

The Spread of Information Disorder on Facebook and its Impact on Sociocultural Sustainability

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Abstract

This study focuses on how information disorder on Facebook affects sociocultural sustainability. Sustainable development comprises the economic, environmental, and social domains. Several researchers have focused on financial and ecological growth, while the sociocultural sphere concerned with language and communication in a digital space remains unnoticed. Human interaction is essential in sustainable development. Therefore, language as a shared means of communication is worth paying attention to. Information disorder as discussed in this paper includes misinformation, disinformation, and mal-information. Facebook, is one of the largest social media platforms which plays a pivotal role in disseminating information. This makes it susceptible to the spread of information disorder and its potential consequences on sociocultural sustainability. Through an interdisciplinary approach drawing from language, communication, and technology, this study investigates two main questions: How do information disorders spread on Facebook? Moreover, what impact does exposure to information disorder have on sociocultural sustainability? A descriptive research design entailing qualitative and quantitative approaches was used in data collection and analysis. Qualitative data was collected using unstructured interviews in four sessions, which lasted 10 minutes using an interview guide. On the other hand, quantitative data was collected using questionnaires with structured questions. 50 informants were purposively sampled from Roysambu Sub-County in Nairobi County. This sample size is intended to supplement the highlighted gaps from the literature reviewed for generalization. The developmental-sociocultural theory is adopted as an analytical tool, using its cultural beliefs and social cohesion tenets. The findings reveal that Facebook users, especially young adults, are increasingly exposed to information disorder, which distorts societal norms and values. These findings may provide insight for policymakers on social media platforms and communities to develop robust strategies to combat information disorder and promote a more sustainable sociocultural environment in this digital age.

Keywords: *Language, Communication, Technology, Sociocultural Sustainability, Information Disorder.*

Introduction

Information disorder refers to the creation, dissemination, and consumption of false or misleading information (Tomassi, 2023). Since the internet has become more widely accessible, social media platforms like Facebook can be a site to amplify the scale at which information spreads, posing risks to sociocultural sustainability. Ong'ong'a (2023) in 'Unveiling African Narratives' on Facebook: Media Posts and Audience Engagement' claims that Facebook is one of the most popular and widely used social media platforms. It has evolved into a primary source of news and information. The platform's vast reach, combined with its user-friendly interface and real-time content updates, allows users to access and share information quickly and easily. However, this increased access to information on Facebook does not come without significant challenges, particularly regarding the spread of information disorders such as misinformation, disinformation, and mal-information. Iosifidis and Nicoli (2020) postulate that the platform's open nature, where users can share content with minimal oversight, has raised serious concerns. Studying the spread and impact of information disorder on Facebook is essential to understanding how information disorder dynamics compromise sociocultural sustainability.

Pierri et al. (2023) describe misinformation within the context of the Russian invasion of Ukraine, as information that is incorrect or misleading but spread without malicious intent. The person sharing it believes it to be true, but it is factually inaccurate. The spread of misinformation on Facebook can distort public understanding of cultural practices. When inaccurate or biased information goes unchecked, it can contribute to the erosion of cultural knowledge and the dilution of traditional values. While Facebook allows for the dissemination of information to a wide audience, it also provides a fertile ground for the rapid spread of false or misleading information. This has far-reaching implications for the integrity of cultural narratives, the preservation of traditions, and the cohesion of communities (Lubicz-Zaorski, 2022).

Tan (2022) describes disinformation as false information that is deliberately created, and disseminated with the intent to mislead the public, manipulate public opinion and influence decisions. Disinformation is dangerous because it undermines trust in institutions, polarizes communities, and creates an environment for obscuring facts by misleading narratives. Tan (2022), on the other hand, describes Mal-information as genuine information shared through the intent to

cause harm or mislead, even though the information may be factual. This may involve sharing truthful but damaging information.

Medina and Sedeno (2023) refer to sociocultural sustainability as preserving and promoting diverse cultural, social, and ethical values within a society. It entails the ability of a community to maintain its cultural heritage and foster social cohesion (Roberts, 2023). Information disorder can challenge aspects of sociocultural sustainability. This is in agreement with Sampat and Raj (2022) who argue that information disorder can exacerbate divisions within societies by fostering fear and hostility. When conflicting narratives inundate individuals, it becomes increasingly difficult to discern fact from fiction. This leads to a polarization of beliefs and a breakdown in social cohesion.

In recent years, there has been growing concern about the spread of misinformation, fake news, and conspiracy theories on social media platforms (Porter, 2022). These can have significant consequences on sociocultural sustainability. Social media platforms, which facilitate the rapid dissemination of information, often spread harmful content. The spread of such content can affect sociocultural sustainability by disrupting social cohesion, weakening shared values, and promoting the fragmentation of communities (Zompetti *et al*, 2022). When information disorder circulates widely, it can diminish the collective understanding of important societal issues, hinder informed decision-making, and exacerbate conflicts.

Advertently, researchers have been increasingly interested in the impact of false information on Facebook. For instance, Marret (2022) argues that the distortion of facts and the promotion of divisive ideologies on Facebook can have detrimental effects on its users. In particular, the author highlights how the platform's algorithm-driven content dissemination tends to prioritize sensational charged information, regardless of its accuracy. This can hinder constructive dialogue, impede decision-making processes, and undermine social integration, ultimately affecting the overall sustainability of society as supported by González and Lelkes (2023). The research at hand aims to shed light on the specific ways in which Facebook spreads information disorder. The research also explores how information disorder affects sociocultural sustainability. The findings target policymakers, social media platforms, and users to work towards developing effective interventions that promote a healthier information ecosystem.

Research Problem

The rapid growth of digital platforms, particularly Facebook, has significantly transformed sociocultural dynamics. This transformation has introduced challenges that threaten sociocultural sustainability. Sustainable development results in better economic, environmental, and social conditions. Much research focuses on financial and ecological aspects whereas the sociocultural dimension, especially as it relates to language, communication, and human interaction in digital spaces remains largely overlooked. This research at hand focuses on the gap identified above.

Research Questions

1. How do information disorders spread on Facebook?
2. What impact does exposure to information disorder have on sociocultural sustainability?

Research Objectives

1. To determine mechanisms through which information disorder spread on Facebook.
2. To examine the impact of information disorder on sociocultural sustainability.

Limitations and Delimitations of the Study

The study focuses on Facebook and not any other social media platforms, each of which may have different dynamics regarding information disorder. The study delimits its scope to misinformation, disinformation, and mal-information, leaving out other forms of digital disorder like fake news or hoaxes. Further, the study focuses on a specific demographic, such as Facebook users within a particular age range and sociocultural group, excluding others who may experience different effects.

Literature Review

The effect of Facebook information disorder on sociocultural sustainability has not gained significant attention in recent years. With the rise of social media platforms, there are concerns about the potential negative impact of misinformation, disinformation, and mal-information on various aspects of society (Omoera & Uwalaka, 2023). Some studies have explored the relationship between social media information disorder and sociocultural sustainability. One of the key findings highlighted in these studies is the role of fake news and misinformation in shaping public opinion.

For instance, Zhong (2023) analyzed the spread of false information on Twitter and found that false news stories were more likely to reach a larger audience than true stories. This study therefore provides parameters under which we make our discussions about the spread of information disorder on Facebook. However, Zhong does not examine how the spread of this false information affects sociocultural sustainability. False information can contribute to the erosion of trust in institutions, polarization, and the spread of social unrest, all of which create adverse effects on sociocultural sustainability that the research addresses.

Okoro et al. (2024) address the growing concern of health misinformation on digital platforms. They categorize misinformation types and identify key sources, examining their impact on individual and public health, as well as trust in healthcare systems. The study highlights regulatory frameworks, ethical content moderation, and digital literacy as countermeasures. However, the analysis does not show how misinformation can contribute to the polarization of societies if it is used to spread information disorder. The research at hand examines how this can challenge sociocultural sustainability. In addition, it seeks to investigate how social network structures on Facebook exacerbate information disorder.

In another study, Ajani et al. (2024) explore the role of digital media technologies in preserving indigenous languages, emphasizing their importance in maintaining cultural and ecological knowledge systems amid globalization. The findings reveal that digital technologies are pivotal in revitalizing Indigenous languages by making them accessible and engaging. The study further suggests that tools such as apps, digital dictionaries, and social media platforms help promote linguistic heritage. As much as the study focuses on the positive role of digital media, it does not address the risks posed by the spread of misinformation, which could distort cultural narratives or lead to the loss of linguistic authenticity as the research at hand focuses on.

Udoudom et al. (2024) examine the influence of social media on the emerging behavior of young adults in Nigeria, emphasizing its implications for moral development. The study identifies both positive and negative outcomes of social media usage. On the positive side, social media platforms provide opportunities for enhanced communication, education, and skill development. However, the findings also highlight significant challenges, such as exposure to inappropriate content, cyberbullying, and a decline in traditional moral values. The authors advocate for targeted

interventions such as parental guidance and policy frameworks, to mitigate these risks while promoting the responsible use of social media among young Nigerians. However, the analysis does not cover the mechanism of the spread of inappropriate content as the research at hand examines.

The study by Mbithi (2022) investigates the impact of social media on Kenya's national security, highlighting its dual role as both beneficial and detrimental. Mbithi argues that social media fosters communication and strengthens networks across various domains, including cultural and political spheres. However, it also poses significant risks, such as terrorism recruitment, cyberbullying, tribal conflicts, and information warfare. The study underscores the need for automated monitoring systems and strict enforcement of policies to mitigate threats and ensure national security. However, the analysis does not show the mechanisms through which social media fosters communication, a gap the research at hand examines.

Theoretical framework

This article adopts the Developmental-Sociocultural Theory proposed by Choukas-Bradley (2022) to frame the analysis of how information disorder on Facebook influence sociocultural sustainability. Choukas-Bradley's theory integrates developmental psychology with sociocultural perspectives, offering a comprehensive framework for understanding how social interactions and cultural contexts affects individual and collective development. The theoretical framework that aims to understand the interaction between individual development and sociocultural contexts. According to Choukas-Bradley (ibid), the Developmental-Sociocultural Theory emphasizes that human development is not only a personal journey but is deeply embedded in and shaped by social and cultural contexts.

This theory posits that cognitive and social growth occurs through active engagement with the surrounding cultural environment and social interactions. It suggests that individuals internalize cultural norms, values, and practices through their experiences within their social milieu. This framework provides a lens to examine how information disorder on Facebook may affect sociocultural sustainability from a developmental perspective. According to the framework, individuals undergo cognitive, social, and emotional development. This development depends on various sociocultural factors such as family, peers, media, and institutions.

There are two key tenets employed for analysis. The first tenet is the cultural beliefs tenet, used to explore how exposure to information disorder on Facebook influences cultural beliefs and values. It focuses on the understanding that cultural beliefs are central to the identity and sustainability of a society. They shape how individuals perceive their world, interact with others, and maintain their traditions. However, when misinformation and disinformation are prevalent on a platform like Facebook, they can distort these cultural beliefs. Through the lens of this tenet, the analysis examines how false information spreads, which can alter people's understanding and attitudes toward their own culture and that of others.

The second tenet is the social cohesion tenet, which focuses on investigating how information disorder affects social interactions and how this affects social cohesion. Social cohesion refers to the bonds that unite individuals in a society, fostering trust, cooperation, and a sense of belonging. In healthy communities, social cohesion gains strength from shared values, open communication, and mutual trust. However, when misinformation and disinformation infiltrate these spaces, they can drive wedges between people, creating distrust, fear, and hostility. By applying the social cohesion tenet, the analysis explores how information disorder disrupts sociocultural sustainability and hampers the ability to foster inclusive social interactions.

Conceptual Framework

Figure 1.

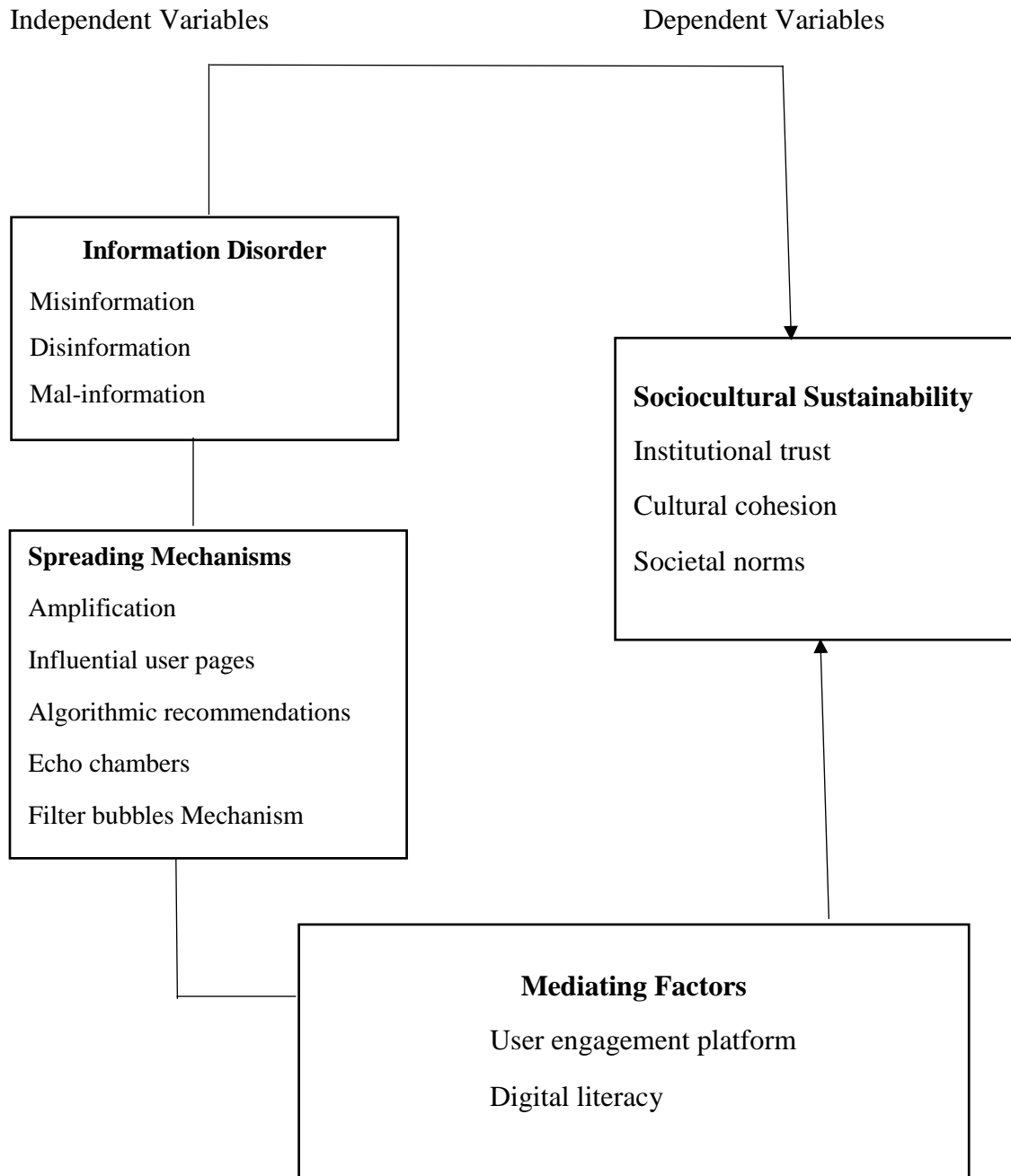


Figure 1 illustrates the relationship between the variables in the study, highlighting the independent variable (Information Disorder), the dependent variable (Sociocultural Sustainability), and the mediating factors. The arrows represent the direction of influence.

Materials and Method

The study used a descriptive research design employing a mixed-method approach for data collection and analysis. It integrated qualitative and quantitative approaches to enable triangulation of findings and provide a comprehensive analysis. The study location was Nairobi County, specifically targeting residents in Roysambu Sub-County. According to the 2019 Kenya Population and Housing Census, Nairobi County had a population of 4,397,073, comprising 2,192,452 males, 2,204,376 females, and 245 intersex individuals. Roysambu Constituency had a population of 54,752, with a population density of approximately 4,758 people per square kilometer. The area was chosen due to its high internet penetration, which ensures a significant portion of residents, use social media platforms particularly Facebook.

The study narrowed its population to 50 informants using purposive sampling. This sample size was sufficient for data collection, addressing research gaps, and facilitating generalizations. Milroy and Gordon (2008) assert that even 24 respondents can be adequate for a study, as larger samples may lead to data redundancy. Respondents' selection was on age and active Facebook usage. For this study, individuals aged 18-30 were classified as young, those aged 31-40 as middle-aged, and those above 41 as old.

Qualitative data was gathered through unstructured interviews involving 25 informants. These were in five sessions with open-ended questions exploring participants' experiences, perceptions, and beliefs about Facebook information disorder. Each session lasted approximately 10 minutes and was recorded using an audio device. Quantitative data was collected using structured questionnaires with closed-ended questions. The researcher distributed Likert Scales and predefined categories to the remaining 25 informants. These questionnaires examined the frequency of Facebook usage and prior encounters with information disorder. The dual approach enabled the collection of rich, detailed insights through interviews while quantitative data provided a broader understanding of the prevalence and patterns of information disorder on Facebook. This methodological blend ensured a nuanced analysis, balancing depth with breadth.

Results and Discussion

This section presents the findings and explores the broader implications of how Facebook's information disorder influences sociocultural sustainability. The analysis covers the data collected from participants. It highlights key trends and patterns emerging from the interaction between misinformation, disinformation, malformation, and sociocultural sustainability. The study examines how disseminating false or misleading information on Facebook affects the preservation of cultural values, traditions, and social cohesion. The table below outlines the demographic characteristics of those involved in the data collection process. These characteristics include age and gender, which offer context for understanding the diversity of perspectives represented in the study.

Table 1.

Demographic characteristics of informants

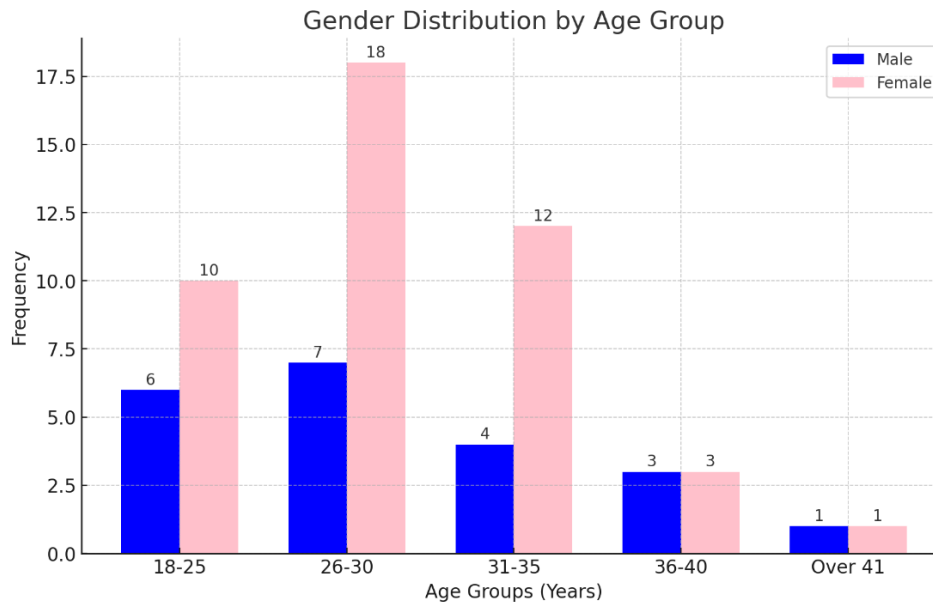
Gender	Frequency	Age/Years	Age/Years	Age/Years	Age/Years	Age/Years
		18-25	26-30	31-35	36-40	Over 41
Male	21 (42%)	6 (12%)	7 (14%)	4 (8%)	3 (6%)	1 (2%)
Female	29 (58%)	10 (20%)	18 (36%)	12 (24%)	3 (6%)	1 (2%)
Total	50	16	16	10	6	2

From the table the majority of Facebook users in the study fall within the age bracket of 26-30, representing a predominantly youthful demographic, the majority being females. This age group's active engagement with digital platforms makes them susceptible to the rapidly changing dissemination of misleading information. This aligns with the social cohesion tenet of the Developmental-Sociocultural Theory proposed by Choukas-Bradley (2022). This tenet focuses on

developmental and sociocultural perspectives on individuals. The demographic characteristics of the informants in the table are interpreted in Graph 1 below.

Bar Graph 1.

Demographic distribution of the informants



The graph indicates that fewer individuals of both genders aged 41 and above fall among Facebook users. This suggests a less exposure of older generations, who may possess deeper connections to traditional cultural practices, to the platform’s influence. Some older informants interviewed alluded to the fact that Facebook does not resonate with their age and they have very little benefit from it. This is in agreement with the cultural belief tenet of Developmental-Sociocultural Theory, which posits that cultural beliefs are central to the identity and sustainability of a society. They shape how individuals perceive their world, interact with others, and maintain their traditions. The study therefore finds that individuals in old age have conservative ideology and are reserved to the cultural norms as a decorum. However, they remain less informed on how Facebook influences the younger generation intended to carry on the cultural norms. This threatens sociocultural sustainability.

Further, the graph reveals that younger adults, who are likely to be key contributors to future sociocultural sustainability, are heavily involved in Facebook. This highlights the platform's

significant role in shaping their views and behaviors. These individuals are at a critical juncture where they not only absorb and perpetuate cultural values but also adapt them to fit the evolving digital age. This is in support of Wang *et al.* (2023) who illustrate how media integration enables platforms to not only disseminate information but also actively influence public understanding and engagement. The research at hand establishes that exposure to Facebook's information disorder threatens the authenticity and continuity of sociocultural values. This is inferred from the larger number of youths engaged in Facebook usage. Misinformation may distort cultural practices, leading to confusion or erosion of long-held traditions, while disinformation can actively mislead the youths, influencing their collective behaviors and norms.

Choukas-Bradley (2022) suggests in Developmental-Sociocultural Theory that, individuals' engagement with sociocultural environments influence their developmental trajectories. These environments play a crucial role in shaping developmental outcomes. Facebook is a powerful social digital platform that can shape public discourse and influence societal norms. It is essential to understand the broader implications of its usage. In today's digital age, where social media platforms are primary sources of news and communication for many, Facebook can play an undeniable role in influencing perceptions of cultural values and social behaviors. As such, the platform's capacity to reinforce or undermine cultural sustainability is immense. This is in agreement with Sparviero and Ragnedda (2021), who posit that digital platforms can act as both enablers and disruptors of cultural practices.

Failure to mitigate the spread of information disorder may result in the gradual erosion of cultural identity, social cohesion, and traditional practices that are vital for sociocultural sustainability. Furthermore, educating users, particularly younger generations, on digital literacy, critical thinking, and responsible online engagement can help reduce the harmful effects of information disorder. In doing so, Facebook can transform from a platform that exacerbates the problem to one that supports the preservation and promotion of cultural heritage in an increasingly interconnected and digitized world.

Mechanisms through which information disorder spread on Facebook

Social norms, cultural expectations, and peer influences on Facebook create an environment where information disorder thrives. The need for social validation can prompt users to share sensational content without verifying its accuracy, contributing to the amplification of information disorder.

This discussion treats Information disorder to mean misinformation, disinformation, and mal-information.

Table 2 presents responses from informants on mechanisms of information disorder propagation on Facebook. Informants were asked about the mechanisms they are aware of and have ever used.

Table 2

Mechanisms for the spread of information disorder

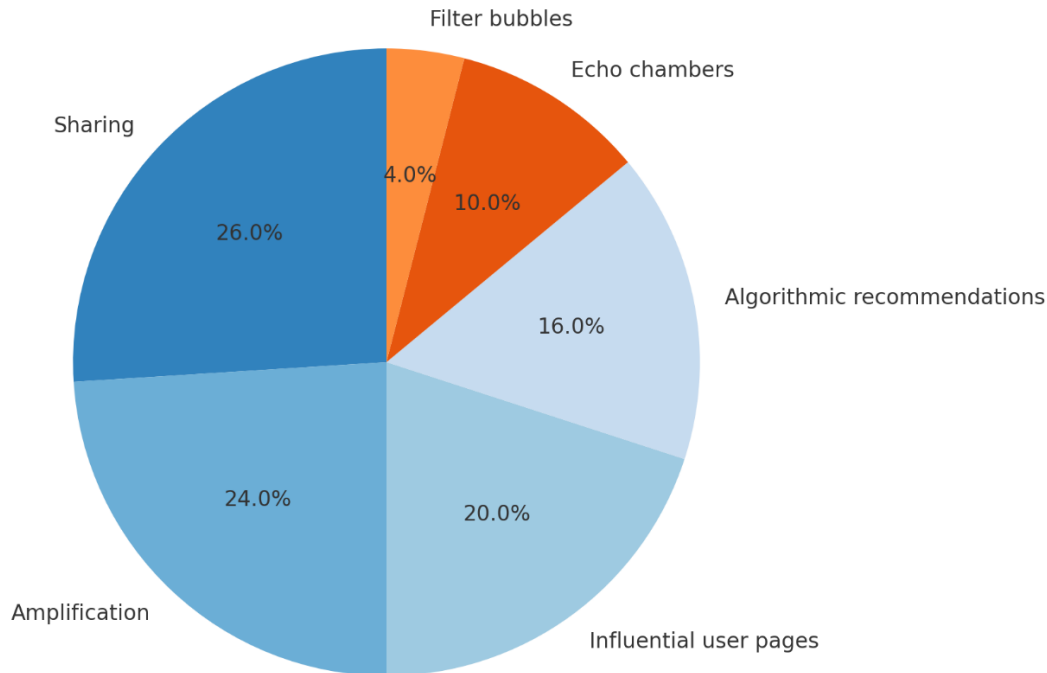
Gender	Frequency	Percentage
Sharing	13	26%
Amplification	12	24%
Influential user pages	10	20%
algorithmic recommendations	8	16%
echo chambers	5	10%
filter bubbles	2	4%
TOTAL	50	100%

The provided statistics highlight the key mechanisms by which information disorder proliferates on Facebook. The data presented using pie chart below represent the distribution of the provided categories, with their frequencies and percentages visually displayed as illustrated.

Pie Chart 1.

Distribution of the Mechanisms for the Spread of Information Disorder

Distribution of Categories by Frequency and Percentage



The chart shows that sharing is the most significant factor, accounting for 26% of the spread. This suggests that users can play an active role in amplifying misinformation, disinformation, and mal-information by directly sharing content with their networks. Such actions facilitate the rapid circulation of false information, as shared content can quickly reach large audiences, often without critical evaluation, which can affect sociocultural stability. This fact is in line with Bridges (2021) who discusses how language and behavior can disrupt the rigid expectations of digital governance, signaling a form of rebellion or failure to comply with standard data norms. This phenomenon underscores the role of individual users in the misinformation cycle, as they inadvertently contribute to its visibility and further dissemination across the digital landscape.

The Developmental-Sociocultural Theory emphasizes the role of culture and social interaction in shaping individual cognition and societal norms. Sharing, as highlighted in the chart, aligns closely with this theory's cultural belief tenet because it reflects how cultural values, norms, and collective behaviors influence the dissemination of information. In the context of information disorder, sharing content is not just an individual act but deeply embedded in social and cultural interactions.

Users often share content to strengthen social bonds, signal belonging to a group, or validate their cultural perspectives. This process aligns with the sociocultural belief that human actions are rooted in cultural and societal frameworks. However, uncritical sharing can amplify information disorder.

Amplification, which is at 24% close behind, in the context of the spread of information disorder on Facebook. It involves the process of significantly magnifying the visibility of information disorder through various forms of user engagement. Each interaction increases the prominence of the content, reinforcing collective attention and the perceived relevance of the information. The cultural belief tenet of Developmental-Sociocultural Theory underscores that human behavior, including digital interactions, shaped by societal norms, values, and cultural contexts. Amplification, which accounts for 24% of the spread of information disorder, directly reflects this tenet by showing how cultural and social practices influence online behavior.

Cultural dynamics such as confirmation bias and group identity can further amplify disinformation. Addressing amplification requires promoting digital literacy and fostering a critical awareness of these cultural dynamics, to reduce the spread of information disorder. This is in agreement with Verma (2022), who investigates shame in the age of social media. Verma (ibid) explores amplification as a significant factor in the spread of shame in social media. This occurs when individuals interact with misleading content. The more people engage with the information disorder, it gains more visibility in users' feeds, search results, and recommendations, making it seen and believed by larger audience.

Influential user Pages become the third at 20%. These pages or accounts have substantial followings, so their endorsement of information disorder significantly influences its spread. Influential accounts managed by public figures, celebrities, or organizations use their loyal followings to disseminate information widely. This creates a form of digital social cohesion where followers either align with the influencer's perspective, out of trust or shared values. The cultural belief tenet of Developmental-Sociocultural Theory highlights the interplay between societal norms and digital interactions, emphasizing how cultural context shapes behavior. Spread of information through influential user pages align with this framework by acting as conduits for cultural and social influence.

Influential user pages can make misinformation gain legitimacy and spread widely, further contributing to information disorder. For example, when an influencer shares unverified claims, the content's perceived credibility increases due to their authority. This is supported by Ishfaq *et al.* (2022), claiming that engagement from influential accounts can trigger algorithms to prioritize and promote the content even more. Influential user pages represent a critical factor in the spread of false information due to their substantial online presence and large followings. They become hubs of interaction, fostering shared engagement that inadvertently legitimizes and spreads information disorder. This phenomenon reflects the dual role of social cohesion: promoting unity within groups while enabling the unchecked dissemination of harmful content across interconnected networks.

Algorithmic recommendations, which account for 16% in the context of the spread of information disorder on Facebook, play a crucial role in amplifying false or misleading information. Algorithms prioritize content that resonates with users' identities, values, or emotions, creating an echo chamber effect that reinforces pre-existing beliefs. This aligns with the cultural belief tenet of the Developmental-Sociocultural Theory, by exploiting cultural and cognitive biases. The sociocultural principle supports the fact that shared values within a community strengthen social cohesion. For instance, emotionally charged or identity-affirming false information gains disproportionate visibility, as algorithms amplify such content to maximize engagement.

From a developmental perspective, individuals become less critical of information within familiar cultural or social frameworks, leading to the unchecked spread of misinformation. Metzler and Garcia (2024) explain this to mean leveraging automated systems that suggest content to users based on their previous interactions explain this. The two authors suggest that algorithms on social media platforms and other digital spaces analyze users' behaviors, such as the posts they like, share, or comment on, to tailor content recommendations. This article is in agreement with this idea since when a user interacts with information disorder; the algorithm may suggest similar content, including additional misleading or false information. This personalization can inadvertently lead users deeper into misinformation networks that can hamper sociocultural stability.

Echo chambers accounted for 10% in the context of the spread of information disorder on Facebook. When users gain access to wrong information that aligns with their existing beliefs, it strengthens their confidence in those beliefs. Misinformation that fits within these pre-established

viewpoints is more readily accepted and less critically examined, leading to a higher likelihood of misinformation being believed, and shared. The cultural belief tenet of Developmental-Sociocultural Theory provides valuable insight into how echo chambers exacerbate information disorder. This tenet emphasizes that shared cultural norms and group dynamics influence individual behavior and cognition. Within echo chambers, misinformation that aligns with pre-existing beliefs is repeatedly reinforced, fostering stronger convictions in false narratives.

While social cohesion traditionally promotes trust and cooperation, misinformation disrupts these bonds by fostering mistrust and polarizing communities. The constant reinforcement of biased or false narratives within echo chambers undermines critical thinking and encourages users to share information disorder, perpetuating its spread. This is in line with Kim (2023) who examines the concept of echo chambers in the context of increasing political and ideological polarization. Kim emphasizes that echo chambers exacerbate polarization by continuously presenting information that supports users' existing ideologies. The research at hand finds this phenomenon significant in influencing how information disorder can be received, and perpetuated. In echo chambers, users are primarily exposed to content that reflects and reinforces their views which might conflict with sociocultural stability. Echo chambers function as closed networks that can reinforce existing beliefs by consistently presenting information that aligns with those beliefs. This creates a sense of shared understanding and trust within the group, which is central to social cohesion. The repeated exposure to information disorder in these networks reduces critical scrutiny and increases users' confidence in the content, as the information perceived to come from 'trusted' sources within the group.

Filter bubbles accounted for only 4% of the factors influencing the spread of information disorder on Facebook, making them the least significant contributor. According to the cultural belief tenet of Developmental-Sociocultural Theory, cultural beliefs profoundly shape individuals' cognitive processes and interactions. In the context of filter bubbles, users are exposed primarily to information that aligns with their existing beliefs, significantly influencing their information preferences and dissemination patterns. As highlighted by Shcherbakova and Nikiforchuk (2022), filter bubbles are algorithm-driven digital environments that curate content based on users' browsing habits, search history, and online interactions. While these algorithms aim to enhance user experiences through personalization, they inadvertently create echo chambers that limit

exposure to diverse viewpoints, thereby amplifying the risk of information disorder. This observation aligns with Franziska et al. (2019), who emphasize that the mechanism of filter bubbles underscores their role in shaping how information spreads, often-reinforcing biases and polarization.

Even though filter bubbles accounted for only 4% of the spread of information disorder, they reinforce false information within these cohesive groups by filtering out contradictory viewpoints. The unintended consequence is that users are less likely to challenge misinformation that aligns with their worldview, as their trust in their curated group strengthens. This reflects how social cohesion can inadvertently support the spread of information disorder in filtered environments, despite their lower overall prevalence. Zollo and Quattrociocchi (2018), who examine complex spreading phenomena in social systems, support this. The two authors state that misinformation often spreads more rapidly and widely compared to factual information, due to its emotionally charged and sensational nature, which encourages sharing and engagement.

Effects of Information Disorder on Facebook users

According to the Developmental-Sociocultural Theory proposed by Choukas-Bradley (2022), the information can be understood through the interaction between individual development and sociocultural influences. From the data analysis in this study, young adults are particularly vulnerable to the impacts of Facebook, due to their stage of identity development and increased sensitivity to peer influence. Information disorder, which includes misinformation, disinformation, and mal-information, can lead to several key effects as discussed.

The study reveals that many young adults frequently encounter Facebook pages rife with misinformation content that is incorrect or misleading but often shared without malicious intent. Interviews with participants highlighted a decline in trust and confidence in cultural institutions and traditional practices due to exposure to such misinformation. The social cohesion principle within Developmental-Sociocultural Theory underscores the necessity of trust, collaboration, shared cultural values for fostering social stability and meaningful community interactions. According to participant responses, misinformation on Facebook undermines social cohesion by eroding trust in established cultural frameworks and traditional practices. The pervasive presence of unintentional misinformation fosters confusion and skepticism, challenging the credibility of

longstanding cultural norms and institutions. This erosion of confidence threatens the collective understanding and shared values that are vital for maintaining social cohesion.

Furthermore, exposure to misleading information undermines communities' ability to collaborate effectively. In the absence of trusted information sources or shared belief systems, uniting around common cultural narratives or practices becomes increasingly difficult, leading to fragmentation and weakened communal bonds. This aligns with Zareie and Sakellariou (2021), who argue that misinformation disrupts social dynamics by altering how cultural beliefs are shared, and perceived. Consequently, conflicts and misunderstandings often arise from false information. The influence of information disorder plays a role in shaping attitudes toward sensitive cultural and religious matters, with the prevalence of false narratives and conspiracy theories. For example, some informants reported that mistrust fueled by misinformation is eroding cultural diversity in marital institutions and politics. Additionally, the dissemination of false information on platforms like Facebook exacerbates social polarization and fuels conflict, further deepening societal divides.

The proliferation of divisive narratives and conspiracy theories exacerbates societal divisions, leading to a decline in cultural diversity and the marginalization of certain groups. This undermines the social progress and integration essential for sociocultural sustainability and jeopardizes peaceful coexistence among diverse cultural communities. Interviews with informants revealed that exposure to Facebook's information disorder significantly affects individuals' cultural beliefs. Many participants reported diminished trust and confidence in cultural institutions and traditional practices because of misinformation. This disorder is especially impactful in shaping perceptions of sensitive cultural issues or historical events, where false narratives and conspiracy theories frequently emerge and gain traction.

Participants reported increased polarization and conflicts within their communities due to the spread of disinformation on Facebook. Informants in the unstructured interviews acknowledged awareness of false information deliberately created and disseminated to deceive or mislead the public. This indicates that information disorder fosters the formation of opposing ideological groups, reducing willingness to engage in constructive dialogue. The findings reveal that disinformation on Facebook significantly disrupts social cohesion by fueling polarization and conflicts. The spread of information disorder undermines shared understandings and trust,

weakening community bonds and cooperation essential for social harmony. The results align with Van Der Linden (2022), who asserts that misinformation erodes trust in traditional and authoritative information sources. This compounds the impact further by echo chambers, where individuals are exposed to a limited range of perspectives, reducing encounters with differing viewpoints. A prominent example cited by participants is the divide among soccer fans, illustrating how such dynamics lead to fractured social cohesion and hinder informed decision-making about cultural practices and beliefs.

The impact of disinformation aligns with the principles of social cohesion, revealing how it fractures the cultural and social bonds essential for unified societies. By undermining shared narratives and eroding mutual trust, communities can become fragmented and increasingly prone to conflict. This fragmentation can hinder the achievement of collective goals and disrupt social harmony. The findings underscore the urgent need to combat disinformation as a critical measure for safeguarding the values and principles underpinning sociocultural sustainability. Addressing this challenge is imperative to maintain inclusive and cohesive communities, ensuring the preservation of cultural diversity and mutual respect.

Some responses from the informants reveal a decrease in community resilience due to mal-information. In this case, Facebook users gain access to genuine information shared through the intent to cause harm or mislead, even though the information itself may be factual. This indicates that there is a possibility of a great impact of information disorder on sociocultural sustainability. Mal-information may lead to a disruption in the transmission of cultural knowledge and practices. In the given finding, disinformation on Facebook, deliberately created to mislead, can significantly disrupt social cohesion by fostering polarization and conflicts. The deliberate spread of information disorder can create opposing ideological groups, which undermines shared understandings and trust. As a result, individuals become less willing to engage in constructive dialogue, weakening the sense of community and cooperation essential for social cohesion.

Without shared narratives or mutual trust, communities can experience fragmentation and an increase in conflict, making it difficult to achieve collective goals or maintain social harmony. The finding illustrates that addressing disinformation is critical to sustaining the values central to the social cohesion tenet, such as dialogue, mutual respect, and community trust. This is in agreement with Upadhyay (2024), who claims that the uncertainty created by misinformation and fake news

can undermine the authenticity and credibility of information. This, can, hinder the preservation and continuity of cultural traditions and threaten the resilience of sociocultural communities. As individuals become increasingly unsure about the accuracy of cultural knowledge and practices, they may lose faith and trust in their cultural heritage. Consequently, this can lead to a decline in cultural diversity and the erosion of sociocultural cohesion within communities.

The erosion of cultural diversity and sociocultural cohesion can have wide-ranging consequences for communities. Cultural diversity is essential for the enrichment of societies as it allows for the exchange of ideas, beliefs, and practices. It fosters innovation, creativity, and a more inclusive representation of different perspectives. When mal-information and fake news disrupt the transmission of cultural knowledge, it becomes increasingly difficult for communities to maintain and celebrate their unique cultural identities. This can result in a homogenization of cultures, where diverse traditions and practices are lost or marginalized.

Conclusion

This paper acknowledges the critical role of Facebook as a digital platform in shaping sociocultural sustainability. It emphasizes the need for proactive measures to address information disorder on the platform. By understanding the mechanisms of information disorder spread and investigating its impact on cultural beliefs, social cohesion, and community resilience, we can work towards preserving and safeguarding our sociocultural heritage in the digital age. This research reveals significant concerns regarding the prevalence and impact of information disorders on the Facebook platform. The findings indicate that information disorder is pervasive, eroding trust in institutions and media and contributing to increased polarization within societies. The findings also suggest demographic disparities in vulnerability to information disorder.

Recommendations

It is important to acknowledge that Facebook plays a pivotal role in shaping public opinion and influencing societal norms. Therefore, we recommend handling the platform with responsibility and putting measures in place to combat information disorder. This includes improving algorithms to prioritize accurate and reliable information, collaborating with fact-checking organizations, and promoting media literacy education among users. Policymakers should also have a role to play in regulating social media platforms other than Facebook and holding them accountable for the

impact of information disorder on sociocultural sustainability. This may include enacting laws that address the spread of fake news and hate speech on social media, as well as promoting digital literacy programs to equip individuals with the skills to evaluate information. Furthermore, individuals using Facebook and other social media platforms like Instagram, Twitter (now X), WhatsApp, and TikTok should have a responsibility to be critical consumers of information and to seek out diverse perspectives. Addressing the issue of Facebook information disorder is crucial for the long-term sociocultural sustainability of societies. By taking comprehensive measures to combat misinformation and promote a more inclusive and diverse online environment, stakeholders can work towards building a more resilient and harmonious society.

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