The Role of Social Media in Shaping Identity and Social Functioning Among Individuals with Psychotic Disorders: A Systematic Review

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Abstract

Background: People with psychotic disorders often face real challenges when it comes to building and maintaining relationship, largely due to how their symptoms affect communication and social behavior. In today's world, where technology has transformed the way we interact, social media platforms like Facebook, X (formerly Twitter), and Instagram, have becomes central spaces for self-expression. For individuals with psychosis, these platforms sometimes reveal distinct patterns, through the words they choose, the images they post, or how they engage with others. These patterns can reflect their inner emotional and mental struggles. **Objective**: This study aims to explore how individuals with psychotic disorders engage with social media, and to examine the implications of this engagement for their identity development, symptom expression, and psychosocial functioning. **Methods:** The two databases utilized for the present study are APA PsycInfo and MEDLINE. This systematic review is restricted to studies published from 2004 onward, as that was the year Facebook was first available, which is generally considered the first widespread social media use. **Results:** The electronic search resulted in 205 studies, of which 20 met the inclusion criteria. Findings suggest that excessive engagement with these platforms, particularly with algorithmic reinforcement of mental health-related content, may shape identity development in maladaptive ways, impacting social behaviors, and interpersonal relationships. Conversely, structured and mindful use of social media can foster a sense of belonging, self-efficacy, and social recovery. **Conclusion**: Social media platforms offer both opportunities and risks for individuals with psychotic disorders, intensifying symptoms and identity while supporting self-expression and connection while potentially

Keywords: psychotic disorder, schizophrenia, social media, identity, social interaction

Introduction

Psychotic disorders are a group of mental health conditions that include schizophrenia, schizoaffective disorder, brief psychotic disorder, schizophreniform disorder, delusional disorder, and schizotypal personality disorder, (Heckers et al., 2013). The term 'psychosis' generally refers to behaviors and experiences, that occur when they should not, such as hallucinations (perceptions without external stimuli) or delusions (fixed false beliefs), also known as 'positive symptoms'. Alongside these, psychotic disorders can involve negative symptoms, which are deficits in behavior, like reduced pleasure (anhedonia), limited speech (alogia), lack of motivation (apathy), and restricted emotional expression (flat affect), (Heckers, 2013). Traditionally schizophrenia has been regarded as the most severe disorder on the psychotic spectrum, (Cicero et al., 2024).

A disrupted sense of self is a core feature of schizophrenia. People with this disorder often struggle with self-awareness, and this can play a key role in the development and persistence of psychotic symptoms (Yau et al., 2019). Identity can be split into personal identity, how we see ourselves independently, and social identity, which reflect our connections to groups or roles (e.g. being a student, family member, member of a sport team). The diagnosis of psychosis can severely shake these roles, leading to feeling of shame, social withdrawal and self-stigma (Yau, 2019). Such experiences may potentially affect not just the individuals, but their families as well. This can contribute to weakening the individuals sense of belonging, where negative interactions or lack of support may reinforce feelings of marginalization (Álvarez-Jiménez et al., 2019). Moreover, the discourse surrounding schizophrenia on platforms like X often reinforces public stigma and we can see it on Robinson et al. (2018) where they found that online discussion about schizophrenia were more likely to be linked as a disorder of violence or unpredictability than other mental disorders.

Psychosis usually emerges during adolescence, which is a critical period of identity formation. When symptoms appear, they can deeply affect how young people see themselves, interrupting the normal process of figuring out who they are (Ben-David et al., 2019). Hallucinations or delusions might distort their self-image and their self-narrative. The term self-

narrative refers to the understanding about themselves, including their values, experiences, and how they see their place in the world. It helps them make sense of their past, present, and future. When psychosis interferes with this process, it can make it harder for individuals to develop a clear and cohesive view of themselves, leading to confusion and difficulty in making decisions or forming personal goals. It becomes more difficult to maintain a stable self-narrative about one's past, present, and future (Ben-David, 2019).

When psychosis sets in, it often leads to isolation, fewer friends, less social contact, and growing loneliness (Alvarez-Jimenez, 2019). If these issues are not addressed early, they tend to worsen over time. One reason is that identity confusion and low self-efficacy make it hard for individuals to recover or reconnect socially. Even with successful treatment for symptoms, social skills do not always improve as easily (Alvarez-Jimenez, 2019).

People with schizophrenia often struggle with memory, attention, or interpreting social cues, (Deneault et al., 2024). These cognitive deficits are reflected in difficulties interpreting facial expressions, emotional reactions, and body language, all of which are crucial in social situations. Because of the social barriers commonly associated with these symptoms, like stigma, discrimination, and misunderstood, it can be hard for these people to fit in, make friends or get the support they need (Puukko et al., 2020).

On a global scale, platforms like Facebook currently have over 2.11 billion daily active users representing nearly a quarter of the world's population (Kumar, 2025). While human connection has always been a fundamental part of society, the rise of social media has transformed the way people connect to each other. Social media can play a dual role in the context of psychosis. On the one hand, it offers a space for individuals to connect with others, potentially reducing feelings of isolation and providing opportunities for self-expression. On the other hand, it can also exacerbate identity confusion and self-esteem issues, as comparisons with others and negative online interactions may intensify feelings of inadequacy (Berry et al., 2018). Therefore, while social media can help foster connections, it also presents challenges that must be carefully remarked to

avoid further undermining self-efficacy and identity development. Social media use can be categorized into three behaviors: direct communication (e.g., posting or messaging others), content production (e.g., posting status updates), and content consumption (e.g., scrolling through feeds, viewing others' profiles), (Berry, 2018). Social media engagement constitutes a significant dimension of contemporary life. Integrating the examination of social media use into clinical investigations could provide important insight into the ways digital interaction shapes these domains.

Social media offers a unique space for self-expression and engagement, and it may become a place where these individuals feel more comfortable expressing their identity and connecting with others compared to real life (Naslund et al.,2020). Identity experimentation involves trying out different behaviors, roles, or identities to see what feels right. This implies that people with psychotic disorder might experiment with different ways of interacting online, such as changing how they present themselves, who they interact with, or what kind of content they engage with, to see what works best for them (Puukko, 2020).

While social media can reduce isolation, its lack of nonverbal cues and potential for overstimulation may hinder genuine connection for individuals with psychosis. Negative interactions, exposure to harmful content, and unmet expectations can heighten symptoms such as paranoia, anxiety, and social withdrawal. These experiences may worsen mental health and impair daily functioning, including relationships and employment (Naslund, 2020).

This review included studies that examined individuals diagnosed with a psychotic disorder, such as schizophrenia, schizoaffective disorder, or unspecified psychosis. It is focused on understanding how these individuals engage with digital platforms. The platforms studied in this research allow users to engage in real-time interactions, express personal views, connect with others globally, and access an extensive variety of multimedia content, including text, images, videos, and links. Through these platforms, users can engage in meaningful exchanges that shape their perceptions, relationships, and even their sense of self. In addition to this, it is also important to

explore how social media use affects broader aspects of daily life, including social functioning and interpersonal interactions. To address these subjects, the following research questions guide this investigation: (1) How do individuals with psychotic disorders engage with social media, and what are the implications for their self-perception, identity development, and symptom expression? (2) In what ways does social media use affect the social, emotional, and functional well-being of individuals with psychotic disorders?

Methods

Materials and methods

The review process adheres to the updated guideline outlined in the PRISMA 2020 statement (Page et al., 2021), which provides a comprehensive framework for the transparent reporting and execution of systematic review. Studies were included if they met the following criteria: (1) focused on individuals diagnosed with a psychotic disorder (e.g., schizophrenia, schizoaffective disorder, or psychotic no other way specified; (2) the research examined the use of various social media platforms that provide individuals with the opportunity to create, share, and exchange a wide range of content. The social media included were Facebook, Instagram, X, and TikTok; (3) employed a quantitative, qualitative, or mixed methods designs; (4) published in peer-reviewed journals; (5) written in English. The social media excluded were forums, health websites, and game websites that prioritize topic-based discussions, expert information, or interactive gaming experiences with less emphasis on social connectivity.

Search strategy

The two central databases utilized for the present study were APA PsycInfo and MEDLINE. This systematic review includes studies published from 2004 onward, the year Facebook, the earliest platform examined in this paper, was launched.

Seven separate combinations of keywords were conducted that gave seven separate combination of strings:

“social media” AND "self-esteem” AND (“Schizophren*” AND “psychosis” AND “Psychosis” AND “psychotic disorder”) AND (“identity” OR “self-worth” OR “social interaction”).

“social media” AND “psychosis” AND “social interaction”

“social media” AND “psychosis”

“social media” AND “psychotic disorder”

“social media” AND “schiz*” AND “identity*”

“social media” AND “schiz*”

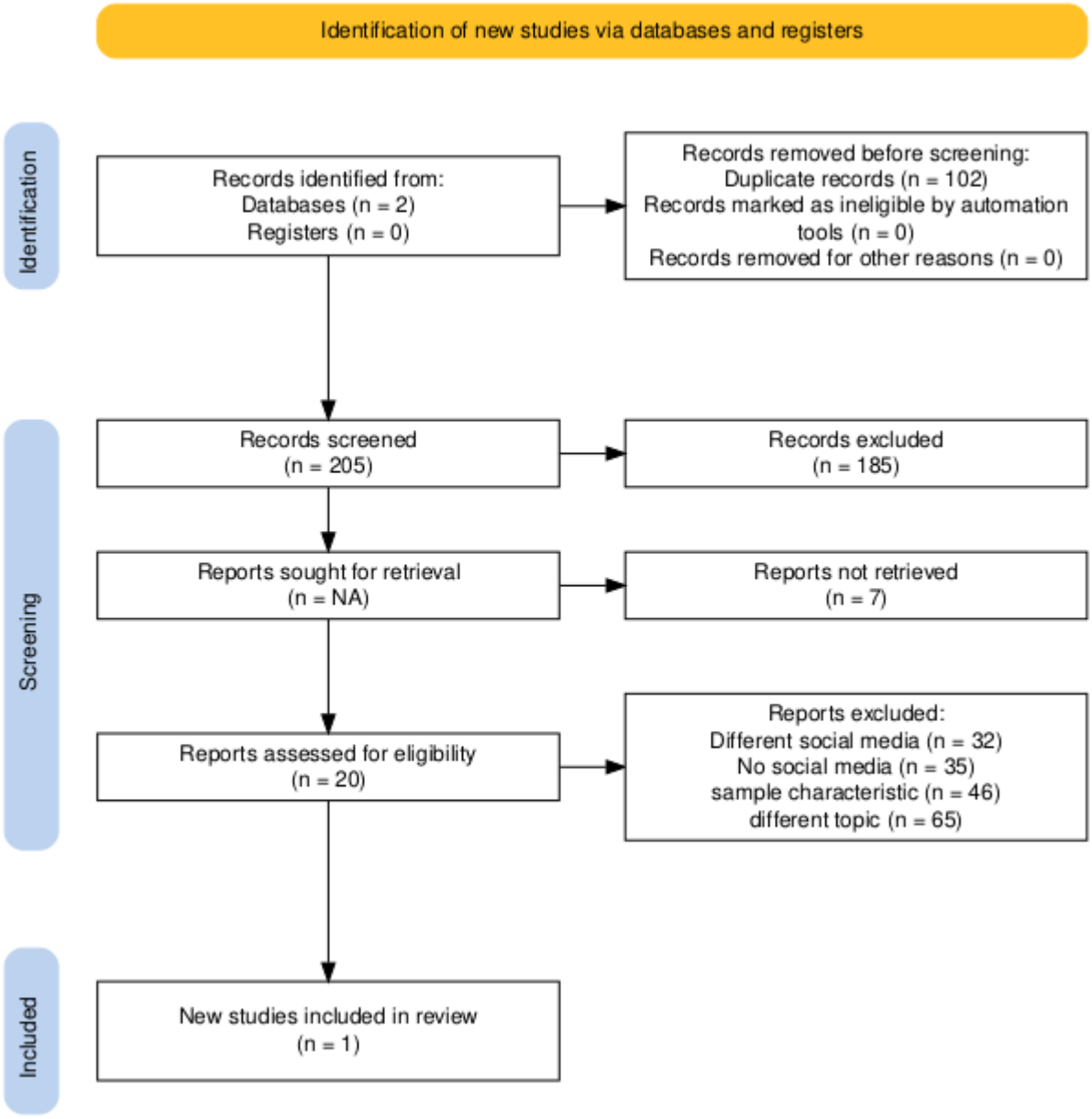
“social media” AND “schizophren*” AND “self-esteem*”

Extracted data included: (1) study characteristic (author, year, location, design); (2) participants demographics (sample size, age, diagnosis); (3) details of social media use (platform studied frequency, and purpose); (4) outcome measured (e.g., change in symptoms, social interaction).

PRISMA Flow Diagram

The study selection process was documented in a PRISMA 2020 flow diagram, detailing the number of records identified, screened, excluded, and ultimately included in the review.

Figure 1. Flowchart of literature search process



Results

Table 1. Studies included in the review (n=20)

Study	Country	Participants	Recruitment	Objective	Study methodology
Alverez-Jimenez et al. 2019	Australia	170 young people (aged 16–27) with remitted FEP	Early Psychosis Prevention and Intervention Centre (EPPIC)	online social media intervention, improving social functioning and mental health	Quantitative
Bae et al. 2021	Korea	13,156 posts from 16,462 users	Pushshift API	machine learning could be effectively used to detect signs of schizophrenia in social media	Quantitative
Bastiaens et al. 2024	USA	patient diagnosed with prodromal schizophrenia	admitted for inpatient of psychiatric care	impact of extensive social media use on the patient's self-perception and diagnosis	Qualitative
Berry et al. 2018	UK	44 participants (aged 16-27) 18 Male, 7 clinical, 26 Female, 12 clinical	National Health Service (NHS)	impact of social media use on people who experience psychosis	Quantitative
Birnbaum et al. 2017	USA	292 Twitter users	data extracted from Twitter	diagnosis of schizophrenia via Twitter	Quantitative
Birnbaum et al. 2020	USA	223 participants (aged 15-35)	Northwell Health's Early	whether social media activity	Quantitative

		93 Male, 73 clinical 130 Female, 80 clinical	Treatment Program	can be used to predict psychiatric conditions before hospitalization or diagnosis.	
Caponnetto et al. 2023	ITA	28 participants, 14 clinical 18 Male, 10 Female	ATCs	participants' perceptions and experiences of social media	Qualitative
Cicero et al. 2016	USA	86 participants, 45 clinical	hospital	relationship between self-concept clarity and various symptoms of schizophrenia	Quantitative, Qualitative
Deneault et al. 2024	Canada	18 studies included	Medline, PubMed, Embase, and PsycInfo	understanding of schizophrenia	Scoping Review
Feldman et al. 2021	USA	5 studies included	PubMed and Scopus	use of social media to screen, monitor and predict psychosis or schizophrenia	Scoping Review
Hänsel et al. 2021	USA	68 participants (aged 15-35) 28 Female, 12 clinical 40 Male, 22 clinical	The Zucker Hillside Hospital	To analyze Instagram usage patterns in individuals with schizophrenia	Quantitative
Hswen et al. 2018	USA	376 Twitter users 203 who self-identified as	Twitter’s API	analyze Twitter activity among users with schizophrenia	Quantitative

		having schizophrenia			
Kim et al. 2023	South Korea	8,925 articles	records of psychiatric hospital admissions in South Korea	Do media frames influence social perceptions of schizophrenia patients, affecting respect or disrespect, before and after the condition's renaming?	Scoping Review
Kolliakou et al. 2020	UK	48,691 crisis episodes 32,689 crisis episodes	NHS Foundation Trust (SLAM) NHS Foundation Trust (C&I)	Is there a link between daily changes in mental health-related Twitter posts and fluctuations in mental health crisis episodes?	Regression analysis
Krishna et al. 2013	USA	patient 21-year-old male diagnosed with schizophrenia	psychiatric hospital	exploring the relationship between problematic social media use and the development of delusions and stalking behavior	Qualitative
Mitchell et al. 2015	USA	174 Twitter users, clinical	Twitter API	analyze the language use of users	Quantitative

Nguyen et al. 2022	USA	268 participants, 141 clinical (aged 15-35)	Health Zucker Hillside Hospital	identity fragmentation across different social media platforms	Quantitative
Oluğ et al. 2024	Turkey	300 clinical participants 126 Female, 174 Male	Zeytinburnu Community Mental Health Cente	use of social media and its effects on patients with psychiatric disorder	Quantitative, Qualitative
Pukko et al. 2020	Finland	2891 participants (aged 13-19)	schools	examining within-person effects between	Quantitative
Torous et al. 2016	USA	39 papers	-	explore the role of social media and social networks in improving social functioning in patients with schizophrenia	Qualitative, Quantitative

Results

The studies included in this review were organized around three main themes based on the ways individuals with psychotic disorders engage with social media. The first theme, digital identity, includes research that examines how people express themselves online and how their self-presentation may reflect identity fragmentation or emotional struggles. The second theme, digital interaction, focuses on how social media supports or complicates communication and social connection in this population. The third theme, digital biomarkers, involves studies that identify specific language patterns and behaviors on social media that may indicate symptom changes or early warning signs of relapse. These three themes provided a clear structure for presenting the results and offered a framework for understanding the diverse impact of social media use on individuals with psychotic disorders.

Digital Identity

The way individuals with psychosis present themselves on social media is often fragmented, reflecting the internal conflicts they experience with their sense of identity. Their posts may not always align with typical social norms, as their self-expression is shaped by unique emotional and cognitive struggles (Naslund, 2020).

A study by Nguyen et al (2022), analysed social media data from individuals with schizophrenia and healthy control across Facebook, X, and Instagram. Using machine learning models, it was showed that a person may present themselves in a certain way on X, in a completely different way on Facebook, and again different on Instagram. The results of this study will be presented platform by platform:

Facebook

On Facebook posts often have more room for details, which may allow for more in-depth expressions. People with schizophrenia-spectrum disorders (SSD) showed lower average posts readability compared to the control group. This suggests that Facebook posts from this population may use a less cohesive language. They used more negative emotion words (e.g., sadness, fear), and

more swear words, suggesting frustration and emotional outburst. They also mentioned more concrete topics such as money and health, compared to the control, which could reflect practical concerns of these topics dominating their thoughts. Activities in specific time slots (9 PM-midnight) reflect the disrupted sleep patterns, which is a common issue in SSD (Nguyen, 2022).

X

Due to X's types limit (280 characters), users must be concise focusing on brevity over details. The brevity of X posts may amplify the emotional tone of their tweets, that may sound more negative. Users with SSD showed less variety in words use, often reflecting repetition or rigidity in how they express themselves. Tweets by individuals with SSD often referenced personal struggles, mental health, and vague existential themes (e.g., dream, existence) contrasting with the more varied and dynamic themes of control users. Late night activities were particularly pronounced among this group, due to insomnia or altered sleep-wake cycles (Nguyen, 2022).

Instagram

Instagram relies heavily on visuals, so the text present on this platform are captions and hashtags that are shorter and less cohesive compared to the other platforms, suggesting not as representative of structured thoughts. Users with SSD posted less often than control which may reflect lower levels of social engagement or difficulties in maintaining a social media presence. Users with SSD tended to post images reflecting internal emotion on abstract themes: surreal, dreamlike imagery, which could be self-generated art, altered photos, or symbolic visuals. Photos tend to be mental health related representing struggle, isolation, and existential thought (e.g., cloudy skies, shadow figures, cracks in objects). Solitude-focused content with few or no people, often depicting isolated spaces or objects. They may reflect their unique worldview by images that are symbolic, metaphorical, or representing abstract thinking (e.g., a flower blooming in rubble might represent hope beside the struggles). Some users with SSD seem to prefer photos with muted or dark colours, possibly reflecting aspects of their emotional state or internal mood. Some of the images posted seem to have a strong contrast between light and dark, which could be a way of

expressing conflicting emotions. In several case, photos are heavily edited, using filters with high saturation or visual effects that distort the picture, perhaps to represent altered perception or inner experience. On the other hand, when images are barely edited or left raw, this might suggest a sense of disconnection from reality. People with SSD often share fewer photos of themselves or others, possibly due to discomfort with social situations or issues with self-image. When faces do appear, they are sometimes obscured or heavily filtered and usually show neutral or negative expressions. There is also a noticeable preference for nature scenes, landscapes, or empty places, which might reflect emotional isolation or a struggle to connect with others. That said, it is worth noting that some users do post content that feels hopeful or resilient, maybe as part of their recovery process or a way to hold on to optimism (Nguyen, 2022).

Hänsel et al (2021), explored Instagram activity as a potential source of digital biomarkers for individuals with SSD, focusing on differences in image characteristics, social connections, and posting behaviors compared to healthy participants. The SSD participants' images were less saturated and less colourful compared to the control group, showing a tendency toward dark hues. Moreover, this group posted less faces assumed lower social engagement or reduced social interaction. Furthermore, users with SSD might follow many people profile, but fewer people follow them back, indicating smaller reciprocity. Lower reciprocity means individuals with SSD may not get the mutual engagement that reinforces the feeling of connection. Without a specific number of likes, comments, or followers, users may feel isolated even in a digital space that is designed to be social. When people do not follow back or engage, it could amplify feelings of rejection, especially in those who are already vulnerable to low self-esteem. Additionally, social media algorithms can worsen this issue, as fewer interactions lead to lower visibility of posts, creating a feedback loop that further reduces engagement. Other individuals with SSD may instead have less intense motivation to maintain relationships, leading to fewer followers and social withdrawals because of fear of rejection and suspiciousness typically as a part of delusions, which

might lead to interpretations that followers are not genuine causing further withdrawal (Hänsel, 2021).

Digital Interaction

Social media platforms offer asynchronous communication, meaning individuals can take their time to process and respond to messages or posts. This reduces the pressure associated with real-time interactions, which may be difficult for individuals with cognitive impairments. Online communication lacks nonverbal cues, such as facial expressions or tone of voice, which for schizophrenia patients may struggle to interpret in face-to-face interactions, (Torous et al., 2016). Text-based communication can therefore simplify social engagement, and can reduce anxieties about symptoms and treatment, improving overall understanding and management of their condition (Naslund, 2020).

A study (Caponnetto et al., 2023) found that social media use was associated with decreased positive affect (PA) and increased negative affect (NA) depending on the content of the posts. Posting about daily activities was associated with higher PA and self-esteem. Posting about feelings or venting was linked to lower PA, lower self-esteem and higher NA and paranoia. The authors discovered that posting emotional self-disclosure was harmful as people might not receive the positive, supportive responses they hoped for when they posted it. This lack of supportive responses worsened the mood of the individual posting content, and increased their paranoia (Berry, 2018). Furthermore, certain features of these platforms, such as rapid content change, excessive stimulation, or the need to engage socially, can exacerbate symptoms like anxiety, paranoia, or cognitive overload (Caponnetto, 2023).

A study conducted at the University of Sheffield (Kolliakou et al., 2020) collected 4 years of tweets in X using two key word-based searches ‘depression’ and ‘schizophrenia’. The study discovered a significant association between mental health-related posts on (e.g. about depression, schizophrenia, or stigma), and increases in mental health crisis episodes (e.g. hospital admissions or emergency treatments), reported in mental health services. Specifically, on days with above average

mental health-related tweets, crisis episodes rose by 5-15%, suggesting that public events and online discussions about mental health may influence vulnerable individuals. The finding was consistent across two independent databases, with patterns showing both immediate (day 1), and delayed (up to 7 days) effects. These results do not imply causation but the potential impact of social media on population mental health.

Digital Biomarkers

A study (Birnbaum et al., 2020) investigated the use of machine-learning models to classify participants with schizophrenia spectrum disorder (SSD), major depressive disorder (MD), and healthy volunteer (HV) based on Facebook activity (messages and images) and to identify pattern of linguistic and visual features that distinguish these groups. Data was collected for 18 months before hospitalization for the population with SSD. The SSD participants used more words related to perception (e.g., hear, feel, see) than MD or HV. They expressed negative emotions more frequently than HV. SSD group used informal language like ‘lol’ and ‘btw’ more often than the other groups. Also, fewer punctuation marks than HV. Both MD and SSD used more swear words and anger-related languages than HV.

Bae et al (2021) found that people with SSD tend to use specific pronouns differently, such as higher use of third-person plural pronouns. This could reflect symptoms like paranoia, where individuals may refer to others in the third person as they feel others participate in their experience, or watching them through sentences like: "They always know what I’m thinking. I can feel them in my head, controlling my thoughts". Here, the use of ‘they’ suggests a belief that external forces or people are involved in the person’s thoughts, which can be part of delusional thinking. Also, the SSD group had a lower word count in their written text compared to the controls but used longer words (six or more letters) than the control group. People with SSD tended to use fewer words linked to positive emotions, which could be tied to symptoms like emotional flatness or lack of pleasure.

A study from Hswen (2018), supports the idea that X behavior might provide valuable insight into mental health, specifically a 'digital phenotype' for schizophrenia. They investigated the use of X using a sample of users who self-identified as having SSD, and randomly selected X users from the general population. SSD users posted on average 21.10 tweets per day, control users 20.80 tweets per day. The schizophrenia group tweeted about depression and anxiety four times more often than the control group, highlighting that depression and anxiety are highly comorbid with schizophrenia and worsen outcomes (e.g., social functioning quality of life and recovery) (Hswen, 2018).

Mitchell et al (2015), examined X users who explicitly stated that they were diagnosed with SSD or related conditions, and control groups randomly selected by X users. In this study, the author stressed the importance of learning about the cognitive mechanism that people with psychotic disorders show in their tweets. Cognitive mechanism refers to words associated with mental processing. An increased use of the words 'know' and 'believe', was found by SSD's tweets, which may signal that they are more occupied with their internal thought processes. It also showed an excessive use of the first-person singular 'I' points to self-focus and a reduced sense of connection with others (Mitchell, 2015) which contrasts with findings from Bae (2021), who observed a frequent use of plural pronouns, suggesting, instead a greater preoccupation with others. Hesitant language, like the use of 'maybe' or 'perhaps', indicates uncertainty and lack of confidence. The SSD group used significantly fewer words in: positive emotion (e.g., happy, love) suggesting the 'flat affect', and home and leisure categories (family, play), that may indicate less engagement with family and leisure activities, (which are common in social withdrawal), also lack of word of motion and time, reflecting reduced focus on action or time-related planning which might align with negative symptoms (Mitchell, 2015). They also exhibited a lack of 'emoticons', (combination of characters, typically keyboard symbols, used to express emotions, feelings, ideas in-text based communication), which could also indicate flat affect. Positive symptoms like 'word salad', (disorganized speech), and neologism (creations of new words) were recurrent in these

tweets (Mitchell, 2015). Words related to negative emotions like fear, anger, or sadness were more frequent in this group. This may include worries about losing touch with reality or fear about what others think of them due to their illness (Mitchell, 2015).

While this review included 20 studies that met the inclusion criteria, not all of them are discussed in this Results section. The reason for this is that the analysis was organized around the three main themes that was listed previously: digital identity, digital interaction, and digital biomarkers. Some of the included papers, although still relevant and valuable, did not fully fit within this thematic structure. For example, Cicero et al. (2016) looked at self-concept clarity in schizophrenia, which is related to identity, but the study did not involve digital behavior, so it was outside the focus of this review. Similarly, Deneault et al. (2024) and Feldman et al. (2021) were scoping reviews. They provided helpful background, especially regarding language and machine learning, but they did not offer direct insights into the personal experiences or social dynamics of individuals with psychosis on social media. Kim et al. (2023) focused on how renaming schizophrenia influenced public perception in Korea. While important from a sociocultural perspective, the study did not examine how people with psychosis use social media or how it affects their daily lives, which was central to this review. Krishna et al. (2013) was a single case report about a young man whose delusions involved social media. It offered an interesting example, but its anecdotal nature made it difficult to generalize or connect with the broader patterns identified in the review. Puukko et al. (2020) explored social media use and depression in adolescents. While it included some clinical participants, the study did not focus only on psychotic disorders. Lastly, Torous et al. (2016) discussed the broader role of digital tools in schizophrenia treatment. Although the paper raised useful theoretical points, it did not present original data that could be tied to the themes identified through the review.

Discussion

Summarizing the findings of this study in response to the two research questions, we can see that: 1) Self-exploration and experimentation on social media allow individuals with psychotic

disorder to express different facets of their identity across platforms, reflecting fragmented or multifaceted self-presentation. On platforms like X, individuals often explore existential or emotional themes using brief, emotionally charged content, while on Facebook they share more concrete and practical concerns, albeit in less cohesive language. Instagram, through its visual nature, becomes a space for symbolic and metaphorical self-expression, using dark, abstract, or surreal imagery to externalize internal emotional states. These varies expressions suggest that social media enables a form of identity experimentation and externalization of inner experiences. However, this may also reflect or reinforce the fragmented identity and altered self-perception often seen in psychotic disorder, especially when posts include distorted self-images, solitary themes, or shifting emotional tones. Some users still express hope and resilience, indicating that social media can support positive identity development in certain contexts.

2) Research indicates that social media use among individuals with psychotic disorders is closely linked to disruptions in daily functioning and social interactions. Individuals with SSD often display reduced social engagement, such as fewer posts, less frequent interactions, and lower reciprocity, which may reflect or worsen social withdrawal and feelings of rejection. Late night posting patterns across platforms like Facebook and X suggest disrupted sleep-wake cycles, a common symptoms in SSD. Emotionally vulnerable content, particularly posts involving self-disclosure or venting, is linked to increased negative affect, lower self-esteem, and heightened paranoia, especially when supportive feedback is lacking. Social media algorithms may further isolate these individuals by decreasing their content visibility, creating a feedback loop of reduced engagement. However, asynchronous and text-based communication can sometimes reduce social anxiety and allow for more comfortable interaction, potentially supporting communication in those with cognitive or emotional impairments. Thus, while social media can offer a low-pressure space for connection, it can also mirror or exacerbate functional impairments and social difficulties in this population. The following discussion offers a more in-depth examination of the findings in relation to the two research questions:

Analysing Findings on Identity

A notable contrast emerges between studies like Bae (2021), who found frequent use of plural pronouns suggesting a focus on external others, and Mitchell (2015), who observed self-focused language and first-person pronouns. These patterns may reflect different stages or subtypes within the schizophrenia spectrum, where some users are absorbed in internal cognition, while others externalize their symptoms through perceived surveillance and threat. This highlights the importance of considering linguistic nuance and heterogeneity within SSD digital expression. Similarly, the differences in outcomes between emotional venting (Berry, 2018; Caponnetto, 2023) and routine daily posting (Caponnetto, 2023) suggest that emotional intensity, rather than platform use per se, predicts negative affect and social withdrawal. These distinctions suggest that individual traits and engagement patterns must be examined together to understand outcomes.

In many ways, social media may act as both a mirror and a tool in the ongoing construction of identity for people with psychotic disorders. According to Cicero's (2016) work on self-concept clarity, the fragmented and emotional nature of online expression, particularly on platforms like X and Instagram, reflects the inner instability typical of psychosis. Instagram posts often exhibit abstract and metaphorical imagery (Hänsel, 2021), while tweets on X are more likely to show disorganized thought patterns (Mitchell, 2015). Nguyen (2022) emphasize platform-specific identity segmentation, with individuals expressing distinct parts of the self across Facebook, Instagram, and X. On Facebook, the use of less cohesive language and emotionally charged content suggests difficulties in structured self-expression, while X posts often highlight existential concerns and repetitive thought patterns, which are characteristic of SSD. The preference for symbolic, surreal, or emotionally expressive content on Instagram indicates that identity construction in this population may be more intuitive or emotional rather than structured and rational. These findings suggest that using social media for self-exploration can be both helpful and potentially risky for individuals with psychotic disorders. This aligns with earlier research (Birnbaum, 2017) suggesting that digital identity is shaped by internal coherence struggles, because these platforms are not merely places

where people explore who they are, it might shape how identity forms, especially through the mix of what user post and how algorithms present content (Nguyen, 2022).

Although social media can serve as a supportive place for experimentation, it can also amplify identity confusion, especially when social feedback is negative or inconsistent (Berry, 2018). In this sense, social media platforms simultaneously enable and destabilize the development of a cohesive self-concept in this population. TikTok's algorithm, for instance, tends to reinforce content based on what users interact with, so the more someone engages with mental health-related videos, the more similar content they will keep seeing. While this can sometimes be informative, it also means that people might repeatedly encounter pre-shaped narrative about mental illness, which are often stereotypical. Exposure to this constant kinds of messages can affect how someone sees themselves. For people with SSD, it might even end up reinforcing symptoms like paranoia, hallucinations, mood swing, or social withdrawal creating a kind of feedback loop that keeps confirming and possibly worsening their experiences (Bastiaens, 2024; Caponnetto, 2023).

Furthermore, Birnbaum (2020) and Bae (2021), found that individuals with SSD tend to use specific linguistic patterns (e.g., first and third-person pronouns, perception-based words, negative emotion words) that may reflect blurred boundaries between self and others, increased self-focused thinking, or even underlying delusional beliefs.

Analysing Findings of Social Interaction and Daily Functioning

Findings suggest that social media can influence daily life by disrupting sleep (Nguyen, 2022; Hswen, 2018); complicating emotional and social interactions (Berry, 2018; Caponnetto, 2023; Kolliakou, 2020); and affecting cognitive processes involved in digital behavior.

Torous (2016) and Naslund (2020) show that asynchronous communication (e.g., messaging rather than face-to-face interaction) helps individuals with psychotic disorders manage social anxiety and cognitive impairments, suggesting that social media offers an alternative social space that reduces the pressure of real-world interactions. However, Hänsel (2021) and Mitchell (2015) reveal that despite engaging with social media, many individuals with schizophrenia struggle with

social reciprocity, they may follow many people profiles, but fewer people follow them back. This suggests that while social media removes some social barriers, it does not necessarily result in meaningful social connection.

Caponnetto (2023) highlights a crucial nuance: social media can enhance self-esteem when users post about daily life, but emotional self-disclosure (venting, sharing struggles) is associated with increased paranoia and negative affect. This connects to what Berry (2018), found that people with SSD may not receive the supportive feedback they expect when they share something personal online. When that happens, it can make them feel worse and push them further into social withdrawal. These findings suggest that it is not just how often people engage with social media that matters, but the type of interaction. Kolliakou et al. (2020) adds another layer to this discussion by showing that mental health-related tweets were correlated with an increase in psychiatric crisis episodes. This suggests that social media discussions about mental health may not always be therapeutic, they can contribute to distress and crisis escalation. This reinforces the need for further research into how social media engagement can be guided in a way that supports healthier identity development and minimizes exposure to harmful content cycles.

Limitation and Future Directions

Two studies referenced in this paper rely on self-identified individuals with schizophrenia spectrum disorders (SSD) on social media. This introduces selection bias, as those who publicly disclose their diagnosis may differ significantly from those who choose not to. Additionally, individuals with more severe symptoms might have limited engagement with social media or use it in ways not captured in existing research. Future studies should incorporate diverse paper collection methods, including clinical samples and qualitative interviews, to gain a more comprehensive understanding of digital identity formation among individuals with SSD. Longitudinal studies tracking changes in digital behavior over time could also offer more insights into the evolving nature of identity expression.

Each social media platform has distinct affordances, norms, and user behaviors that influence how individuals present themselves. Findings from X (which prioritizes brevity) may not apply to platforms like Instagram (which is image-driven and long and short-form video) or TikTok (which uses algorithmic reinforcement through short-form videos). This limits the generalizability of results across different online environments.

Further investigation is needed into how social media algorithms influence mental health narratives and identity construction. Perhaps future research could test what happens when people see different kinds of content, this might tell us if certain posts shape how someone sees themselves or just reflect what they are already going through.

Some of the research on digital identity and SSD relies on publicly available social media data, which raises ethical concerns regarding privacy and consent. It is also worth noting that many users likely do not realize their social media content could be used in research, raising important questions about informed consent. Additionally, there is a risk of misinterpreting online expressions, leading to unintended stigmatization rather than support. Ethical guidelines must be developed to ensure that research using social media data respects user privacy and consent. Future studies should also integrate participatory approaches, where individuals with lived experience contribute to the research process to provide context and mitigate misinterpretations.

Identity formation is influenced by a range of factors beyond social media, including family relationships, offline social interactions, and cultural background. Current research often focuses on digital behavior in isolation, without considering how offline experiences shape online self-presentation. Additionally, users may engage with mental health-related content for various reasons, such as seeking information, connecting with others, or validating personal experiences. A more integrated approach is needed to explore how digital identity interacts with offline experiences. Future studies should incorporate mixed-methods research that combines social media analysis with in-depth interviews, ethnographic observations, or clinical data to provide a more nuanced understanding of identity construction in SSD.

Conclusion

Social media's influence on daily functioning and social interactions among individuals with psychotic disorders is multifaceted. On one hand, digital communication reduces the pressure of face-to-face interaction, offering asynchronous and structured modes of connection (Torous & Keshavan, 2016). Caponnetto (2023) observed that digital platforms can support emotional regulation and reduce social anxiety when interactions are positive. On the other hand, excessive use or emotionally vulnerable disclosures can result in negative affect, heightened paranoia, and social withdrawal, particularly when supportive responses are lacking (Berry, 2018). Kolliakou (2020) found that when there was a spike in schizophrenia-related tweets on X, there was also an increase in mental health crises happening around the same time, suggesting that what happens online might reflect or even influence people's real-world behavior. Furthermore, late-night posting patterns and low engagement levels are consistent with known disruptions in circadian rhythms and social cognition in psychotic disorders (Birnbaum, 2020; Hswen, 2018). Thus, while digital spaces can promote inclusion and function as therapeutic extensions, they also carry the risk of amplifying core symptoms and impairing real-life functioning when not moderated or supported appropriately.

Asynchronous interactions allow individuals to process and respond at their own pace, which is particularly beneficial for those with cognitive impairments. However, the absence of nonverbal cues in text-based communication may limit meaningful engagement, while certain social media features, such as rapid content changes and overstimulation, can exacerbate anxiety and cognitive overload. Patterns of social media use further reveal associations with social behavior and interpersonal relationships. For instance, individuals with psychotic disorders often exhibit lower social engagement, reflected in reduced posting frequency, fewer reciprocal connections, and reliance on abstract or metaphorical imagery. These patterns suggest difficulties in maintaining relationships and navigating social norms. Moreover, the intensity of social media engagement can influence daily activities; excessive use may distract from offline responsibilities, while unmet expectations of online support can worsen self-esteem and social withdrawal.

In conclusion, social media acts as both a tool and a challenge for individuals with psychotic disorders. It offers a platform for exploration and social interaction but also risks amplifying symptoms and emotional struggles. These findings point to a kind of contradiction: on one hand, social media can promote inclusion, self-expression, and creativity, but on the other, it may also worsen key symptoms of psychosis, especially when use is unstructured or lacks support. Since digital platforms now play such a big role in shaping how people think and behave, it is important for clinicians and researchers to consider things like digital literacy, how algorithms influence what people see, and how we can ethically monitor this in mental health treatment.

References

Alvarez-Jimenez, M., Bendall, S., Koval, P., Rice, S., Cagliarini, D., Valentine, L., D'Alfonso, S., Miles, C., Russon, P., Penn, D. L., Phillips, J., Lederman, R., Wadley, G., Killackey, E., Santesteban-Echarri, O., Mihalopoulos, C., Herrman, H., Gonzalez-Blanch, C., Gilbertson, T., Lal, S., Gleeson, J. F. (2019). HORYZONS trial: protocol for a randomised controlled trial of a moderated online social therapy to maintain treatment effects from first-episode psychosis services. BMJ open, 9(2), e024104. https://doi.org/10.1136/bmjopen-2018-024104

Bae, Y. J., Shim, M., & Lee, W. H. (2021). Schizophrenia Detection Using Machine Learning Approach from Social Media Content. Sensors (Basel, Switzerland), 21(17), 5924. https://doi.org/10.3390/s21175924

Bastiaens, L. , Cristofano-Casella, S. & Bastiaens, J. (2024). Prodromal or Factitious Psychosis: A Cautionary Tale in the Era of Increasing Social Media Use by Vulnerable Individuals. Journal of Psychiatric Practice, 30 (2), 162-166. doi: 10.1097/PRA.0000000000000771.

Berry, N., Emsley, R., Lobban, F., & Bucci, S. (2018). Social media and its relationship with mood, self-esteem and paranoia in psychosis. Acta psychiatrica Scandinavica, 138(6), 558–570. https://doi.org/10.1111/acps.12953

Birnbaum, M. L., Ernala, S. K., Rizvi, A. F., De Choudhury, M., & Kane, J. M. (2017). A Collaborative Approach to Identifying Social Media Markers of Schizophrenia by Employing Machine Learning and Clinical Appraisals. Journal of medical Internet research, 19(8), e289. https://doi.org/10.2196/jmir.7956

Birnbaum, M. L., Norel, R., Van Meter, A., Ali, A. F., Arenare, E., Eyigoz, E., Agurto, C., Germano, N., Kane, J. M., & Cecchi, G. A. (2020). Identifying signals associated with psychiatric illness utilizing language and images posted to Facebook. NPJ schizophrenia, 6(1), 38. https://doi.org/10.1038/s41537-020-00125-0

Caponnetto, P., Signorelli, M. S., Tiralongo, J., Rodolico, A., Concerto, C., Petralia, A., & Inguscio,

L. (2023). PERCEPTIONS AND EXPERIENCES OF M-HEALTH TECHNOLOGIES AND SOCIAL MEDIA: A QUALITATIVE STUDY IN PATIENTS WITH SCHIZOPHRENIA. Health psychology research, 11, 89721. https://doi.org/10.52965/001c.89721

Cicero, D. C., Martin, E. A., Becker, T. M., & Kerns, J. G. (2016). Decreased Self-Concept Clarity in People with Schizophrenia. The Journal of nervous and mental disease, 204(2), 142–147. https://doi.org/10.1097/NMD.0000000000000442

Deneault, A., Dumais, A., Désilets, M., & Hudon, A. (2024). Natural Language Processing and Schizophrenia: A Scoping Review of Uses and Challenges. Journal of personalized medicine, 14(7), 744. https://doi.org/10.3390/jpm14070744

Feldman, J., Hamlyn, A., & Rice, T. (2021). Social media in screening and monitoring for early intervention in psychosis. Schizophrenia research, 238, 70–72. https://doi.org/10.1016/j.schres.2021.09.023

Hänsel, K., Lin, I. W., Sobolev, M., Muscat, W., Yum-Chan, S., De Choudhury, M., Kane, J. M., & Birnbaum, M. L. (2021). Utilizing Instagram Data to Identify Usage Patterns Associated With Schizophrenia Spectrum Disorders. Frontiers in psychiatry, 12, 691327. https://doi.org/10.3389/fpsyt.2021.691327

Heckers, S., Barch, D. M., Bustillo, J., Gaebel, W., Gur, R., Malaspina, D., Carpenter, W. (2013). Structure of the psychotic disorders classification in DSM-5. Schizophrenia Research, 150(1), 11–14. doi:10.1016/j.schres.2013.04.039

Hswen, Y., Naslund, J. A., Brownstein, J. S., & Hawkins, J. B. (2018). Online Communication about Depression and Anxiety among Twitter Users with Schizophrenia: Preliminary Findings to Inform a Digital Phenotype Using Social Media. Psychiatric Quarterly, 89(3), 569–580. doi:10.1007/s11126-017-9559-y

Kim, I. B., Choi, J., Park, S. C., Koike, S., Kwon, J. S., Kim, E., Choi, H. S., Lee, J. Y., & Lee, Y.

S. (2023). Data-mining analysis of media frame effects on social perception of schizophrenia renaming in Korea. BMC psychiatry, 23(1), 882. https://doi.org/10.1186/s12888-023-05386-4

Kolliakou, A., Bakolis, I., Chandran, D., Derczynski, L., Werbeloff, N., Osborn, D. P. J., Bontcheva, K., & Stewart, R. (2020). Mental health-related conversations on social media and crisis episodes: a time-series regression analysis. Scientific reports, 10(1), 1342. https://doi.org/10.1038/s41598-020-57835-9

Krishna, N., Fischer, B. A., Miller, M., Register-Brown, K., Patchan, K., & Hackman, A. (2013). The role of social media networks in psychotic disorders: a case report. General hospital psychiatry, 35(5), 576.e1–576.e5762. https://doi.org/10.1016/j.genhosppsych.2012.10.006

Kumar N. (2025). Facebook Users Statistics (2025) — Worldwide Data. https://www.demandsage.com/facebook-statistics/#:~:text=As%20of%202025%2C%20Facebook%20has,its%20monthly%20active%20user%20base.

Margaret Mitchell, Kristy Hollingshead, and Glen Coppersmith. 2015. Quantifying the Language of Schizophrenia in Social Media. In Proceedings of the 2nd Workshop on Computational Linguistics and Clinical Psychology: From Linguistic Signal to Clinical Reality, pages 11–20, Denver, Colorado. Association for Computational Linguistics.

Nguyen, V. C., Lu, N., Kane, J. M., Birnbaum, M. L., & De Choudhury, M. (2022). Cross-Platform Detection of Psychiatric Hospitalization via Social Media Data: Comparison Study. JMIR mental health, 9(12), e39747. https://doi.org/10.2196/39747

Page M J, McKenzie J E, Bossuyt P M, Boutron I, Hoffmann T C, Mulrow C D et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews BMJ 2021; 372 :n71 doi:10.1136/bmj.n71

Puukko K, Hietajärvi L, Maksniemi E, Alho K, Salmela-Aro K. Social Media Use and Depressive

Symptoms—A Longitudinal Study from Early to Late Adolescence. International Journal of Environmental Research and Public Health. 2020; 17(16):5921. https://doi.org/10.3390/ijerph17165921

Robinson, P., Turk, D., Jilka, S., & Cella, M. (2018). Measuring attitudes towards mental health using social media: investigating stigma and trivialisation. Social Psychiatry and Psychiatric Epidemiology. doi:10.1007/s00127-018-1571-5

Torous, J., & Keshavan, M. (2016). The role of social media in schizophrenia. Current Opinion in Psychiatry, 29(3), 190–195. doi:10.1097/yco.0000000000000246