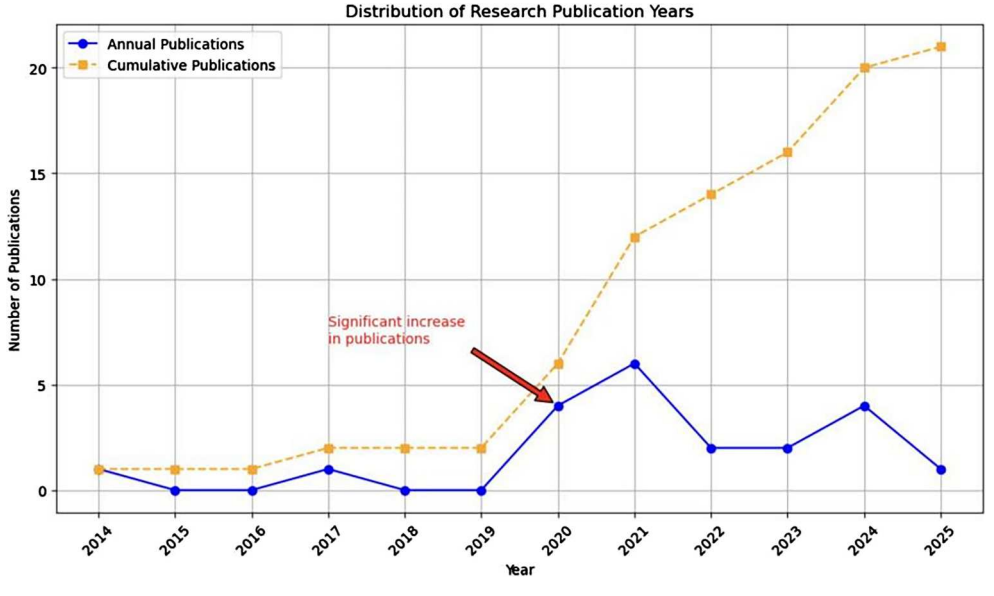

Figure 2. Distribution of research publication years.

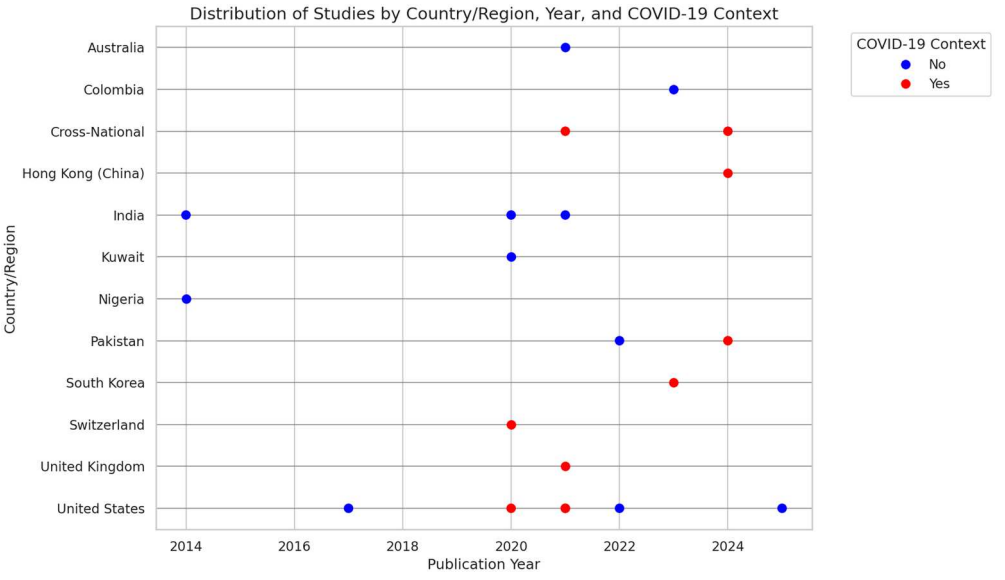

Figure 3. Distribution of country/region. Note: Each dot represents a study published in a specific country/region and year. In 2021, red dots overlap in the United States because two studies during the COVID-19 pandemic were conducted there.

Switzerland, Australia, Korea, Colombia, and Hong Kong. Two studies were cross-national, one with participants from the United States and Canada, and the other from the UK, Argentina, and Italy. This global distribution highlights the universal relevance of the topic (Figure 3).

17 studies used quantitative methods, three were qualitative, and one employed mixed-methods (Figure 4). Sample sizes in quantitative studies varied considerably (up to 1,787 participants), enhancing generalizability. In contrast, qualitative samples were smaller (15, 20, and 22 participants) (Dedryver & Knai, 2021; Keen & Gainsbury, 2021; Surya et al., 2024).

Participant demographics

The definition of 'young adults' varied across different studies. Most studies included participants aged 18 years and older up to 34, while five lowered the minimum age to 15 or 17 (Ahmad et al., 2022; Keen & Gainsbury, 2021; Patel et al., 2021; Sahoo et al., 2024; Tirukkovalluri et al., 2020). Notably, five studies included participants over age 30 (Fumagalli et al., 2021; Lisitsa et al., 2020; Primack et al., 2017; Rochelle & Chan, 2024; Sewall et al., 2022). Two studies included broad age ranges but focused their results on the young adults sub-group, aligning with the scope of this review (Juvonen et al., 2021; Teater et al., 2021). Undergraduate students were the most frequently studied population due to their increasing trend in digital engagement. Gender-specific analyses were rare. While most studies did not examine gender differences, four studies conducted in Kuwait, Hong Kong, India, and the United States reported differential outcomes between male and female participants, suggesting that gender-related effects may vary across cultural contexts (Al-Kandari & Al-Sejari, 2021; Rochelle & Chan, 2024; Sahoo et al., 2024; Sewall et al., 2022).

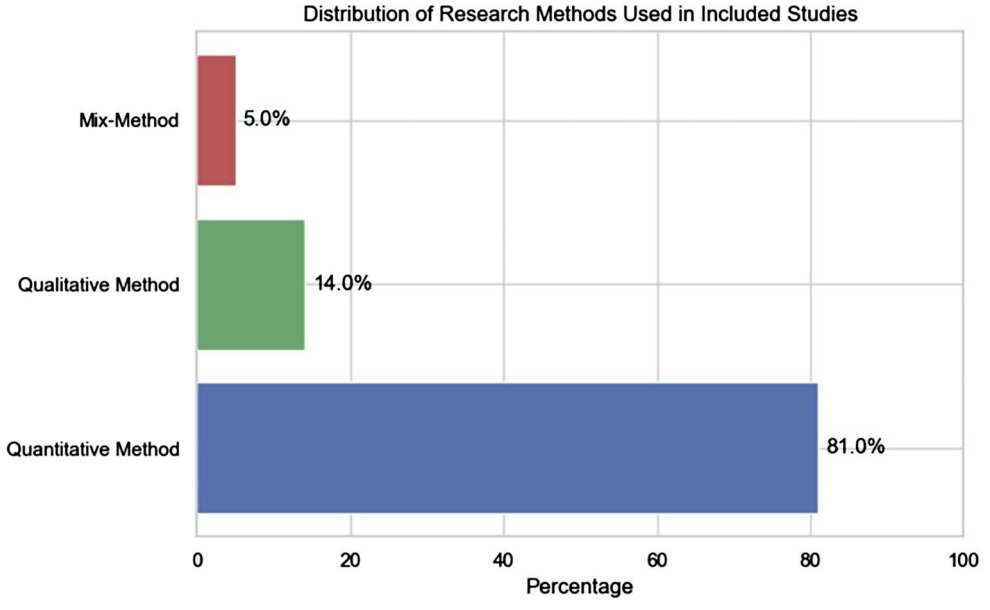

Figure 4. Distribution of research methods.

Social media usage measurement

Social media use was primarily evaluated through self-reported measures, which encompass both self-developed questionnaires and validated scales. The self-developed items typically evaluated usage frequency and perceived behavioural changes of participants. For example, participants were asked questions such as 'How much time do you spend on social media (or platform)?' (Al-Kandari & Al-Sejari, 2021, p. 4) or 'Has your social media usage increased, decreased, or remained stable since the beginning of the COVID-19 pandemic?' (Juvonen et al., 2021, p. 4). Validated tools included: (a) Smartphone Addiction Scale (SPAS), (b) Frequency of electronic contact with friends, (c) Social Network Site Engagement (Facebook Intensity Scale), (d) Social Media Addiction Proneness Scale, (e) Bergen Social Media Addiction Scale, (f) Perception of Social Media Questionnaire, (g) Questionnaire of Addiction to Social Networks, and (h) Mobile Phone Problem Use Scale (MPPUS-10). Additionally, several studies have also evaluated digital communication behaviour, such as the frequency of messages, likes, and comments, to reflect interactive participation (Juvonen et al., 2021; Lee et al., 2023; Patel et al., 2021; Wang et al., 2023). In addition, various dimensions of social media use were explored, including overall daily use, nighttime use, and problematic or compulsive patterns. Despite the reliance on subjective measures, a few studies incorporated objective measurements such as screen-time screenshots or application usage tracking (Fumagalli et al., 2021; Sewall et al., 2022).

Both cross-sectional and longitudinal studies generally supported the existence of an association between social media use and social isolation among young adults. Among the 21 included studies, 14 were cross-sectional designs and 2 were longitudinal designs, while the remaining employed survey research designs, 2 (social media use) × 2 (gender) factorial designs, semi-structured interviews, and field surveys. Of the quantitative

studies, 11 (approximately 52.3%) reported a statistically significant positive association between social media use and social isolation. These studies commonly found that higher frequency, longer duration, or passive forms of social media use were associated with increased feelings of social isolation (Primack et al., 2017).

Social isolation measurement

Social isolation was primarily measured by validated psychological measurement scales. The UCLA Loneliness Scale was the most commonly used ($n = 7$), followed by the Patient Reported Outcome Measurement Information System (PROMIS) ($n = 4$). Other tools included (a) Social Isolation Scale (SIS), (b) Emotional/Social Loneliness Scale (ESLI), (c) Revised Ruben Social Network Scale, and (d) Psychological Well-being Scale. Moreover, several studies employed self-developed items to capture subjective experiences of social isolation in the context of social media use. These items posed direct questions, such as 'Does social media make you feel isolated?' (Asemah, 2014, p. 115). This variability underscores the lack of standardised measurement frameworks. A network diagram was constructed to visualise each study to the specific scales employed for assessing social media use (SMU) and social isolation (SI) (Figure 5).

A summary of quantitative results can be found in Table 3.

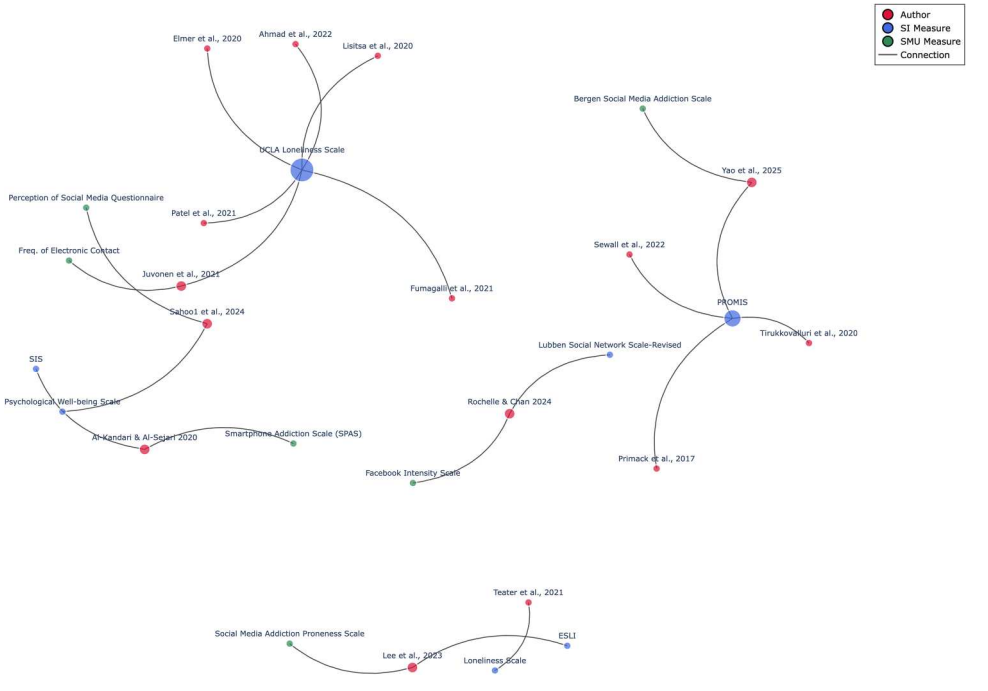

Figure 5. Frequency-weighted network of SMU and SI measurement tools across studies. Note: Nodes represent measurement instruments for SMU and SI, as well as individual studies (author–year). The size of each measurement node reflects the frequency with which the instrument was used across the included studies, with larger nodes indicating more frequent use. Edges link studies to the specific SMU and SI instruments they used.

Table 3. Quantitative results.

Category	Occurrences
Publication Year	2014 (n=1; 5%), 2017 (n=1; 5%), 2020 (n=4; 19%), 2021 (n=6; 28%), 2022 (n=2; 9.5%), 2023 (n=2; 9.5%), 2024 (n=4; 19%), 2025 (n=1; 5%)
Research Method	Quantitative (n=17; 81%), qualitative (n=3; 14%), mixed methods (n=1; 5%)
Research Design	Cross-sectional survey (n=15; 71%), longitudinal study (n=2; 9%), individual interviews (n=1; 5%), focus group interviews (n=1; 5%), field survey (n=1; 5%), 2 (social media use) × 2 (gender) factorial design (n=1; 5%)
Region of Sample	United States (n=7; 33%), India (n=3; 14%), Pakistan (n=2; 9%), United Kingdom (n=2; 9%), Kuwait, Nigeria, Switzerland, Australia, South Korea, Colombia, Hong Kong, Argentina, Italy (each n=1; 5%)
Special Context	The COVID-19 pandemic (n=10; 48%), general context (n=11; 52%)
Country Design	Single country (n=19; 90%), multiple countries (n=2; 10%)
Social Media Use Measurement	The Smartphone Addiction Scale (SPAS) (n=1; 4.8%), frequency of electronic contact with friends (n=1; 4.8%), Perception of Social Media Questionnaire (n=1; 4.8%), the Bergen Social Media Addiction Scale (n=1; 4.8%), the Mobile Phone Problem Use Scale (MPPUS-10), Questionnaire of Addiction to Social Networks (n=1; 4.8%), the Social Media Addiction Proneness Scale (n=1; 4.8%), Social Network Site Engagement (The Facebook Intensity Scale) (n=1; 4.8%), not mentioned or not validated (n=14; 66.7%)
Social Isolation Measurement	The UCLA Loneliness Scale (n=7; 33%), the Patient-Reported Outcomes Measurement Information System (PROMIS) (n=4; 19%), the Social Isolation Scale (SIS) (n=1; 5%), the Emotional/Social Loneliness Inventory (ESLI) (n=1; 5%), the Revised Rubin Social Network Scale (n=1; 5%), and the Psychological Well-being Scale (n=1; 5%), not mentioned or not validated (n=6; 28%)

Thematic findings

We organised the findings into three categories: (1) motivations and patterns of social media use, (2) effects of text-based and visual communication channels, and (3) no association between social media and social isolation. Notably, half of the included studies were conducted in the context of the COVID-19 pandemic ($n = 10$). During this period, social media became a vital substitute for face-to-face engagement to help young adults maintain social ties. Lockdowns limited in-person interactions, and social distancing measures may have induced heightened levels of social isolation among young adults (Elmer et al., 2020).

Motivations and patterns of social media use

Several studies highlighted that the motivations and patterns underlying social media engagement critically shape its impact on users' social connectedness.

Positive use patterns. Five studies reported positive associations between social media use and reduced social isolation among young adults. Among these, three studies specifically examined interactive or purpose-driven social media use. Rochelle and Chan (2024) and Lee et al. (2023) found that engaging in companionship-driven communication and maintaining digital interaction led to experiencing less social isolation. Juvonen et al. (2021) supported this finding that for individuals living alone, satisfying electronic contact, such as liking, commenting, and private messaging, provides substantial protection against both social isolation and emotional distress.

The remaining two studies focused on general social media engagement. Sahoo et al. (2024) reported that higher overall social media engagement was associated with greater

psychological well-being and lower social isolation. Similarly, Yao et al. (2025) found that greater social media use correlated with higher levels of both online and offline social support, which in turn was associated with lower social isolation.

Negative use patterns. Conversely, 12 out of 21 studies consistently reported that problematic patterns (overuse or addiction), passive use, and compulsive use of social media were associated with higher levels of social isolation among young adults.

Studies on problematic use had identified that high usage frequency and long daily duration, often measured as exceeding 121 min per day, significantly increased the odds of feeling socially isolated (Primack et al., 2017; Tirukkovalluri et al., 2020). Lis-Gutiérrez and Zapata-Patarroto (2023) similarly linked social media addiction to elevated isolation. Asemah (2014) and Ahmad et al. (2022) further noted that overuse could weaken real-world interpersonal skills and social confidence.

During COVID-19, Elmer et al. (2020) observed that university lockdowns fractured students' social and academic networks, significantly raising isolation levels even as online interaction increased. Lisitsa et al. (2020) supported this reality that many young adults turned to passive scrolling and checking of social media, not to connect but to cope, which ultimately displaced offline contacts without offering meaningful, interactive support. Midgley et al. (2024) further demonstrated that without a clear motivation to connect, social engagement via social media became ineffective.

Moreover, Keen and Gainsbury (2021) noted that compulsive users frequently experienced emotional exhaustion, social isolation, and pressure from online comparison and performance norms. Qualitative insights reinforced this, with participants describing 'screen-time guilt' and anxiety. One remarked, 'I got really bad like reply anxiety … I feel like I need to reply instantly and end up resenting them because they keep messaging me.' (Dedryver & Knai, 2021, p. 5). Similarly, Surya et al. (2024) indicated that digital interaction failed to replicate the emotional depth of face-to-face connections and may bring negative emotions due to comparisons with others. Despite high engagement in video calls (78.4%), social media (92.7%), phone calls (89%), and texting (92.3%), young adults remained the most isolated demographic before and during the pandemic (Teater et al., 2021).

Effects of text-based and visual communication cchannels

The social media platform type and interaction mode further shape the isolation experience. Visual-based platforms such as Snapchat, Instagram, and YouTube emphasised self-expression and were consistently associated with social isolation. For example, Al-Kandari and Al-Sejari (2021) identified a strong linear link between social isolation and frequent use of visual-oriented platforms among young Kuwaitis, emphasising the potential for long-term passive consumption of isolation. Similarly, Fumagalli et al. (2021) supported this finding that social media use (e.g., Facebook, Instagram) predicted higher isolation levels, mediated by fear of missing out (FOMO). In contrast, text-based platforms like WhatsApp were associated with decreased isolation and unrelated to FOMO.

However, emerging immersive technologies offer a potential counterpoint. Yao et al. (2025) demonstrated that social VR (virtual reality) platforms can enhance social support and reduce isolation when they are used with social intent, by enabling deeper relational engagement compared to traditional text or image-based social media.

No association between social media and social isolation

Two studies reported no statistically significant association between social media use and social isolation among young adults. Sewall et al. (2022) and Patel et al. (2021) questioned the robustness of prior findings, reporting that the relationships between social media use and mental health outcomes, including social isolation, were generally non-significant or minimal across different sub-groups and analytic models. Patel et al. (2021) further noted that, despite frequent engagement with social media, many young adults still preferred face-to-face interactions, suggesting that digital connectivity does not necessarily enhance real-world social connectedness.

Discussion

This systematic literature review synthesised findings from 21 studies investigating the relationship between social isolation and social media use among young adults. The goal was to clarify how social media use may foster social interaction or contribute to social isolation in this population.

Overall, the findings revealed a paradoxical pattern: while social media offers potential opportunities for connection, it also carries risks of exacerbating social isolation. Most included studies ($n = 15$) reported adverse outcomes linked to problematic engagement patterns (e.g., overuse or addiction, passive use, and compulsive use), while a minority ($n = 4$) found positive associations related to purposeful engagement or social media platform-specific affordances. Two studies reported no significant association (Figure 6).

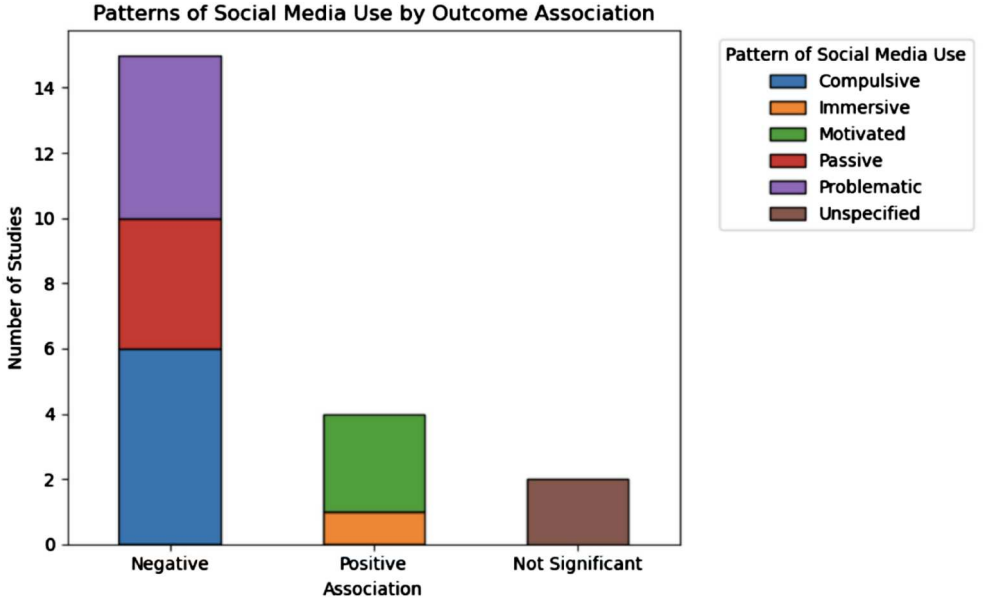

Figure 6. Types of social media use by outcome association. Note: Studies reporting non-significant associations did not explicitly distinguish specific patterns of social media use and were therefore categorised as unspecified.

Interpretation and theoretical implications

Several studies emphasised the role of user motivation and engagement quality in shaping social outcomes. Specifically, interactive and motivated engagement, such as maintaining relationships or fulfilling companionship needs, was linked to lower social isolation (Juvonen et al., 2021; Lee et al., 2023; Rochelle & Chan, 2024). These findings align with earlier reviews on older adults'ICT usage during the pandemic, reinforcing that meaningful digital engagement can mitigate isolation, but cannot fully substitute real-world social bonds (Lei et al., 2024; Muhammad et al., 2019).

Moving beyond mere usage frequency or time, the findings underscore that user motivation and quality of engagement are crucial determinants of social outcomes. Notably, in the context of COVID-19, social media served compensatory functions due to restricted offline opportunities. This aligns with the Compensatory Internet Use Theory (Kardefelt-Winther, 2014), which views problematic use as a response to unmet psychosocial needs. Passive or compulsive use may reflect coping strategies that paradoxically reinforce isolation because of a lack of depth or reciprocity, whereas socially oriented engagement can serve compensatory functions, temporarily mitigating social isolation without fostering problematic outcomes.

These patterns underscore that while social media is designed to connect, problematic use may deepen disconnection, particularly among young adults who are digitally active yet socially vulnerable. By focusing specifically on them, this review extends previous work, drawing attention to a demographic that is particularly susceptible to the high risks of social isolation.

Social media platform-specific and contextual influences

Moreover, this review also reveals that platform characteristics shape user experience, which were often overlooked in earlier aggregate assessments of social media use. The present review advances prior research by identifying social media platform-specific differences in their association with social isolation. Previous studies often aggregated social media platforms into a single construct. Visually oriented platforms (e.g., Instagram, Snapchat, YouTube), which prioritise curated self-presentation, were particularly associated with feelings of inadequacy and isolation (Al-Kandari & Al-Sejari, 2021). In contrast, platforms that facilitate synchronous, reciprocal communication (e.g., WhatsApp, Facebook private chats) appeared less harmful or even protective (Midgley et al., 2024).

Moreover, studies conducted during the COVID-19 pandemic highlight how societal conditions shape digital interaction outcomes. This context-sensitive approach was often overlooked in earlier syntheses, which revealed that the effectiveness of social media in mitigating isolation is highly contingent on the surrounding social environment and individual usage patterns.

Limitations of existing evidence

A notable limitation in the reviewed literature is the dominance of cross-sectional designs ($n = 17$), restricting causal inference. One longitudinal study reported that the prospective associations between social media screen-time and social isolation were generally

small and statistically non-significant across most specifications and sub-groups (Sewall et al., 2022). This supports previous concerns about overreliance on correlational data (Huang, 2022) and reinforces the urgent need for more longitudinal and experimental studies.

Additionally, very few studies examined or tested intervention strategies. Some evidence suggested that purposeful engagement (e.g., sustaining offline relationships or participating in supportive online communities) might reduce isolation, which means social media itself could function as an informal intervention (Patel et al., 2021), but these findings were incidental and lacked theoretical grounding, resulting in limited explanatory power and a lack of theoretically informed intervention strategies.

Future research directions

Despite growing evidence, several critical gaps remain.

First, future research should prioritise longitudinal and experimental designs, such as prospective cohort studies, to better identify temporal relationships and underlying mechanisms between social media use and social isolation. Second, inconsistent measurement of both social media use and social isolation complicates synthesis. There is an urgent need for the development and adoption of standardised, validated instruments that differentiate between active versus passive engagement and social versus non-social usage patterns. Third, the rise of immersive platforms (e.g., social VR, AI-driven social platforms) provides new avenues for study. Researchers should assess how these emerging modalities affect connection and isolation. Fourth, future research should invest in theoretically grounded frameworks, such as Uses and Gratifications Theory, Social Comparison Theory, or Self-Determination Theory to guide hypothesis formation and intervention design. Beyond identifying broad patterns, future studies should explicitly test the mechanisms linking different forms of social media use to isolation outcomes, including the roles of active versus passive engagement and platform modality, by examining mediators such as perceived reciprocity, social comparison, and social support. Fifth, qualitative approaches are currently underutilised. Such studies can provide rich, nuanced insights into users' lived experiences, underlying motivations, and subjective perceptions of online interactions, dimensions that are crucial for designing effective interventions. Within this context, volunteering emerges as a promising hybrid intervention that aligns closely with the patterns identified in this review. Volunteering has been shown to enhance psychological well-being, strengthen social bonds, and foster purpose and social identity among young people (Nichol et al., 2024; Pradhan et al., 2026). At the same time, social media can function as a facilitative infrastructure for organising, promoting, and sustaining volunteering activities, thereby integrating online coordination with offline social participation. Such an approach directly reflects the review's findings that purposeful and interactive forms of social media use are more likely to alleviate social isolation than passive consumption. The future study will investigate purposeful social media use, such as organising, promoting, or sharing volunteering experiences, which could create interactive digital and physical pathways to reduce isolation. For instance, young people can use social media to organise volunteering events, share experiences, and foster a sense of community, which could mitigate isolation while fostering real-world connections. This proposal aligns with evidence that highlights the protective effects of social support, agency, and identity exploration on youth well-being

(Santini et al., 2025). Future work should pilot and evaluate such hybrid models through experimental and theory-driven frameworks.

Conclusion

This systematic review examined the relationship between social media use and social isolation among young adults. Most studies reported negative findings, especially concerning problematic use of social media. Although young people are highly active on social media platforms, their engagement often lacks meaningful interaction, contributing to increased feelings of disconnection. Only a few studies reported positive effects of purposeful social media use, such as enhanced connectedness, but these were also observational and not designed as interventions. Therefore, no causal or intervention-based conclusions can be drawn.

The dominance of cross-sectional and self-reported data limits the generalisability and causal interpretation of existing findings. Additionally, variation in the measurement of both social media use and social isolation reduces the comparability across studies. Despite isolated positive associations, the overall trend remains negative, indicating a pressing need to explore effective intervention strategies.

Future research should employ longitudinal or experimental designs to assess whether purposeful digital behaviours can actively reduce social isolation. Given the documented risks of overuse and maladaptive patterns, interventions must focus not only on digital literacy but also on enhancing real-world social engagement. Volunteering, in particular, remains an underexplored area. Its potential to promote meaningful interaction and mitigate isolation among young adults represents a significant gap in the current literature.

Disclosure statement

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