

Social Media's Impact on Select Urban Issues:  
A Compendium of MURC Research Briefs



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## Executive Summary: Issues & Findings

This section provides an executive summary of the major issues and findings contained in the four Mississippi Urban Research Center's (MURC) social media research briefs. The briefs focused on examining how social media is particularly impacting urban areas both positively and negatively. Due to urban areas (in contrast to rural areas) tending to have higher population levels, racial/ethnicity distinctions, higher numbers of technological devices and usage levels, and higher levels of political, social, and economic stratifications, the use (or mis-use) of social media can have a more profound impact on the quality of life in urban areas. As used in this compendium report, the term "social media" is defined as . . . "internet-based, disentrained, and persistent channels of mass-personal communication facilitating perceptions of interactions among users, deriving value primarily from user-generated content" (Carr & Hayes, 2015).

In seeking to fulfil its mission of conducting basic and applied research into urban problems and public policy, the Jackson State University Mississippi Urban Research Center examined how social media (and the devices used to distribute that media) are impacting urban communities now and into the foreseeable future. This compendium represents the first phase of MURC's research into this ever expanding area. Future research activities will involve gathering additional information and insight from multiple perspectives, and then developing actionable policies, interventions, programs, and services that can help build upon, and mitigate where necessary, aspects of social media that are negatively impacting the quality of life in urban areas. The following section provides a summary of the four research briefs contained in this compendium report.

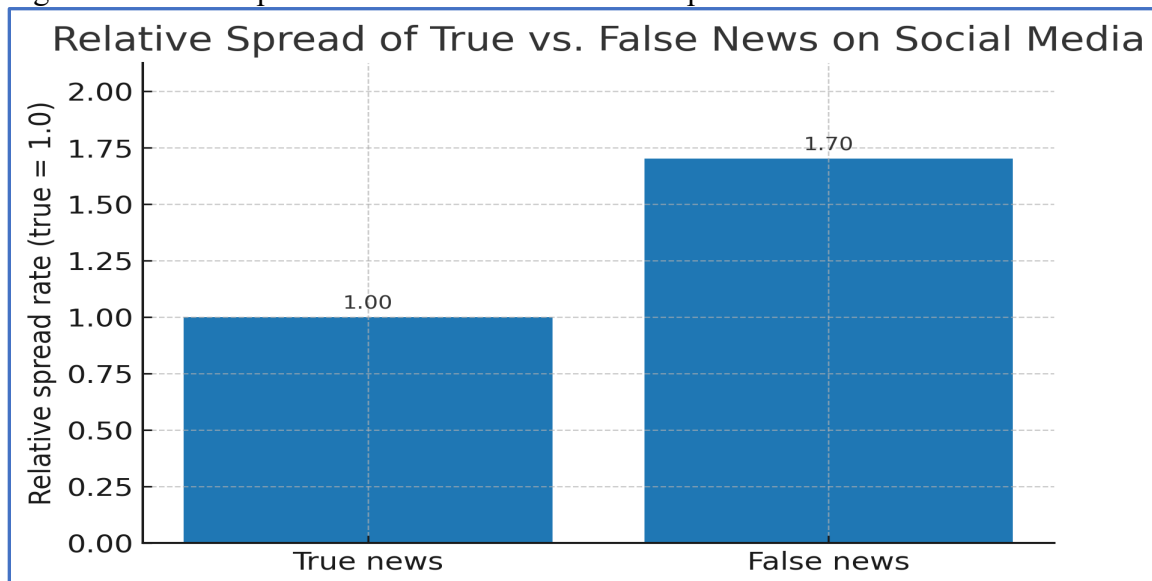
## Social Media, Mis/Disinformation, and Urban Areas: A Review of Literature and Theory

This study reviewed literature from 2015–2024 to examine the spread and impact of misinformation on social media. It identifies and defines key terms (e.g., misinformation, disinformation, malinformation, and infodemic), explores ten theoretical frameworks explaining the spread of misinformation, and highlights five themes especially relevant to urban areas. The findings emphasize that misinformation spreads faster and has more profound consequences in cities due to their high population density, diversity, and technological penetration. The study includes visual models and recommends policy-based and strategic interventions to mitigate the potential negative aspects of social media use.

### Major Issues and Findings

- Widespread misinformation poses a serious societal threat.
- Urban settings amplify misinformation impacts due to their density and diversity.
- Ten theories explain misinformation spread; five disinformation themes are key for cities.
- Strategic planning and targeted interventions are recommended.

Figure 1. Relative spread rate of misinformation compared to factual news.

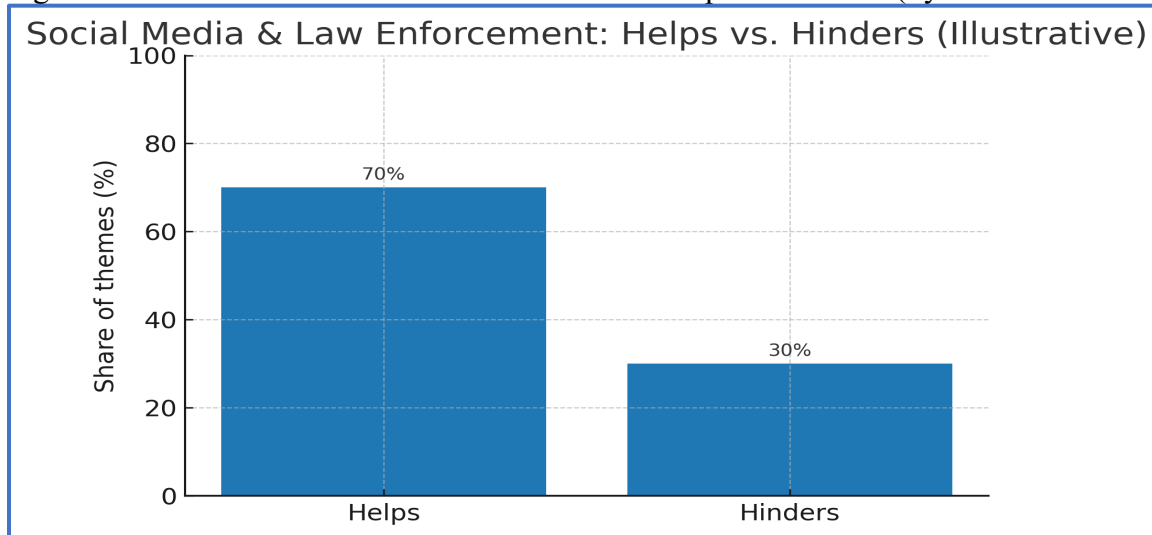


*Note.* Data from Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*, 359(6380), 1146–1151. <https://doi.org/10.1126/science.aap9559>

## Does Social Media Help or Hinder Law Enforcement?

This research examined the role of social media's impact on law enforcement. It used a mixed methods research approach that included analyzing crime statistics and conducting content/thematic reviews of public, private, and nonprofit organizations' reports. Findings suggest social media is more helpful than harmful, and it enhances communication, transparency, and community engagement. It aids real-time information sharing and crowdsourcing, but presents challenges including privacy violations, misinformation, cybersecurity risks, and resource constraints. In urban settings, law enforcement use of social media faces particular difficulties due to diverse populations, device saturation, and heightened political/social tensions.

Figure 2. Social media's role in law enforcement - Helps vs. Hinders (Synthesis of themes).



*Note. Based on the abstract "Does Social Media Help or Hinder Law Enforcement?" and Nix, J., & Wolfe, S. E. (2020). The impact of social media on policing: A research agenda. Police Quarterly, 23(4), 455–478.*

### Major Issues and Findings

- Social media enhances communication, trust, and crime-solving capacities.
- Challenges includes issues related to privacy, misinformation, cyber risks, ethics, and resource limitations.
- Social media adds complexity to Urban policing due to scale, diversity, and social tensions.
- Responsible and ethical practices regarding the use of social media are essential.

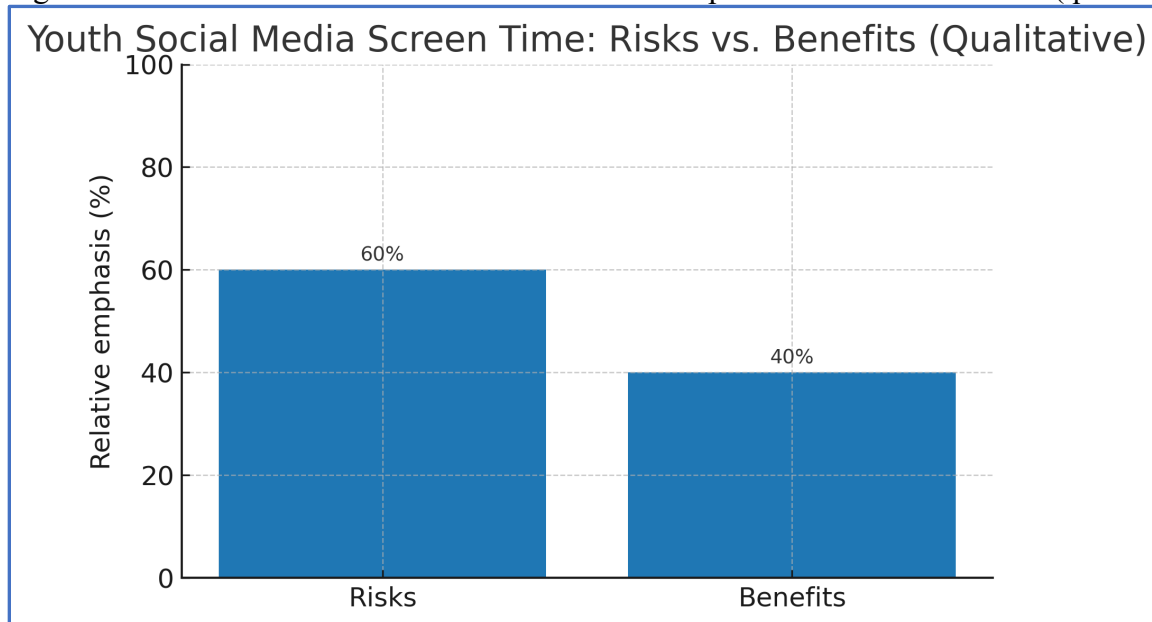
## Is Social Media Screen Time a Healthy Option for Youth?

This study reviewed research literature regarding the health impacts of social media use among adolescents. Research findings are mixed, with no clear consensus on long-term effects. Risks included addictive use, exposure to harmful content, and impacts on knowledge, attitudes, and behaviors. Study recommendations stress stricter age enforcement, designing safer platforms, and systems to address harmful content. The study highlights the importance of parental, professional, and policymaker involvement in reducing the risks of excessive social media use.

### Major Issues and Findings

- Mixed evidence on long-term health impacts.
- Risks include addiction, harmful content, and negative behavioral influence.
- Potential solutions called for stricter social media policies and safer platforms' design.
- Parents, researchers, and policymakers need to play more active roles regarding how social media is allowed to be used by youth.

Figure 3. Youth social media screen time—relative emphasis of risks vs. benefits (qualitative).

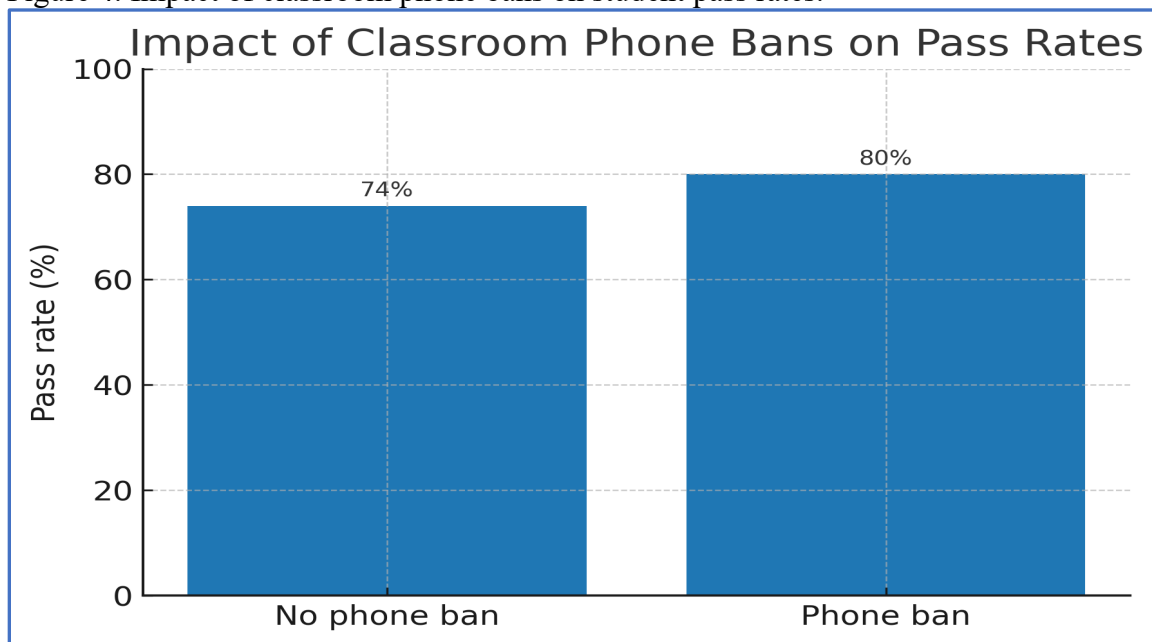


*Note. Based on the abstract “Is Social Media Screen Time a Healthy Option for Youth?” and Kaye, L. K., Orben, A., Ellis, D. A., Hunter, S. C., & Houghton, S. (2020). The impact of social media use on appearance self-esteem from childhood to adolescence. Journal of Youth and Adolescence, 49(6), 1161–1175.*

## Examining Social Media and Devices in the Classroom: A Research Commentary

This commentary, combining an empirical review of 27 studies<sup>1</sup> and authors' personal observations, investigated the role of devices and social media in classrooms. Findings show that unsanctioned use of social media can lower test performance, while the utilization of district-wide social media bans was shown to improve student pass rates by 6 percentage points (Kedmey, 2015). Heavy in-class social media use was also found to be linked to health issues such as anxiety and sleep problems (Kay, 2020). However, the intentional integration of devices can also yield moderate learning gains, such as through Augmented Reality (AR) tools and assessment apps.

Figure 4. Impact of classroom phone bans on student pass rates.



*Note. Based on the abstract “Examining Social Media and Devices in the Classrooms: A Research Commentary.” Illustrative pass rates reflect a 6-percentage-point rise in pass rates after a district-wide phone ban as described in the abstract.*

<sup>1</sup> ChatGPT .03 Model analysis tool was used to assist with gathering research data presented in this research commentary

Other findings included that device bans may also disadvantage low-SES students who rely on phones for access (Kedmey, 2015). This commentary concluded by stating balance and compromise are necessary regarding how social media use is allowed in the classroom, with teachers playing a central role in setting boundaries.

### Major Issues and Findings

- Unrestricted device use negatively impacts academic performance.
- Some positive outcomes emerge from structured, purposeful device use.
- Bans risk harming disadvantaged students reliant on devices for access.
- Teachers must balance learning opportunities with managing distractions.

### Conclusions: Social Media's Magnification Effects

The challenges and findings identified in this compendium report are magnified in urban areas due to several interrelated factors:

- *Population Density & Diversity*: Urban centers have large, heterogeneous populations with wide-ranging cultural, social, and political viewpoints. This diversity increases both the spread and interpretation of social media messages, amplifying misinformation risks and complicating law enforcement's ability to maintain trust across groups.
- *High Device Saturation*: Cities have a higher density of devices and users, which accelerates the velocity at which information—including misinformation—spreads. Findings indicate that urban residents are more likely to own smartphones, intensifying the spread of both harmful and beneficial social media content.
- *Political and Social Complexity*: Urban areas are often at the center of political movements, protests, and diverse social agendas. Social media in these contexts can both mobilize positive collective action and exacerbate conflict through the rapid spread of disinformation or polarizing narratives.
- *Youth Vulnerability in Cities*: With higher youth populations in urban centers, risks related to screen time and device use are intensified. Urban schools face additional challenges in enforcing policies around devices while simultaneously managing equity concerns for disadvantaged students.

Supporting research shows that misinformation spreads 70% faster than factual news on Twitter (Vosoughi, Roy, & Aral, 2018), a phenomenon that becomes particularly critical in

urban areas where information networks are dense. Additionally, urban law enforcement agencies face significantly more online threats and misinformation-driven events compared to their rural counterparts (Nix & Wolfe, 2020).

### Overall Conclusions

The intersection of social media with misinformation, law enforcement, youth health, and education carries heightened risks and challenges in urban environments. Addressing these challenges requires context-sensitive policies, stronger digital literacy education, and cross-sector collaboration to safeguard public trust and well-being in complex urban landscapes.

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## Social Media's Impact on Select Urban Issues: A Compendium of MURC Research Briefs

### Compendium Introduction

In seeking to fulfil its mission of conducting basic and applied research into urban problems and public policy, the Jackson State University Mississippi Urban Research Center examined how social media (and the devices used to distribute that media) are impacting urban communities now and into the foreseeable future. The research briefs presented in this compendium report focused on examining how social media is particularly impacting urban areas both positively and negatively. Due to urban areas (in contrast to rural areas) tending to have higher population levels, racial/ethnicity distinctions, higher numbers of technological devices and usage levels, and higher levels of political, social, and economic stratifications, the use (or mis-use) of social media can have a profound impact on the quality of life in urban areas.

This compendium represents the first phase of MURC's research into this ever expanding area. Future research activities will involve gathering additional information from multiple perspectives, and then developing actionable policies, interventions, programs, and services that can help build upon, and mitigate where necessary, aspects of social media negatively impacting the quality of life in urban areas. The Mississippi Urban Research Center welcomes feedback from the general public regarding the issues and findings discussed in this report. That feedback will be used to help develop and strengthen any policy and/or programmatic recommendations flowing from the four research briefs.

## Presentation of Research Briefs & Commentary

Social Media, Mis/Disinformation, and Urban Areas: A Review of Literature and Theory  
Sheryl L. Bacon, MPA

### **Abstract**

Social media has evolved from its emergence as a novelty in the 1990s to a regular part of everyday life for 63% of people around the world, with an estimated 5.2 billion social media users globally (Kepios, 2024). The growth of social media in popularity has contributed to the spread of another social phenomenon – the spread of misinformation and digital misinformation, which have been identified by the World Economic Forum as “a serious threat to our society” (Del Vicario, Bessi, Zollo, & Quattrociocchi, 2016). Due to the sheer number and types of persons, digital devices, issues, opportunities for interactions, and varying viewpoints present in urban areas, the potential harm that can be caused by social media misinformation is greatly magnified when compared to rural areas. With the expansion of social media and new platforms in recent years, it is crucial to examine the issue of social media misinformation, how and why it spreads, and how it specifically impacts urban areas. This study utilized a mixed-methods, exploratory methodology to identify: 1) definitions of key terms such as social media, misinformation, disinformation, malinformation, and infodemic); 2) peer-reviewed conceptual and theoretical frameworks seeking to explain how misinformation is spread; and 3) secondary data quantifying the possible impacts of social media misinformation on urban issues. This review covered the period of 2015 to 2024. Qualitative sources reviewed included peer-reviewed journal articles and reports from professional associations and governmental entities. Key study findings include the identification of ten theories on social media misinformation, along with five common themes of disinformation particularly relevant for urban areas. Also included are visual models representing this study’s research findings, as well as recommendations on how misinformation can be combated through policy and other interventions. This research’s ultimate objective is to provide insight on how the negative impacts of social media misinformation on urban issues can be alleviated through awareness, knowledge, and targeted intervention.

Keywords: social media, misinformation, disinformation, malinformation, and infodemic)

### **Introduction**

The term “social media” was first coined in 1994, but by 2015, the use and definition of social media had evolved to describe “internet-based, disentrained, and persistent channels of mass-personal communication facilitating perceptions of interactions among users, deriving value primarily from user-generated content” (Carr & Hayes, 2015). The use of social media among citizens around the world has grown tremendously in the past two decades, and has

brought along with it a tremendous growth in globalized socializing, culture, and information sharing. The ease and convenience of internet use gained by adding mobile devices such as laptop computers, electronic tablets, and smartphones as access points in more recent years has also been accompanied by the formation of a global network through which misinformation is enabled to spread just as easily as information (Ali A., 2021). “Digital misinformation” has been identified by the World Economic Forum as “a serious threat to our society” (Del Vicario, Bessi, Zollo, & Quattrociocchi, 2016), and as a result, has helped create a cultural environment which requires the acknowledgment and careful discernment of misinformation. Due to the sheer number and types of persons, digital devices, issues, opportunities for interactions, and varying viewpoints present in urban areas, the potential harm that can be caused by social media misinformation is greatly magnified when compared to rural areas.

This research brief explores the phenomenon of social media misinformation as related to types of misinformation, how and why misinformation spreads, and how it specifically impacts urban areas. This research reviews early and current literature for the purposes of identifying the following: 1) definitions of social media “misinformation” and related concepts (e.g. “disinformation,” “malinformation,” “infodemic”); 2) methods and means by which misinformation is disseminated on social media; and 3) peer-reviewed conceptual and theoretical frameworks which seek to explain how social media misinformation is spread. Additionally, this study reviewed secondary data that seeks to quantify the possible impacts of social media misinformation on urban issues such as education, health, housing, immigration, disaster/emergency response, and politics/governance. The ultimate objective of this research is to provide insight on how the negative impacts of social media misinformation on urban areas

can possibly be alleviated through concerted awareness and actions by policymakers, committed organizations, and concerned citizens.

### *Misinformation, Disinformation, and Malinformation*

For clarity of concepts, distinctions must first be made in the definitions of misinformation terms encountered in the literature review. Misinformation is often used as an umbrella term to describe incorrect information in general. A report (Trijsburg, et al., 2024) addressing the impacts of disinformation on life and governance, define three separate connotations for the terms “misinformation,” “disinformation,” and “malinformation” that illustrates how the “information pathology” of those terms have involved. As used in that report, **misinformation** refers specifically to “false or misleading information held and shared without intent to harm, often due to unconscious bias or by accident.” **Disinformation** is used to describe “false information that is deliberately created to harm, mislead or evoke an emotional response in a target audience” (Trijsburg, et al., 2024). A third less widely used term is **malinformation**, which refers to “true information that is used with the intent to manipulate or harm,” and/or “factual information which then becomes harmful when it is used out of context or combined with mis- and disinformation” (Trijsburg, et al., 2024).

Those terms are further broken down by Waldle and Derakhshan (2017), as having two dimensions (False and Harmful) and eight types. As shown in Table 1, each “type” of mis-, dis-, or malinformation is applied to a dimension of being either False, Harmful, or both. The distinctions and interactions between these terms are of importance when exploring the theoretical frameworks of how and why misinformation (in all categories) is spread. The ability to recognize whether a claim is misinformation, disinformation, or malinformation, as well as whether it is false, harmful, or both, is key to understanding how, where, and why it spreads, and to developing effective strategies to counter the accompanying societal problems.

Table 1. Waldle and Derakhshan's Taxonomy of "Information Disorder"

<b>Term</b>	<b>Type</b>	<b>Dimension</b>
Misinformation	False Connection	False
Misinformation	Misleading Content	False
Disinformation	False Content	False & Harmful
Disinformation	Imposter Content	False & Harmful
Disinformation	Manipulated Content	False & Harmful
Disinformation	Fabricated Content	False & Harmful
Malinformation	Leaks/ Harassment/Hate Speech	Harmful
Misinformation	Satire & Parody	(Least)
Disinformation		False & Harmful
Malinformation		

*Source: Waldle and Derakhshan, Information Disorder: Toward an Interdisciplinary Framework for Research And Policy Making, Council of Europe Report DGI(2017)09, 2017*

To actually reduce potential harm in urban environments caused by misinformation, effective strategies addressing misinformation should begin with a prioritization of those cases classified as False & Harmful, or Harmful, rather than those cases which are only classified as False. The goal is to reduce the observable/measurable harm actually being caused as a result of those "information pathologies" (Trijsburg, et al., 2024).

## **Background**

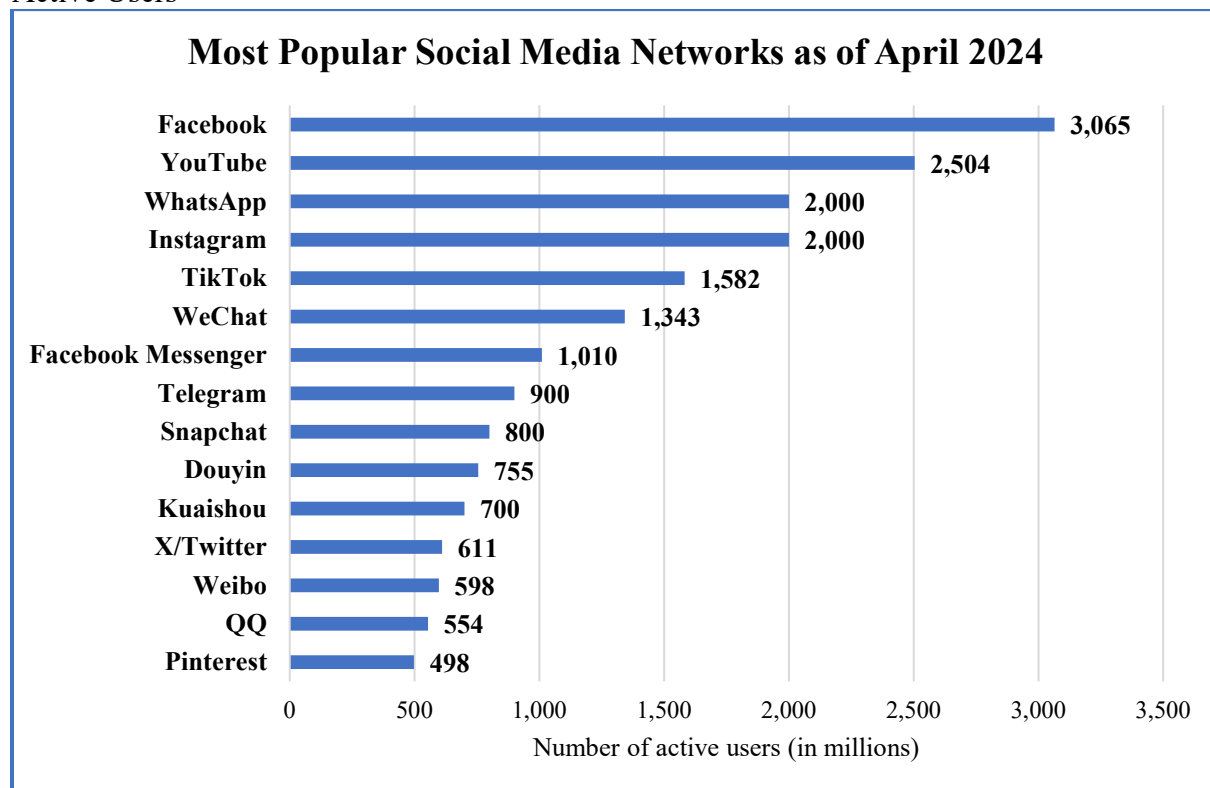
### *History and Growth of Social Media*

Since the earliest emergence of the public internet in the mid-1990s, people have used it for social purposes. Some of the earliest platforms for this interpersonal type of online socializing were virtual chatrooms and bulletin boards hosted by sites like AOL, Windows Live, and Yahoo!, which were predominantly used as web search portals and online service providers, but also facilitated private communication and networking (Crelin, 2017). The websites Classmates.com and SixDegrees.com can be considered precursors of modern social media, as they were designed for network building specifically among alumni from the same scholastic institutions (Crelin, 2017). However by the early 2000s, a new type of platform emerged which

gave roots to what we collectively know as social media in the present day. The websites Friendster (founded 2002), MySpace (founded 2003), and Facebook (founded 2004) were established and grew in popularity prompting a new wave of social media platforms (Ngak, 2011).

This new wave of social media platforms followed the model of providing a site designed specifically for users to create and customize a personal profile, and curate a ‘Friends’ list of other users with whom they could communicate and share online content. As of October 2024, there were an estimated 5.22 billion social media users globally – nearly 64% of the world’s population, with 94.5% of internet users worldwide accessing social media monthly (Kepios, 2024). Figure 1 provides a listing of the most popular social media sites that included such platforms as Facebook, YouTube, and Instagram (Statista.com, 2024).

Figure 1. Biggest Social Media Platforms Worldwide as of April 2024, by Number of Monthly Active Users

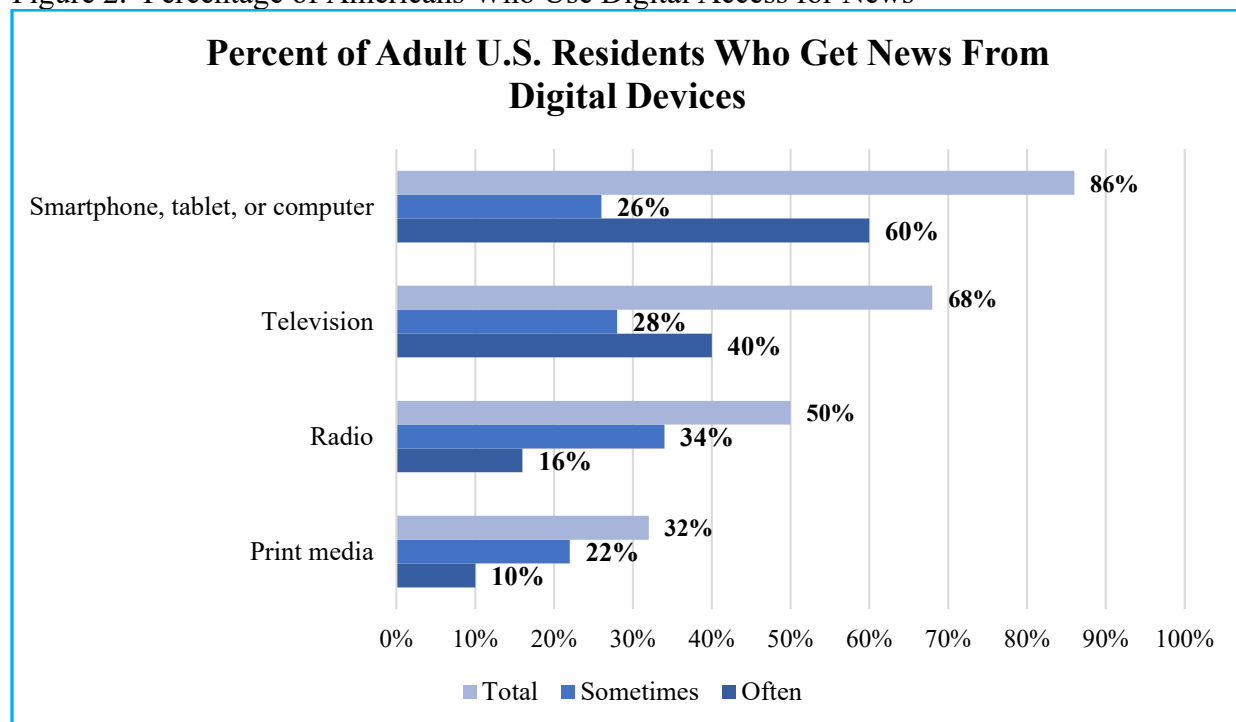


Source: <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>

### *Spread of Misinformation*

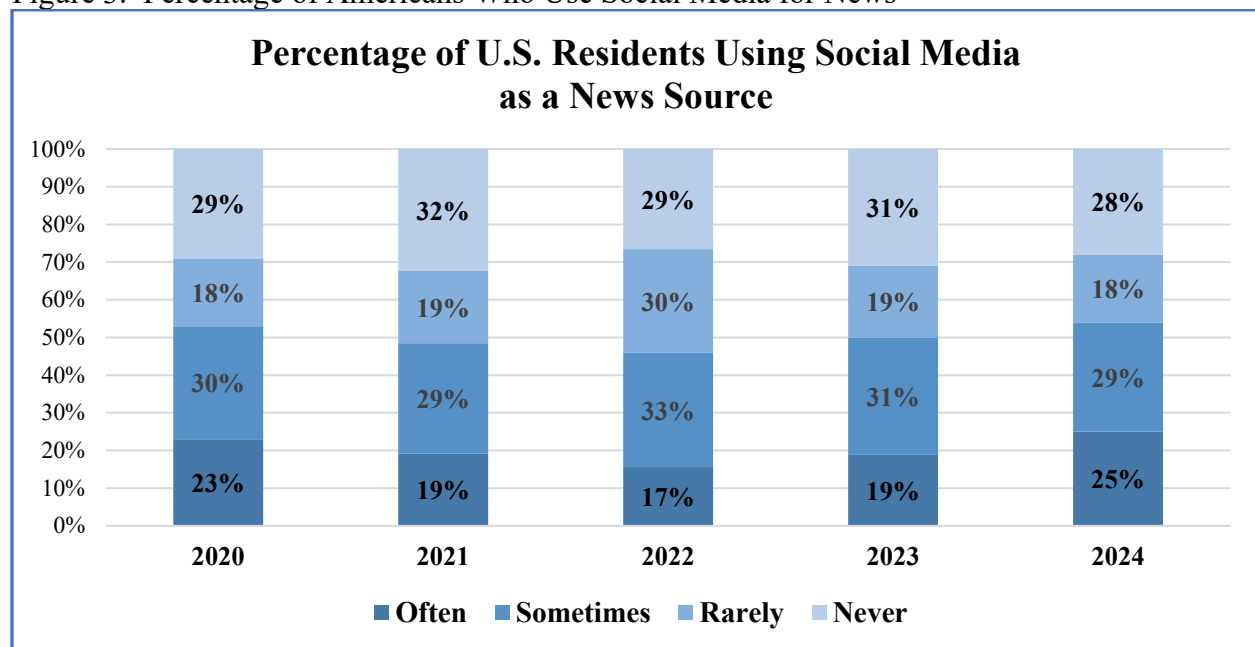
The growth in popularity of social media has contributed to the spread of another social phenomenon – the spread of misinformation. While information sharing has been a constant feature of social media, a growing number of people also use social media for other purposes such as entertainment, business purposes, and as a source for news information (St. Aubin & Liedke, 2024). A 2020 survey conducted by the Pew Research Center found approximately 86% of Americans receive news information from some sort of digital device, and a similar survey conducted in 2024 found that more than half (54%) of adult U.S. residents reported getting their news information from social media at least “Sometimes” (Shearer & Mitchell, 2021). Figures 2 and 3 provide a visual display of the percentages of Americans using social media to receive news information.

Figure 2. Percentage of Americans Who Use Digital Access for News



Source: Survey of U.S. adults conducted Aug. 31-Sep. 7, 2020, Pew Research Center (Shearer & Mitchell, 2021).

Figure 3. Percentage of Americans Who Use Social Media for News



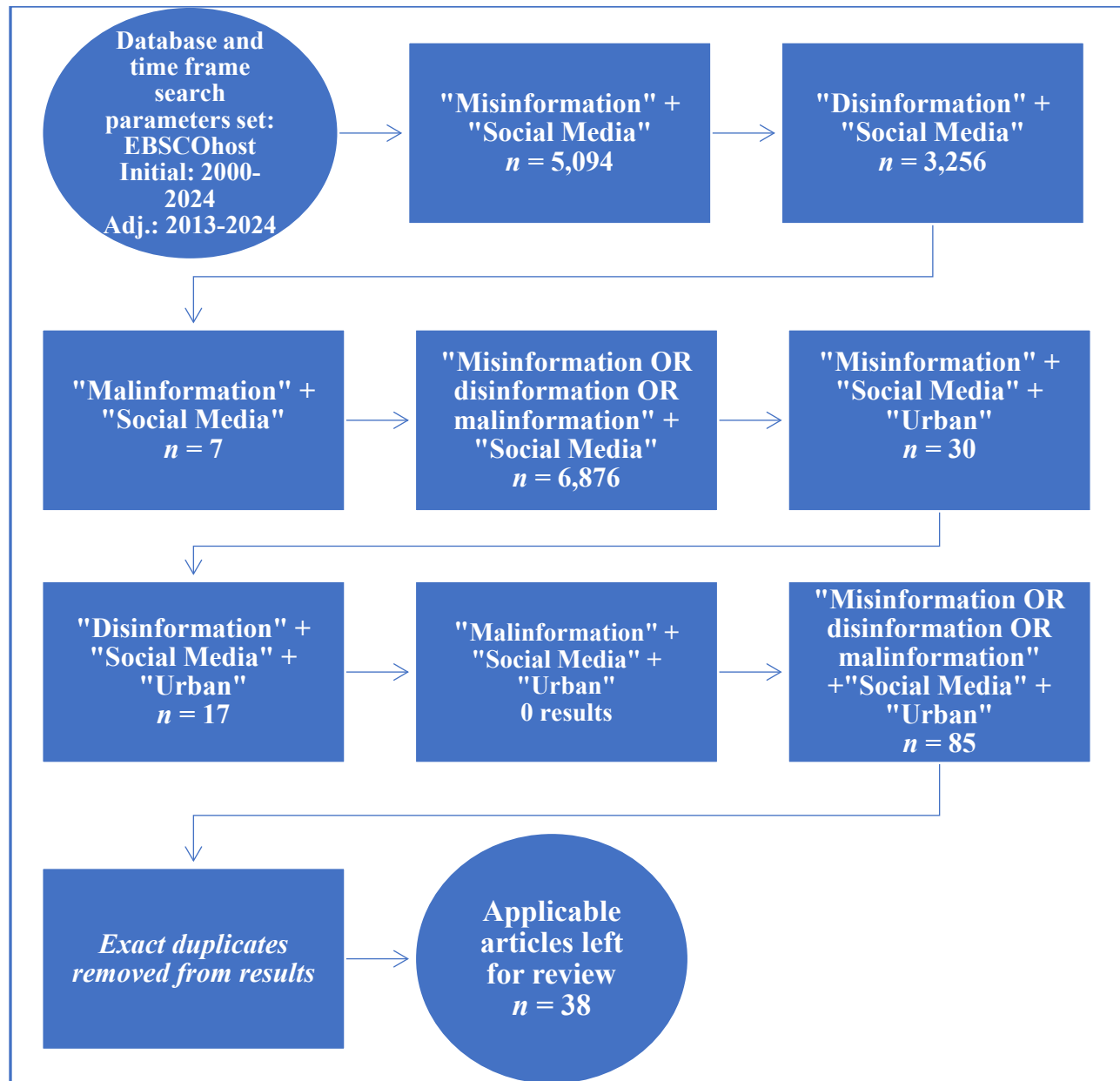
Source: Survey of U.S. adults conducted Aug. 31-Sep. 7, 2020, Pew Research Center (Shearer & Mitchell, 2021).

The sharing and spreading of misinformation on social media prompted the World Health Organization to host a series of strategy meetings to address what was dubbed an “infodemic” of misinformation during the COVID-19 pandemic (Brennen, Simon, Howard, & Kleis Nielsen, 2020). Some researchers have found this infodemic of misinformation to be spreading “significantly farther, faster, deeper, and more broadly than the truth in all categories of information . . .” (Vosoughi, Roy, & Aral, 2018). Due to the increasing speed and number of persons (especially in heavily populated urban areas) potentially being impacted by false social media information, it is necessary now more than ever to counter this trend. One of the first steps to countering this trend is to recognize when, where, and how it is occurring, and then develop counter-measures that seek to reduce the harmful effects of this “infodemic of misinformation.” This study seeks to provide additional insight that can help policymakers, individuals, and community groups develop and implement such counter-measures. The next section describes the research methods used to examine this issue and report its findings.

## Methodology

This study utilized a mixed-methods, exploratory methodology to identify: 1) definitions of key terms such as social media, misinformation, disinformation, malinformation, and infodemic); 2) peer-reviewed conceptual and theoretical frameworks seeking to explain how misinformation is spread; and 3) secondary data quantifying the possible impacts of social media

Figure 4. Flowchart of Literature Review Selection Process



misinformation on urban issues. EBSCOhost was utilized to search the following databases for peer-reviewed articles and reports from professional associations and governmental entities on the subject matter (See Figure 4):

- Academic Search Complete
- Academic Search Premier
- eBook Academic Collection
- E-Journals
- Information Science & Technology Abstracts (ISTA)

The time period under review for this study was initially 2000 to 2024, but was later amended to 2013 to 2024 to focus on qualifying literature which increased noticeably circa 2015. Full-text articles and documents were selected for inclusion in the review based on their relevance to the search keywords, and were excluded if they only included the keywords without the context defined in the research objectives. Keywords used in the search process were: “misinformation,” “disinformation,” “malinformation,” “social media,” and “urban.” These keywords were used in combinations designed to refine results for analysis, and to summarize review of literature findings (as shown in Figure 4). Using this process, 38 articles and documents were determined to be suited for use in the literature review, and the findings were then used to create visual models (e.g., figures and tables) corresponding to the research objectives. Results were also used to make recommendations on how misinformation can be combated through policy and other interventions.

## **Findings**

### *Theoretical Frameworks on Mis/Disinformation*

A review of the research literature revealed several existing models and theories of how (and why) mis/disinformation is disseminated on social media. An overarching theme of the theoretical frameworks reviewed was that misinformation sharing often reflected communal behavior (Joyner, Buchanan, & Yetkili, 2023), and could be specified as “homogeneity” and

“polarization” (Del Vicario, Bessi, Zollo, & Quattrociocchi, 2016). Stated more simply, the two main drivers of the theoretical explanations for spreading social media misinformation are: 1) the psychological need to see self-reflecting information sources as trustworthy and accurate (homogeneity); and 2) the need to insulate one’s own community from harm caused by outsiders (polarization). These two characteristics can be found in one form or another within each of the theories of misinformation presented in this brief.

### *Theories of Misinformation*

Table 2 lists the theories found in the research literature offering various explanations as to “why” misinformation thrives in the social media environment.

Table 2. Theories of Misinformation

<b>Theory</b>	<b>Author(s)</b>	<b>Description</b>
<b>Rumor theory</b>	Oh, Agrawal, and Rao (2013); Liu, Burton-Jones, and Xu (2014); Kwon and Rao (2017); Oh, Gupta, Agrawal, and Rao (2018); Chua and Banerjee (2018)	Suggests that social media misinformation is a transactional function through which community members collectively and collaboratively exchange and analyze information to reach common beliefs, reduce societal tensions, and problem-solve.
<b>Diffusion theory</b>	Lee, Agrawal, and Rao (2015)	Suggests that reposting behaviors on social media (sharing and “retweeting” information), are a response to perceived distress (particularly in disaster situations) – the higher the distress, the higher the sharing.
<b>Third-person effect</b>	Chua, Cheah, Goh, and Lim (2016)	Refers to the theory that social media users see themselves as being less susceptible to misinformation than others – and thus will share unverified information in order to debunk and “protect” others.
<b>Extreme value theory</b>	Bessi (2017)	Suggests that the sharing of “viral” (widely spread) misinformation follows a predictive mathematical process model (a Poisson process) that represents extreme deviations from median probability.
<b>Rhetorical theory</b>	Murungi, Purao, and Yates (2018)	Suggests that “fact-checks” and verified information have less impact on social media networks due to confirmation bias of already held beliefs.
<b>Reputation theory</b>	Kim, Moravec, and Dennis (2019)	Theory that the person or source behind the misinformation determines cognitive biases.

Theory	Author(s)	Description
<b>Situational crisis communication theory</b>	Paek and Hove (2019)	Suggests that as a response to perceived crises, people attempt to identify the actor(s) responsible, as well as ascribe attributes and intentions to them that explain the crisis/situation.
<b>Illusory truth theory</b>	Hassan and Barber (2021)	Modified version of the Illusory Truth Effect – individuals are more likely to accept a misinformation claim as true if they are already familiar with it and/or repeatedly exposed to it.
<b>Game theory</b>	Agarwal, Agarwal, Harjule, and Rahman (2023)	Suggests that misinformation sharing can be best characterized through analysis of the goals and objectives of the source, and/or those who spread it.
<b>Monetization of social media sites</b>	Ceylan, Anderson, and Wood (2023)	Monetization of social media sites helps prompt excessive sharing without verification of information involved.

*Source: (Muhammed & Mathew, 2022); (Ahmed, Bee, Ng, & Masood, 2024); (Agarwal, Agarwal, Harjule, & Rahman, 2023); (Ceylan, Anderson, & Wood, 2023)*

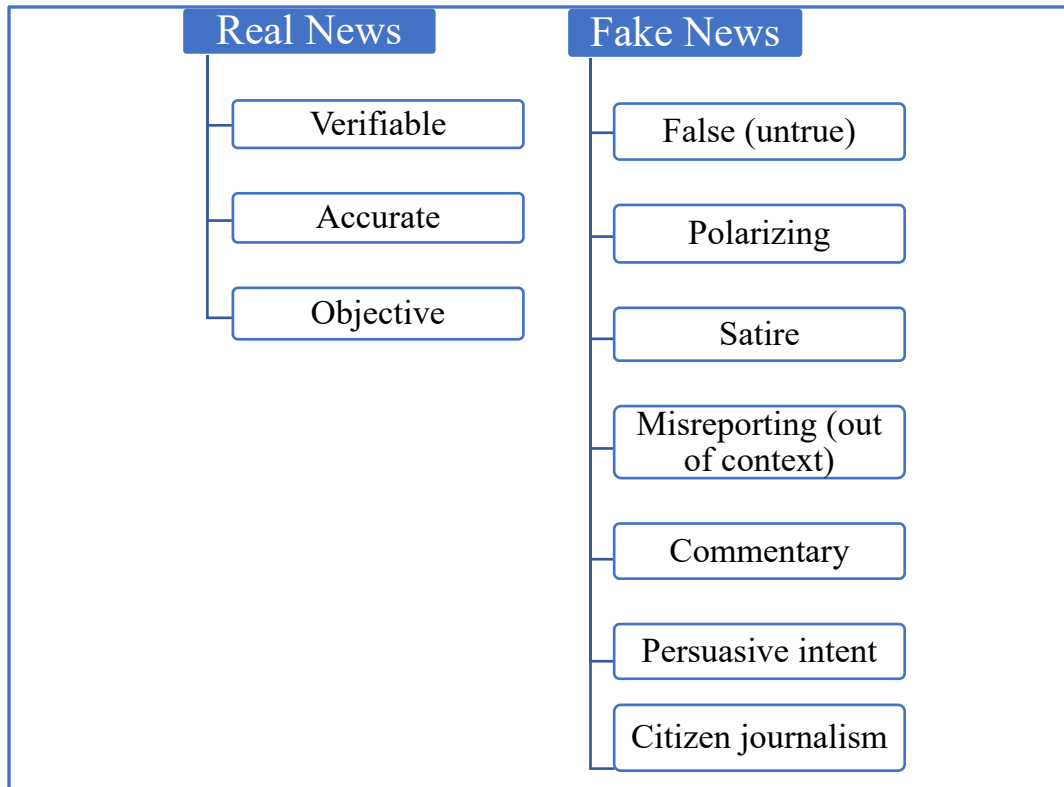
#### *Four Models of Misinformation*

Findings from this study also identified four models of misinformation which serve as illustrations of how misinformation functions on social media (Jia, 2020). These models differ from the above theories of misinformation in that the theories offer explanation on “*why*” misinformation spreads, while these models offer explanations on “*how*” misinformation is disseminated (i.e., the methods involved and used to disseminate misinformation).

A summary of the first model, Molina et al.’s (2019) Misinformation Detection model, is shown in Figure 5. It consists of identifying the language and characteristics which distinguish misinformation from information. It can be referred to simply as “real news vs. fake news,” and the model explains the difference between each. In this model, Internet users should (ideally) be able to discern true information from misinformation due to true information having the qualities of being verifiable, accurate, and objectively true through multiple lenses (Jia, 2020). The

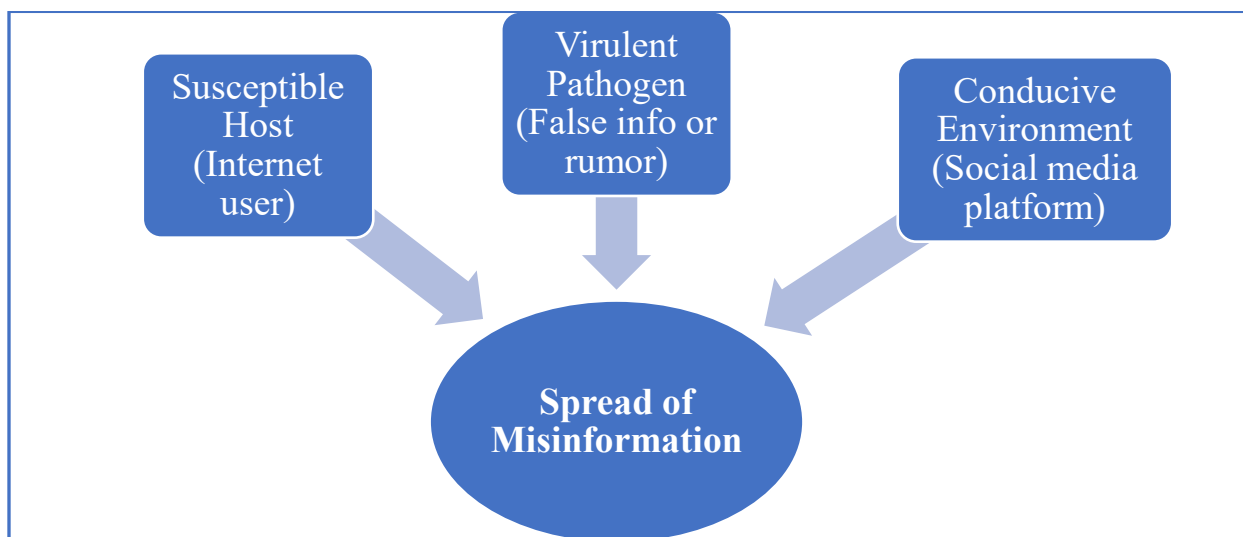
inability of users to make these distinctions leads to mis-, dis-, and malinformation gaining traction across social media platforms.

Figure 5. Misinformation Detection Model (Molina, Sundar, Le, and Lee, 2019)



Source: (Jia, 2020)

Figure 6. Disinformation and Misinformation Triangle Model (Rubin, 2019)

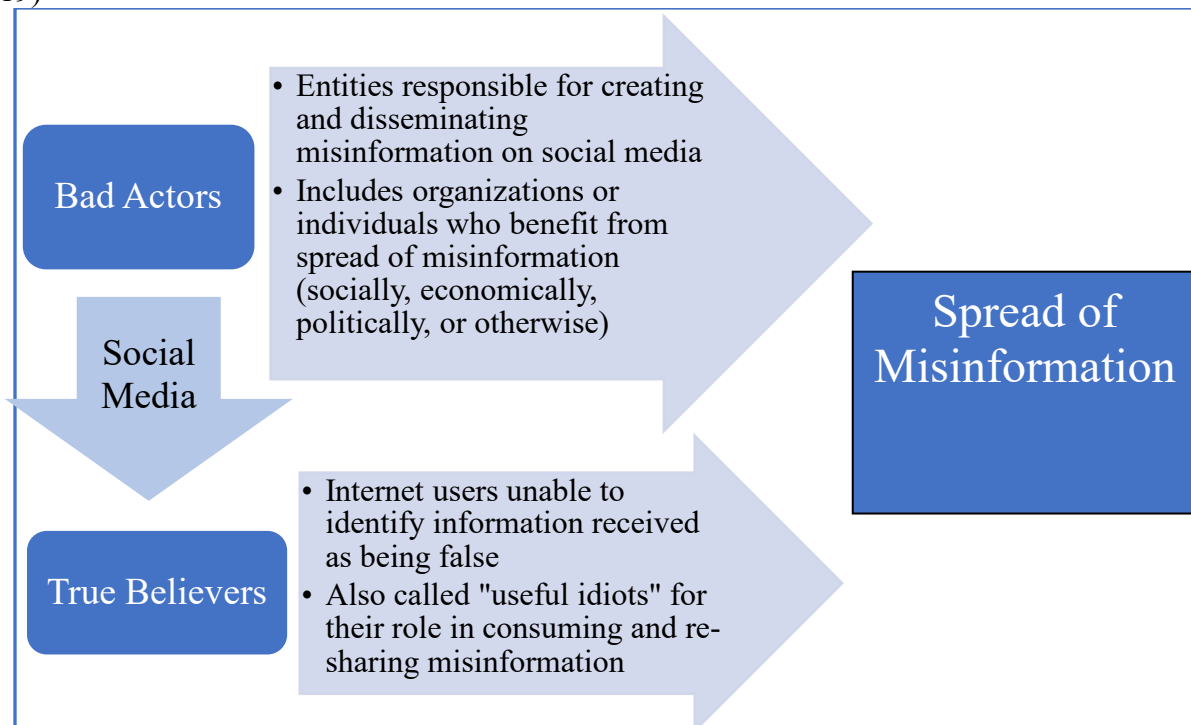


Source: (Jia, 2020)

The second model is referred to as Rubin's (2019) Disinformation and Misinformation Triangle, and it suggests an epidemiological depiction of how misinformation operates. With this model, there must be three required components in order to propel misinformation: 1) a susceptible host; 2) a virulent pathogen; and 3) a conducive environment. As related to this review, social media serves as the conducive environment, the Internet user is the susceptible host, and any false information becomes the virulent pathogen that is spread amongst the population. These three components are depicted in Figure 6.

The third model, illustrated in Figure 7, is the Misinformation Actors model developed by the authors Zannettou, Sirivianos, Blackburn, and Kourtellis (2019). This model posits that

Figure 7. Misinformation Actors Model (Zannettou, Sirivianos, Blackburn, and Kourtellis, 2019)



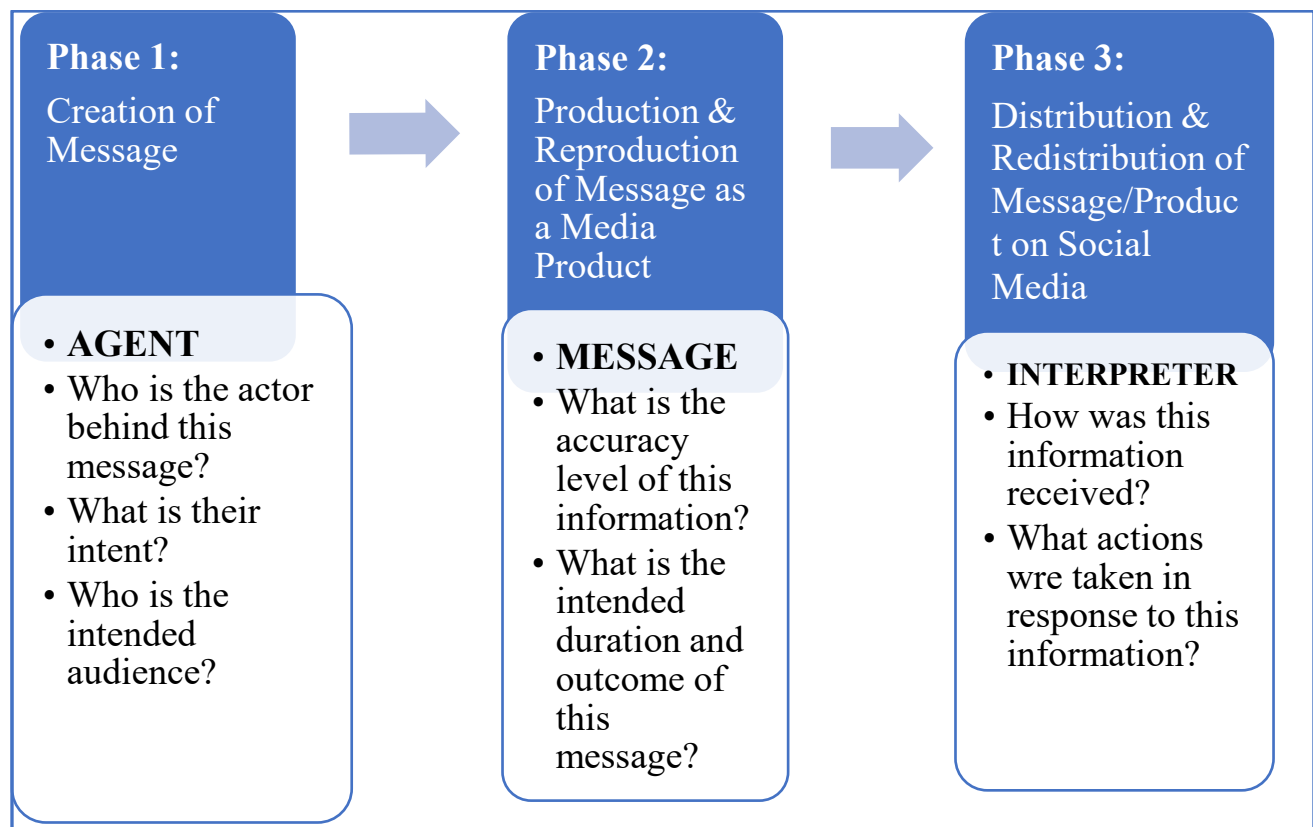
Source: (Jia, 2020)

there are two separate parties responsible for how misinformation is spread on social media – the first being “bad actors” who generate and distribute false and/or misleading information with ill intent, and “true believers” who consume and redistribute the misinformation with the mistaken

assumption that it is actually truth. In this model, these two groups are the primary proliferators of misinformation reaching the masses on social media.

Lastly, the fourth model, referred to as the Information Disorder model (Waldle, 2017), is a much more complex framework. It requires an analysis of several elements of misinformation such as ‘agent,’ ‘message,’ ‘interpreter,’ and ‘phase.’ This model uses these elements to define how misinformation functions; the type/dimension of the misinformation; and explains Waldle and Derakhshan’s Taxonomy of Information Disorder discussed earlier in this review. A visualization of this model is shown in Figure 8.

Figure 8. Information Disorder Model (Waldle, 2017)



Source: (Jia, 2020); (Waldle, 2017)

## Discussion

### *Effects of Mis/Disinformation on Urban Issues*

The real-life effects of mis-, dis-, and malinformation on urban issues can be observed around the world and across multiple sectors, such as education, health, housing, disaster/emergency response, and politics/governance. As such, having knowledge of the models and theories involving social media, and of Waldle and Derakhshan's Taxonomy of Information Disorder, become essential due to the sheer volume of misinformation being disseminated on social media. Left unchecked and uncorrected, misinformation can create distrust among community members in geographic and/or virtual proximity to each other. If citizens are hearing a message from officials which contradicts misinformation that is widespread on social media, it creates dissonance in the community as well as a loss of credibility and confidence in authority and information sources. Table 3 lists five common themes of misinformation in urban areas, along with real-world examples of each theme, as identified by Trijsburg et al. (2024).

Table 3. Common Disinformation Themes in Urban Areas

Theme	Real-World Illustration
<b>Migrants and cultural diversity</b>	<ul style="list-style-type: none"><li>• “Venezuelan immigrants are forming violent gangs in Aurora, CO” (Toomer, 2024)</li><li>• “Haitian immigrants are eating people’s pets in Springfield, OH” (Reuters Fact Check, 2024)</li><li>• “DEI (diversity, equity, and inclusion) efforts weaken organizations” (Evaristo, 2024)</li></ul>
<b>Gender and sexual diversity</b>	<ul style="list-style-type: none"><li>• “They are forcing new gender identities and sexual orientations on kids, and performing gender assignment surgeries in schools” (Dale, 2024)</li></ul>
<b>Health and wellbeing</b>	<ul style="list-style-type: none"><li>• “Vaccines are dangerous”</li><li>• “COVID-19 is not real” (Chen, et al., 2021)</li><li>• Celebrity endorsement of medical/health products (Caulfield, 2021) (Caulfield, 2017)</li></ul>

Theme	Real-World Illustration
Sustainability and climate	<ul style="list-style-type: none"> <li>• “Climate change is not real” (Pasquini, Spencer, Tyson, &amp; Funk, 2023)</li> </ul>
Urban planning	<ul style="list-style-type: none"> <li>• NIMBY-driven myths (Briman, et al., 2024)</li> <li>• “Wind farms are harmful to the environment and/or lower property values” (Winter, Hornsey, Pummerer, &amp; Sassenberg, 2024)</li> </ul>

Source: (Trijsburg, et al., 2024)

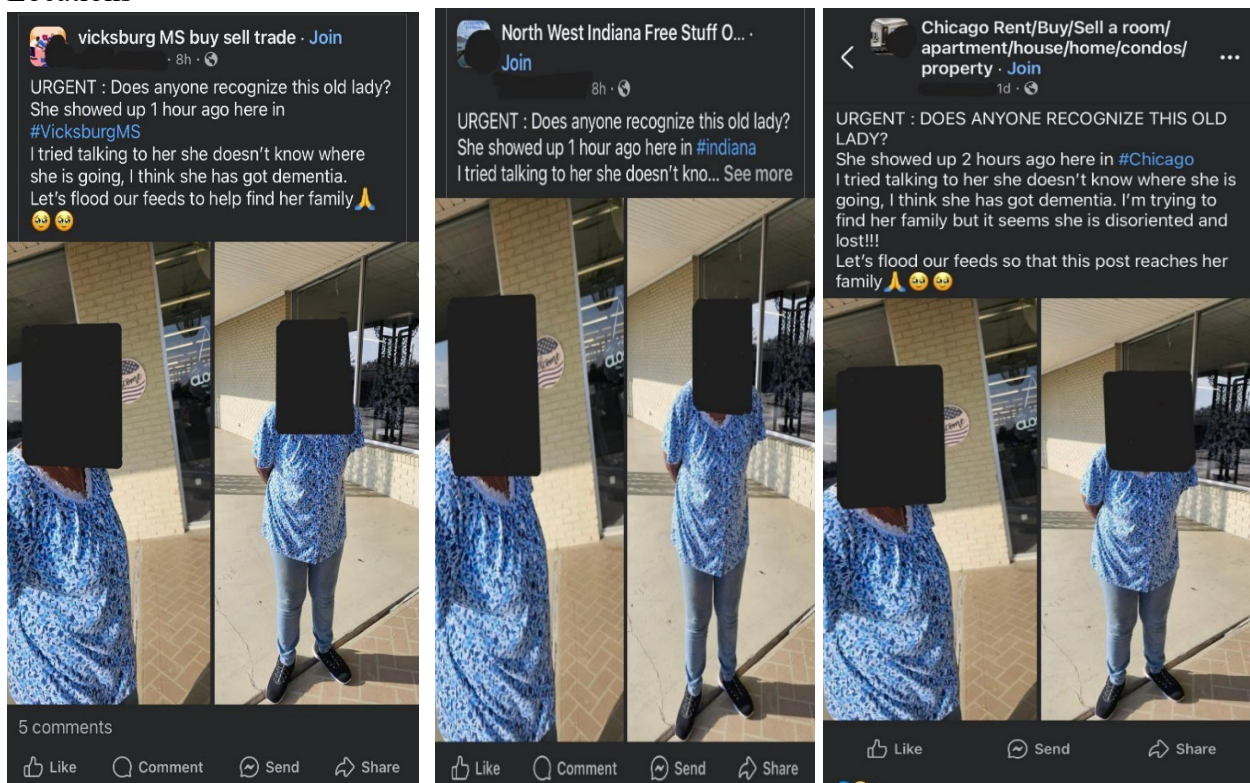
The consequences of misinformed citizens in urban communities go beyond just having social implications, they can manifest themselves into violent and dangerous outcomes. Real harm can be done in the form of damage to property, physical assaults, mental health disorders (e.g., stress, anxiety, low self-esteem, societal withdrawals), and loss of life (e.g., murder, suicide). As one example, between July and August in 2024, the United Kingdom saw the “worst riots” in over a decade fueled by misinformation on social media regarding a triple-homicide (Syed, Schneid, Shah, Waxman, & Zorthian, 2024; The Soufan Center , 2024). Anti-immigrant protesters destroyed property, threaten and attempted violence based on a rumor that a Muslim immigrant was responsible for the murders. As a result, the U.K. Prime Minister admonished social media companies for their role in the spread of such misinformation (Syed A, 2024). Harm can also be done in the form of economic loss, which can take the form of boycotts due to false information (Geneva Internet Platform Digital Watch Observatory , 2024), or lost opportunity cost, as in the case of falsehoods being shared for the purpose of deterring support for renewable energy development projects (Winter, Hornsey, Pummerer, & Sassenberg, 2024).

In the United States, misinformation shared across social media has also created many dangerous circumstances, largely due to the *Illusory Truth theory* which combines the history of actual and/or similar incidents with misinformation being disseminated (see Table 2). As an illustration, the notorious Tuskegee Syphilis Study helped convince many African-Americans in

particular that the COVID-19 vaccine was unsafe (Baggett, 2024). Notably, the U.S. Surgeon General had to issue a public advisory during the COVID-19 pandemic addressing social media misinformation due to the risk it posed to life and health (Office of the Surgeon General, 2021). And similar to the aforementioned U.K. riots, armed individuals attacked the U.S. Capitol on January 6, 2021 as a result of misinformation shared on social media pertaining to the 2020 U.S. Presidential election (Silverman, Timberg, Kao, & Merrill, 2022).

More alarmingly, the models and methods of spreading misinformation on social media platforms seem to be continually strengthened by the rising presence of “bots” on the Internet,

Figure 9. Example of “Bots” Reposting Misinformation in Three Different Geographic Locations



Source: Facebook

including social media sites. “Bot” is a slang term that is short for “robot” and refers to an automated program that posts and/or interacts online. As far back as 2014, a “Dead Internet” theory has circulated, which suggests that actual human interaction online is limited, and that the

majority of social media activity is “bot”-driven (Walter, 2024). Initially, this theory seemed to be quite laughable, but now seems much less humorous, more plausible, and more possible as time moves forward. A 2024 report from the cybersecurity firm Imperva states that “bad bots” (that is, “bots” with malicious intent) are rising in their presence on the Internet. This report states that as of 2023, “bots” overall made up 47% of Internet traffic (an increase of 5% from the previous year), with “bad bots” making up 32% of that traffic; whereas, human presence on the internet decreased 2.2% to comprise approximately 50% of total Internet traffic (2024 Imperva Bad Bot Report, 2024). Imperva suggests that the majority of these “bots” are programmed for functions like data mining and scraping, but it cannot be ruled out that the increased use of “bots” will likely become more common in the sharing and re-sharing of information with no human oversight to determine intent or veracity. Figure 9 shows an example of how these “bots” function on social media – Facebook, in this example – by re-posting misinformation among users across different states.

### *Growing Challenges*

On January 7, 2025, the technology company Meta (owner and operator of social media giants Facebook, Instagram, WhatsApp, and Threads) announced that they will be ridding the site of independent fact-checkers (Bauder, 2025), removing yet another crucial barrier to the spread of misinformation across social media. With the continued rise in political tensions, the presence of “bots,” and changing societal conditions, the spread of misinformation, disinformation, and malinformation on social media can be expected to do the same. The real-world illustrations presented earlier of the damage misinformation can caused in urban areas, underscore the need for a concerted and strategic effort to reduce the impacts of misinformation on urban areas. The intent of this study is to provide a more thorough understanding of what social media misinformation is, and how it operates and impacts urban areas. By doing so, this

study seeks to help produce more informed citizens and comprehensive efforts to reduce the prevalence and severity of social media misinformation.

### **Conclusions**

Due to the sheer number and types of persons, digital devices, issues, opportunities for interactions, and varying viewpoints present in urban areas, the potential harm that can be caused by social media misinformation is greatly magnified when compared to rural areas. The growth of social media over the years has created a need to understand digital misinformation. The ten theories of misinformation identified in this study (i.e., rumor theory, diffusion theory, third-person effect, extreme value theory, rhetorical theory, reputation theory, situational crisis communication theory, illusory truth theory, game theory, monetization of social media sites); along with the four misinformation models identified (i.e., misinformation detection model, disinformation and misinformation triangle model, misinformation actors model, information disorder model); and the five disinformation themes impacting urban areas (i.e., migrants and cultural diversity, gender and sexual diversity, health and wellbeing, sustainability and climate, urban planning) discussed in this study are included to better inform policy makers, individuals, and concerned organizations regarding the current and potential negative effects of social media-driven misinformation. The illustrations in Table 3, and observations of misinformation impacting urban areas in particular, are intended to underscore the potential harm misinformation being disseminated on social media can cause. The ultimate objective of this research is to provide insight on how these negative impacts can be alleviated through concerted awareness and actions on the part of policymakers, committed organizations, and concerned citizens.

## Recommendations

Based on this study's findings, the following recommendations are provided to help address the key issues identified in the above sections:

- *Improved media literacy training.* Starting in elementary school, efforts to train pupils in media literacy and “fake news” detection need to be enhanced. This can take place in both the Language Arts and Computer Science arenas, and can be designed to be fun and level appropriate even for younger Internet users (Ali & Qazi, 2023) (Urban, Hewitt, & Moore, 2018).
- *Identification of trustworthy news source types.* Community organizations and local governments should work together to identify and publicly communicate trustworthy news sources (and how to identify them) to citizens.
- *Bolster programming and algorithms used to detect and identify misinformation.* One potential use for emerging AI technology is to program it to detect unverified information, and flag it with a notice to social media users – similar to the independent fact-checking formerly performed by humans on Meta platforms.
- *Urban strategic planning should incorporate policies and mechanisms to address misinformation campaigns on social media.* Public, private, and nonprofit organizations should develop specific protocols for identifying, prioritizing, addressing and correcting social media misinformation which affects public affairs.

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### **Abstract**

Social media has emerged as a vital tool for law enforcement agencies, enabling them to enhance communications, foster community engagement, and improve public safety through transparency and collaboration. This research brief explored whether social media helps or hinders law enforcement by examining its current uses, trends, and effectiveness as a crime reduction strategy. This study utilized a mix methods approach to examining the research topic. Quantitative methods were used to locate and collect data (e.g., crime statistics) from federal, state, and nonprofit organizations. That data was analyzed using descriptive techniques such as calculating percentages, frequency counts, and bar charts. Qualitative methods were used to collect and review information from reports and news articles, with that information being analyzed using content and thematic analysis to identify key themes and observations. Based upon this research brief's findings, social media does appear to "help" more than it "hinders" the activities of law enforcement. Social media offers numerous advantages, including real-time information sharing, crowdsourcing public insights, and showcasing positive law enforcement efforts to strengthen public trust. However, it also poses significant challenges, such as ethical concerns, privacy violations, misinformation dissemination, cybersecurity risks, and resource constraints. Utilizing social media as a law enforcement strategy in urban areas also presents challenges related to policing diverse population groups, monitoring the sheer volume of social media devices available, and navigating various political and social tensions. The effective use of social media related to law enforcement requires balancing its benefits against its challenges; adopting and implementing responsible and ethical practices; and building and maintaining community trust.

Keywords: law enforcement, social media, technology, misinformation, trust, crime

### **Introduction**

In many large cities, social media has become an important tool for law enforcement organizations to share information, communicate directly, and enhance community engagement with the public (Gill, 2017). This upgrade in communications, reflects a broader shift towards Community-Oriented Policing (COP) that encourages building relationships with the community, promoting transparency of actions, and establishing collaborations to improve public safety (Gill, 2017). The 2016 Social Media Survey, conducted by the Urban Institute and the International Association of Chiefs of Police (IACP), underscores this trend. Findings from that survey revealed a growing reliance among U.S. law enforcement agencies on social media platforms for public outreach, intelligence gathering, and community relations (Kim, 2017). Law

enforcement agencies surveyed varied in sizes, U.S. geographic regions, and utilized various community relations and public information management platforms like Twitter to aid with crime prevention activities (Kim, 2017).

This research brief explored whether social media aids or hinders law enforcement by examining its current uses, trends, and effectiveness as a crime reduction strategy. The main research question for this brief . . . Does social media help or hinder law enforcement? . . . addresses the apparent paradox of social media as related to this study. That is, social media having the ability to both help and hinder law enforcement activities. As discussed in detail later, social media is used by criminals to commit and “publicize” their crimes; and it is used by law enforcement officials to catch criminals and “publicize” the accomplishments of law enforcement. The goal of this research study is to examine in greater detail the various aspects surrounding the use of social media by law enforcement officials, criminal offenders, and the general public. By examining the various aspects from multiple perspectives (i.e., law enforcement, criminal offenders, and the general public), this research will help policymakers, community members, and other interested parties better understand how social media can be used to help increase public safety and diminish the negative challenges associated with using it as a tool. To gain more insight into answering this study’s central research question, three secondary research questions are also explored: 1) How is social media currently being used by citizens and law enforcement? 2) What are the positive and negative trends associated with social media? and 3) What other technologies are considered when social media is chosen as a tool for combating crime? By examining these questions, this brief seeks to provide more insight regarding the current, and potential future role, social media can perform in helping law enforcement successfully implement its public safety mission.

## Methods

### Data Collection

This study utilized a mix methods approach to examining the research topic. Quantitative methods were used to locate and collect data (e.g., crime statistics) from federal, state, and nonprofit organizations. Qualitative methods (e.g., conducting literature reviews) were used to collect and review information from reports and news articles related to this study's research topic. The following social media topics and key words were used to identify relevant reports and news articles:

- The frequency of social media use by the public
- The role of social media in law enforcement
- The number of users who rely on social media as their primary news source
- The use of Twitter data to solve and prevent crime
- Emerging technology supporting social media use.

The primary sources utilized for both qualitative and quantitative data collected were *The Pew Research Center* and *The Urban Institute*. These sources provided comprehensive, reliable, and current data and information on social media usage and its implications for law enforcement.

### Data Analysis

Quantitative data was analyzed using descriptive techniques such percentages, frequency counts, and bar charts. Percentages were calculated to quantify the extent of social media usage and its role in law enforcement activities. Bar charts were created to visually display the data, highlighting key trends and patterns in its social media usage. These visualizations helped to identify the most common uses of social media by law enforcement and the general public, as well as help identify the effectiveness of social media in crime prevention and community engagement. Qualitative data was analyzed using narrative and thematic analysis techniques to

identify key themes and observations contained in the reports and news articles reviewed. These data findings were then grouped and presented as themes or key observations.

## **Findings**

The following section presents a summary of significant findings emerging from an examination of social media factors assisting or hindering law enforcement. These findings are presented as follows: (1) Demographic Profile of Social Media Usage; (2) Law Enforcement Usage of Social Media; (3) Case Studies on Social Media Usage in Law Enforcement; and (4) Social Media as a Crime Fighting Tool.

### **Demographic Profile of Social Media Usage**

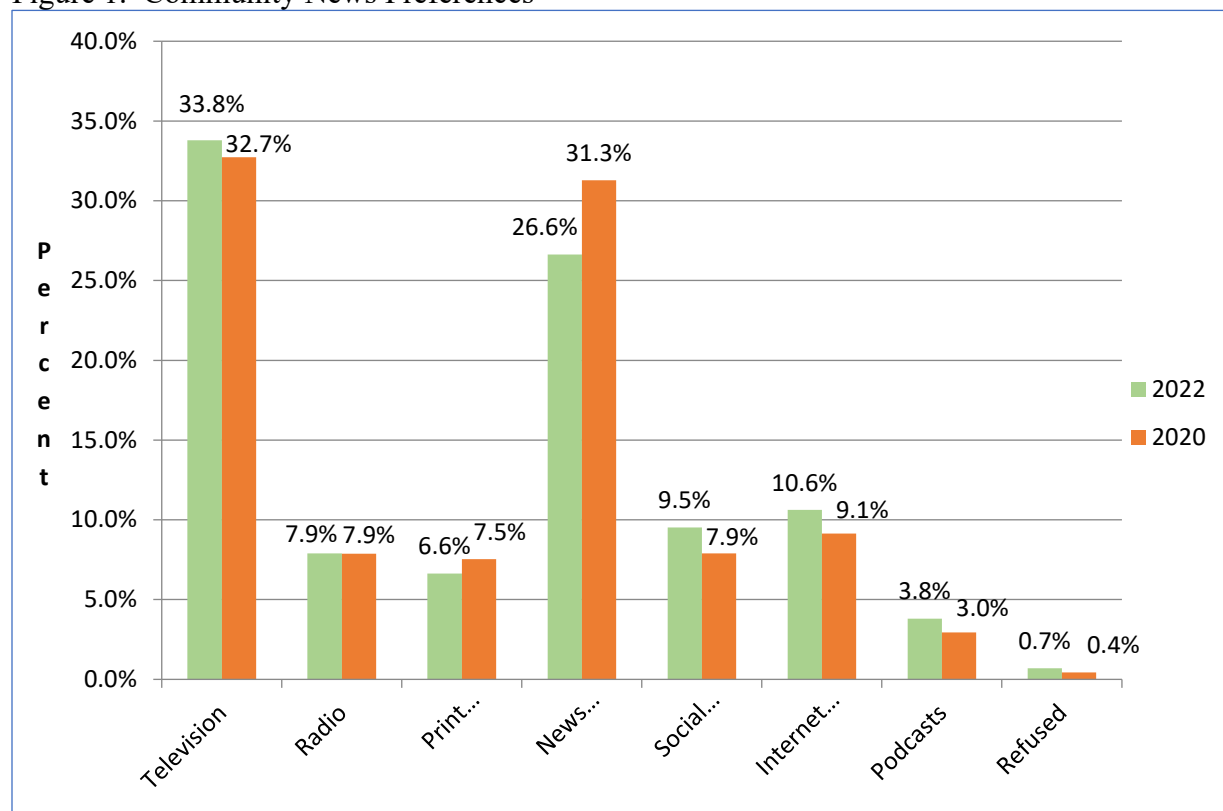
One of the major uses of social media by the general public is as a significant news source. Currently, over half of U.S. adults (53%) regularly use platforms like Facebook, YouTube, and Twitter to stay informed (Pew Research Center, 2021). Facebook leads as the most popular platform with 36% of Americans using it for news, followed by YouTube with 23%, and Twitter with 15%. Platforms like Instagram, Reddit, TikTok, Snapchat, and LinkedIn also serve as news sources to smaller segments of the population (Pew Research Center, 2021). There are demographic distinctions among U.S. groups regarding which social media platforms are used to obtain news information. Facebook and Reddit tend to attract predominantly White audiences, while Instagram serves a more racially diverse group (e.g., African American/Black - 22%, and Hispanic - 27%) (Pew Research Center, 2021). There are also Gender differences with women comprising the majority of Facebook's news audience (63%) and men dominating Reddit's (66%). Politically, platforms like Twitter, Instagram, Reddit, and LinkedIn tend to lean Democrat, as opposed to no major social media platform showing a Republican majority among its regular news consumers (Pew Research Center, 2021).

## Television vs Social Media

In comparison to social media, watching news via television is the preferred format for many Americans (47%), surpassing reading (34%) and listening (19%) (Pew Research Center, 2018). There also appears to be a generational difference between younger and older citizens regarding their preferred source of news with older adults utilizing more traditional media like TV and print, and younger adults utilizing more digital platforms for watching, reading, and listening to news (Pew Research Center, 2018, 2021; API, 2014).

Figure 1 provides a visual comparison of community news preferences by media platforms. Data presented was collected via survey by the Pew Foundation in 2020 and 2022 of American citizens, with the 2020 survey consisting of 9,220 participants and the 2022 survey consisting of 12,147 participants (Pew, 2020 and 2022).

Figure 1. Community News Preferences



## Global Use of Social Media

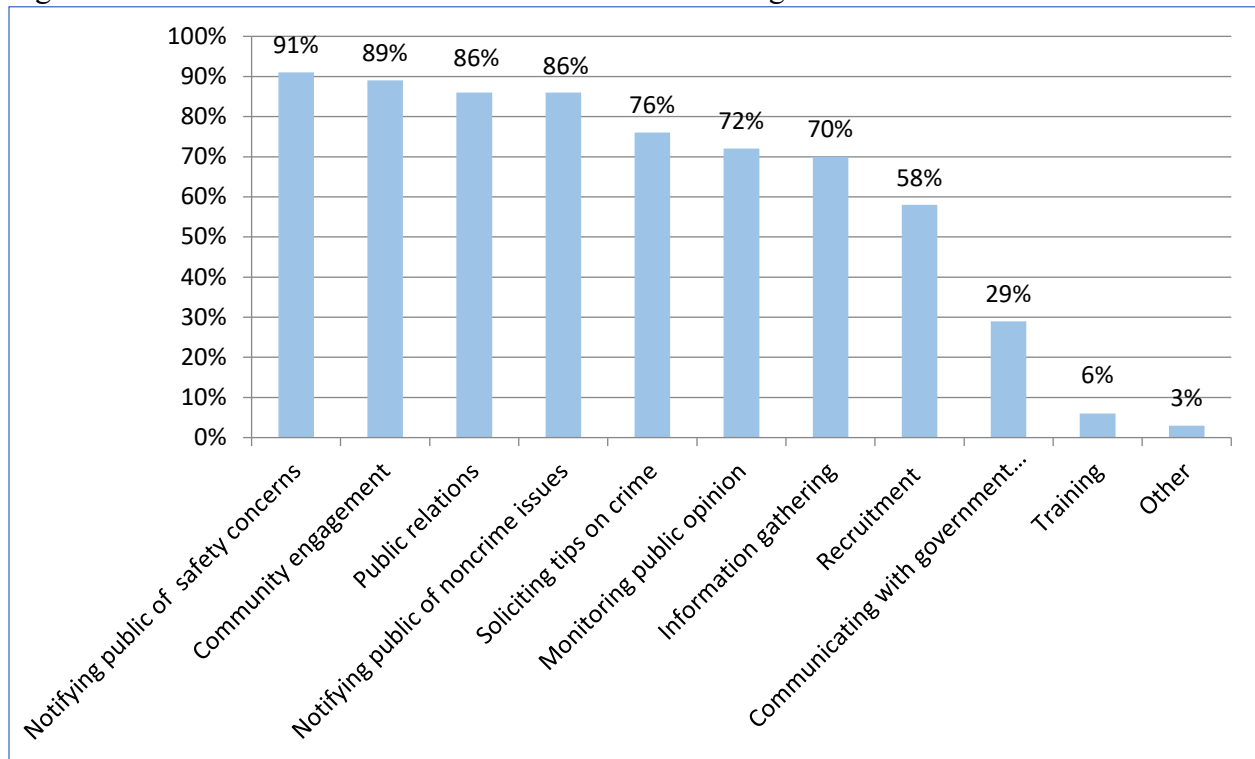
The *Digital 2024 Global Overview Report* provides a recent view of social media usage from a global perspective. In the 2024 report, the average daily social media usage among internet users globally stood at 143 minutes, reflecting a slight decrease from 151 minutes in the previous year (GWI, 2024). Brazil emerged as the leading country in terms of daily usage, with users spending an average of three hours and 49 minutes per day, significantly surpassing the United States' average of two hours and 16 minutes (GWI, 2024).

Just as in America, social media's global impact has proven both beneficial in terms of enhancing access to information, streamlining communications, and expanding of expression; and it has created challenges such as diminishing personal privacy, increasing political polarization, and heightening distractions in daily life (Social, 2023). As related to this research brief, both the benefits and challenges previously outlined accurately describe some of the major issues surrounding social media's usage and law enforcement.

### Law Enforcement and Social Media

Law enforcement agencies are increasingly utilizing social media as part of their daily activities and crime fighting tactics. Platforms like Facebook, Twitter, and YouTube are heavily utilized by law enforcement in the areas of public safety and crime notifications, community outreach, public relations, and law enforcement recruitment (Tiry, 2019). Figure 2 provides a visual representation of how law enforcement is using social media. The data was derived from a 2016 survey of over 500 police agencies from across the United States and Canada. As depicted in Figure 2, approximately 91% of the police agencies who utilize social media, use it to notify the public of safety concerns, with approximately 76% using it for soliciting tips on crime, and approximately 70% using it for information gathering (Kim, 2017).

Figure 2. Law Enforcement Social Media Uses in Percentages



Source: (Kim, 2017)

### Case Studies of Social Media Usage

The following sections present a summary of reports and news articles reviewed related to law enforcement's use of social media. These case studies are presented to add context to understanding the complex role social media is performing in assisting and hindering law enforcement activities.

#### New York (NY)

The New York Police Department (NYPD) exemplifies effective use of Twitter, with over 1 million followers. Their real-time updates on crimes, traffic incidents, and community events help keep the public informed, and also helps foster trust by humanizing the department through posts featuring officers in the community. An example occurred in 2012 when a tweet

about a suspect threatening to bomb Times Square. Someone passing by was able to identify and report the individual, which resulted in an arrest (Ablison, 2024).

#### Los Angeles (CA)

The Los Angeles Police Department (LAPD) uses Instagram's visual appeal to connect more with the public. The department shares videos and pictures of officers patrolling neighborhoods and participating in community events. This approach helped solve a high-profile 2019 animal cruelty case when a video of a woman dumping puppies into a dumpster went viral, leading to her identification and arrest (Ablison, 2024).

#### Seattle (WA)

The Seattle Police Department (SPD) uses Facebook to communicate with over 100,000 followers. The department regularly shares safety tips, crime updates, and hosts live town hall meetings. During the 2020 protests following George Floyd's death, the SPD Facebook Live updates provided real-time information on crowd movements and addressed public concerns which helped to build trust during the protest period (Ablison, 2024).

#### Madison (MS)

The Madison Police Department investigated the death of an eight-year-old female student who was struck by a school bus on October 2, 2024. The student was transported to the University of Mississippi Medical Center in critical condition but later died from her injuries. Following the incident, rumors began circulating on social media, including allegations that the bus driver may have been intoxicated. In response, the Madison Police Department held a press conference to address the misinformation and outline their investigative process. Police confirmed that a DUI/Drug Recognition expert was on the scene and found no preliminary evidence of driver impairment. Toxicology samples were submitted and were not yet released as

of the writing of this research brief. This case serves as an example of how the spreading of unverified information via social media can be harmful to the general public and to law enforcement investigation activities. In this case study, social media hindered the police investigation of the child's death. This case showed how harmful social media can be to police departments, the victim's family, and the accused person (Banks, 2024).

#### Car Thefts/Street Vandalism (Chicago-IL, Los Angeles-CA, Denver-CO, Jackson-MS)

Social media is a big influence on the behavior of teenagers and young adults. Some criminologists say that after the "Kia Boyz" videos about stealing cars went viral on social media, car thefts soared (Li and Larney, 2023). "In Chicago, the number of stolen Kia and Hyundai cars jumped 35 times over a couple of months from 45 cars stolen in May 2022 to more than 1,400 cars stolen that October" (Li and Larney, 2023). Data from Los Angeles, Denver, and other major cities also exhibited that trend (Li and Larney, 2023). In January 2021, Jackson Police were called to investigate a "Street Takeover" event on interstate I-55 (Smith, 2021). Street takeovers are events that may have originated in Los Angeles, CA in 2018, but have spread to other cities through the use of social media (Smith, 2021).

#### Social Media as a Crime Fighting Tool

Crime monitoring tools are crucial for public health and law enforcement officials to effectively allocate resources and develop targeted interventions. Social media platforms, such as Twitter, have proven to be valuable tools for monitoring and predicting public health events like disease outbreaks. This potential extends to crime surveillance as well. A study examining the relationship between crime data and drug-related tweets found a strong association between the two, suggesting that social media data could help predict future crimes (Mahajan & Mansotra, 2021).

The Jackson Police Department (JPD) has adopted the *Chorus Intelligence Suite*, a software tool designed to track criminal activity on some social media platforms (Drape, 2024). This initiative, approved unanimously by the Jackson City Council, enables officers to identify individuals who post about their crimes online. By analyzing usernames or "handles," the software cross-references associated identifiers such as email addresses, phone numbers, social security numbers, and dates of birth, facilitating the identification of suspects. Officer Eric Fox from JPD's Intelligence Unit noted that many offenders, particularly younger individuals, document their criminal acts on social media using pseudonyms, making traditional identification methods challenging (Drape, 2024). The implementation of this software, funded through U.S. Department of Justice grants, represents a strategic enhancement of JPD's Intelligence Unit. City Councilman Vernon Hartley expressed support for the initiative, emphasizing its potential to strengthen crime-fighting capabilities by leveraging social media networks statewide and nationally (Drape, 2024).

There is a well-established link between drug use and crimes such as shoplifting, theft, and prostitution (Wang, 2019). Research conducted by Wang, et. al (2019) consistently showed a

Table 1. Correlation(r) between crime predicted and crime reported

Category	Crime Type	r- value	Keywords	Rating
1	Crime against Women	0.7927	dowry, rape, assault, abduction, me too	Strong Positive
2	Crime against Children	0.7978	kidnapping, child labor, minor	Strong Positive
3	Murder	0.3722	kill, gun, shot, arms, murder	Moderate Positive
4	Suicide	-0.2218	depression, suicide, anxiety, mental health	Weak Negative

Category	Crime Type	r- value	Keywords	Rating
5	Cyber Crime	0.9499	fraud, stalking, trolling, bullying	Strong Positive
6	Violence due to Protests	0.8068	anti-CAA, anti-NRC, hate India, protest, violence, riots	Strong Positive

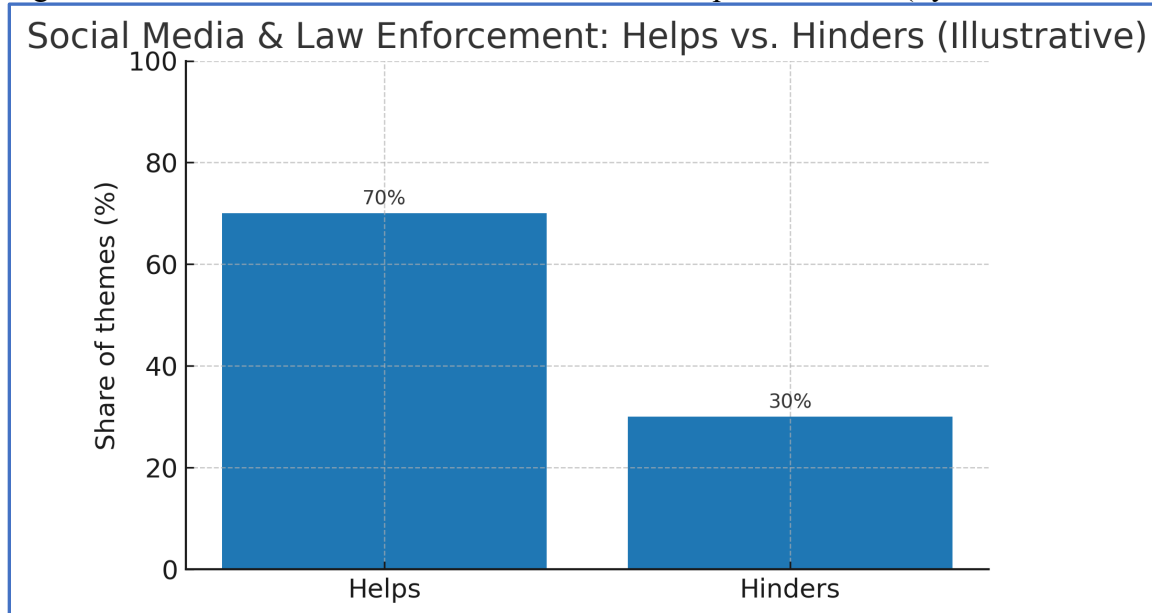
Source: (Mahajan & Mansotra, 2021)

positive association between drug abuse and crime. Another set of researchers (Mahajan & Mansotra, 2021) collected crime-related tweets from Twitter and data on six different types of crimes from national and local online news portals and federal agencies from December 2, 2019, to December 22, 2019. The researchers hypothesize that the frequency of drug-related tweets is positively associated with county crime rates, even when controlling for factors like income inequality and population density. Table 1 provides a summary of the researchers' findings regarding the use of social media messages to help police identify potential links to crimes committed. The researchers' results showed a significant relationship between a keyword from a Twitter message and a confirmed related crime that occurred in that location during the same time period as the device used to send the Twitter message (Mahajan & Mansotra, 2021). Innovative social media uses like those tested by Wang (2019) and Mahajan (2021) support the argument of social media helping law enforcement become more successful as a crime fighting tool.

### Conclusions

Based upon findings presented in this research brief, it does appear social media “helps” more than it “hinders” the activities of law enforcement (Figure 3). Social media can provide

Figure 3. Social media's role in law enforcement - Helps vs. Hinders (Synthesis of themes)



*Note. Based on the abstract “Does Social Media Help or Hinder Law Enforcement?” and Nix, J., & Wolfe, S. E. (2020). The impact of social media on policing: A research agenda. Police Quarterly, 23(4), 455–478.*

powerful tools for investigating and solving crimes, enhancing internal and external communications, promoting more transparency regarding law enforcement actions, and building public trust. When used effectively, as shown in the NYPD, LAPD, and SPD case studies, social media can help solve crimes and improve community relations.

However, agencies must keep in mind cases like “The Kia Boyz” and “The Madison County bus incident” as examples of social media distributing harmful information, thus hindering the effectiveness of law enforcement. Despite its benefits, the use of social media by law enforcement poses significant challenges. Privacy concerns arise when agencies monitor individuals or groups without proper oversight, potentially leading to ethical violations. The rapid spread of misinformation on social media can complicate investigations and create public panic (as what occurred in the Madison Police Department case where rumors about a bus accident had to be addressed). Furthermore, the high costs of establishing and monitoring of

social media accounts 24/7, coupled with risks like cybersecurity breaches and misinformation campaigns, can prove especially challenging for even the best funded law enforcement agencies. These challenges are especially magnified in urban areas due to the large and often diverse populations inhabiting those areas (e.g., increasing potential claims of racial profiling and discrimination); the large number of social media devices that can quickly transmit accurate and erroneous information; and the often divergent political and social viewpoints of the area's population.

Looking ahead, law enforcement agencies must embrace and address both the benefits and challenges associated with social media use in policing. Utilizing a comprehensive approach in deploying social media as a crime fighting and community building tool, will allow law enforcement the opportunity to decrease crime rates while also building up community trust and support. As discussed at the beginning of this research brief, social media is growing in its usage and acceptance. Therefore, it is only wise that policymakers, law enforcement officials, community members, and other interested parties collaborate on how to make the use of social media more effective, fair, and efficient for all parties involved.

### **Recommendations**

The following section provides recommendations based upon the findings identified in this research brief. These recommendations are presented in two groups --- (1) Law Enforcement; and (2) the General Public:

#### **Recommendations for Law Enforcement**

1. Enhance Transparency and Community Engagement
  - a. Use social media platforms for real-time updates on public safety issues, crimes, and community events.
  - b. Host live sessions and engage in two-way communications to build trust with the community.

2. Leverage Social Media for Investigations
  - a. Use geo-tagged and sentiment analysis tools to monitor crime-related activity and predict future crime trends.
  - b. Employ clustering techniques like K-means to analyze data and categorize crimes effectively.
3. Develop Ethical Guidelines
  - a. Establish clear policies to ensure social media monitoring respects privacy and avoids bias.
  - b. Train personnel to avoid overreach, such as creating fake profiles or targeting specific groups unfairly.
4. Invest in Technology and Training
  - a. Allocate resources for specialized tools like Twitter APIs for data collection and analysis.
  - b. Provide training for officers on effective and ethical use of social media.
5. Combat Misinformation
  - a. Act swiftly to address and correct false information circulating online to maintain public trust.
  - b. Collaborate with credible sources to disseminate verified updates during crises or high-profile investigations.
6. Strengthen Cybersecurity Measures
  - a. Protect departmental social media accounts and stored data from hacking attempts.

#### Recommendations for the General Public

1. Verify Information Before Sharing
  - a. Avoid spreading unverified information from social media to prevent panic or misinformation.
2. Rely on updates from official law enforcement or government accounts.
3. Engage Responsibly with Law Enforcement
  - a. Provide accurate and helpful information when reporting crimes or suspicious activities online.
  - b. Use social media channels to participate in community discussions or town hall meetings.
  - c. Conduct regular audits to prevent breaches and ensure data integrity.

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### Abstract

**BACKGROUND:** Debates concerning the health impacts of social media screen time on youth are widespread. Research evidence reflects that social media use can have positive and negative health impacts on youth populations. This study assessed whether social media screen time use is associated with negative health outcomes of adolescent youth. **METHODS:** This study utilized a qualitative approach that consisted of reviewing the research literature to better understand the health impacts of youth social media screen time use. **KEY FINDINGS:** Mixed evidence was found regarding the health impacts of youth social media screen time use, and on the longitudinal impact of any causal or long-term effects (Kaye, Orben & et al, 2020). Risk, benefits and consequences of social media use have been identified yet there are still debatable concerns about how much use of social media screen time is appropriate or addictive. There are concerns that the content on social media platforms can affect the knowledge, attitudes and behaviors of adolescents (Kaye, Orben & et al, 2020). Further studies are needed on this topic to better understand the health impacts of youth social media screen time use. **RECOMMENDATIONS:** Policy recommendations include enforcing age minimums for social media use, designing platforms to prioritize health and safety, and creating systems to address complaints about harmful content and interactions. **IMPORTANCE OF THE STUDY:** This study provides important information on the use of social media screen time and its potential negative health effects on youth. Social media has become an important and essential part of the lives of many youth. It is important for parents, researchers, health professionals, and policymakers to assist in lowering the risk of potential harmful effects of excessive social media screen time.

Keywords: adolescents, youth, screen time, social media, health impacts

### Introduction

Social media has transformed the interactions and communication of individuals in the United States and throughout the world. Social media is not a new concept, it has been developing since the dawn of human interaction (Edosomwan, Prakasan, Kouame, et al., 2011). The use of social media has been embraced by adults and youths representing all walks of life. Its use by young people has been particularly striking. According to a U. S. Surgeon General's Advisory, social media use among young people is nearly universal, with up to 95% of teenagers, and 40% of children aged 8-12, being on social media (OSG, 2023). Despite social media's widespread use among youth, there is considerable debate as to whether there is enough

evidence to determine if social media use is sufficiently safe for them, especially during adolescence development, a particularly vulnerable period of brain development.

Social media has been found to have both positive and negative health effects, impacting different people in different ways based on individual strengths and weaknesses and based on cultural and socio-economic factors (OSG, 2023). The World Health Organization (WHO, 2025) has stated that social media can have both benefits and risks for young people, and that it is important to protect them from the digital landscape. There is an ongoing debate regarding how much social media “screen time” is appropriate for youth. As will be discussed later in this study, there is some research that finds screen time negatively impacts psychosocial functioning of youth, physical and mental health and behaviors, and overall well-being (Kaye. L. K., Orben, A., et al (2020).

This study’s primary goal was to review the current social media screen time research literature and decipher its findings regarding the effects of screen time use on adolescent’s health and well-being. An additional goal of this study was to explore the psychological and social factors that influence social media usage and adolescents’ well-being (Guo & Cheung, 2023). To assist the reader of this study with understanding key terms being used throughout this report, the following section provides definitions for those terms as used in this research brief:

Adolescence - According to the World Health Organization (WHO, 2025), Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19. It is a unique stage of human development and an important time for laying the foundations of good health. Adolescents experience rapid physical, cognitive and psychosocial growth. This affects how they feel, think, make decisions, and interact with the world around them.

Health - According to the World Health Organization (WHO, 2025), Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Screen Time - According to Kaye. L. K., Orben, A., et al (2020), Screen time is the amount of time spent using electronic devices, such as computers, tablets, smartphones, televisions, or wearable technology. It can include both sedentary and active behaviors.

Social Media – According to Pillow & Hopson (2014), the term “social media” includes networking sites, video or picture-sharing sites, forums, blogs and other tools. It refers to a group of Internet-based applications that allows for the creation and exchange of user-generated content among individuals and various types of groups.

Youth - The United Nations (2013) for statistical purposes, defines ‘youth’ as those persons between the ages of 15 and 24 years; a period of transition from the dependence of childhood to adulthood's independence.

### **Problem Statement**

Currently, nearly four billion people all over the world use platforms such as Facebook, Instagram, WeChat or TikTok (Clement, 2020; Wearsocial.com, 2020). Over 93% of teenagers ranging from 12 to 17 years old are connected to social media (Guo & Cheung, 2023). Social networking presence has become a hallmark of modern day communications and interactions involving adults and youth. It has quickly become the preferred method of communication and information sharing among people all over the world (Clement, 2020; Wearsocial.com, 2020). Social media, while having significant potential for communication and knowledge transfer, carries with it legal, ethical, personal, and professional risks (Pillow and Hopson, 2014).

There is growing concern regarding the amount of time adolescents spend on social media. The U.S. Surgeon General’s Advisory (OSG, 2023) reports that children on social media are commonly exposed to extreme, inappropriate and harmful content, and those who spend more than three hours a day on social media face double risk of poor mental health including experiencing symptoms of depression and anxiety. A recent survey of teenagers showed that, on average, they spent 3.5 hours a day on social media (OSG, 2023). The issue is that some youth utilize social media in problematic ways that can lead to negative physical and mental health outcomes (OSG, 2023). Additional problems resulting from excessive use include violations in

patient confidentiality, violations of privacy, recruiting misconduct (Pillow & Hopson, 2014). Other concerns over excessive social media screen time use includes issues regarding the type of content being viewed on social media; the types of activities and interactions being engaged in by youth; sleep disruptions; and a lack of physical activity due to excessive use (Pillow & Hopson, 2014). Determining the physical and mental health impacts of social media screen time may also depend upon the specific way in which youth engage with social media (Bleakly, 2019).

### **Research Methodology**

A qualitative approach was utilized to review the research literature regarding the health impacts of social media screen time on youth. A systematic review identified peer reviewed health research articles on social media use and its impact on adolescent health. Research articles which focused on social media usage, amount of screen time use, and impact on adolescent health was specifically selected for review. The inclusion search criteria for this review included the key terms of “adolescents”, “youth”, “screen time”, “social media”, and “health impacts”. The time period used to conduct the review of literature was 2010 to 2024. The target population for this research brief was primarily American youth who participated in the U. S. Surgeon General’s Advisory 2023 study titled *Social Media and Youth Mental Health*. Selected articles were manually analyzed for the identification of common themes and significant findings related to the physical and mental health impacts of youth social media screen time use. Findings emerging from this review were then summarized and grouped into two major categories representing “benefits” and “risks” of social media screen time use.

## Research Findings

The following section presents a summary of significant findings that emerged from a review of the research literature on youth social media screen time impacts. These findings are presented in two groups representing “benefits” associated with social media screen time use, and “risks” associated with such use. The findings listed below provide and represent a summarized listing of similar research responses identified during the review of literature:

### Benefits

- According to Dalomba (2022) Social media and technology can assist with 1) staying connected with family and friends worldwide via email, text, FaceTime, etc.; 2) quick access to information and research; 3) convenient banking and bill pay; 4) online learning, job skills, content discovery (e.g., YouTube videos); 5) increasing civic engagement; 6) serving as a marketing tool; and 7) providing opportunities for remote employment.
- Social media can provide youth and adolescents with a platform to access more people, information, and resources that further increases their personal social capital and social support (Guo & Cheung, 2023).
- According to Bleakley (2019), there is evidence that social media platforms can be leveraged as behavioral change agents. Social media based behavioral interventions have been linked with improvements in nutrition behaviors (e.g., increased fruit and vegetable intake or decreased sugar-sweetened beverage consumption), and intermediate smoking reduction and cessation outcomes. Youth who were exposed to sexual health messages on social media were also more likely to use contraception or a condom at last intercourse.

### Risks

- Findings from the 2023 OSG report on social media screen time use found on a typical weekday, nearly one-in-three adolescents reported using screens (most commonly social media) until midnight or later. Findings also indicated a relationship between excessive social media use and poor sleep quality, reduced sleep duration, sleep difficulties, and depression among youth.
- Excessive social media screen time use may also perpetuate body dissatisfaction, disordered eating behaviors, social comparison, and low self-esteem, especially among adolescent girls; with one-third or more of girls aged 11-15 saying they feel “addicted” to

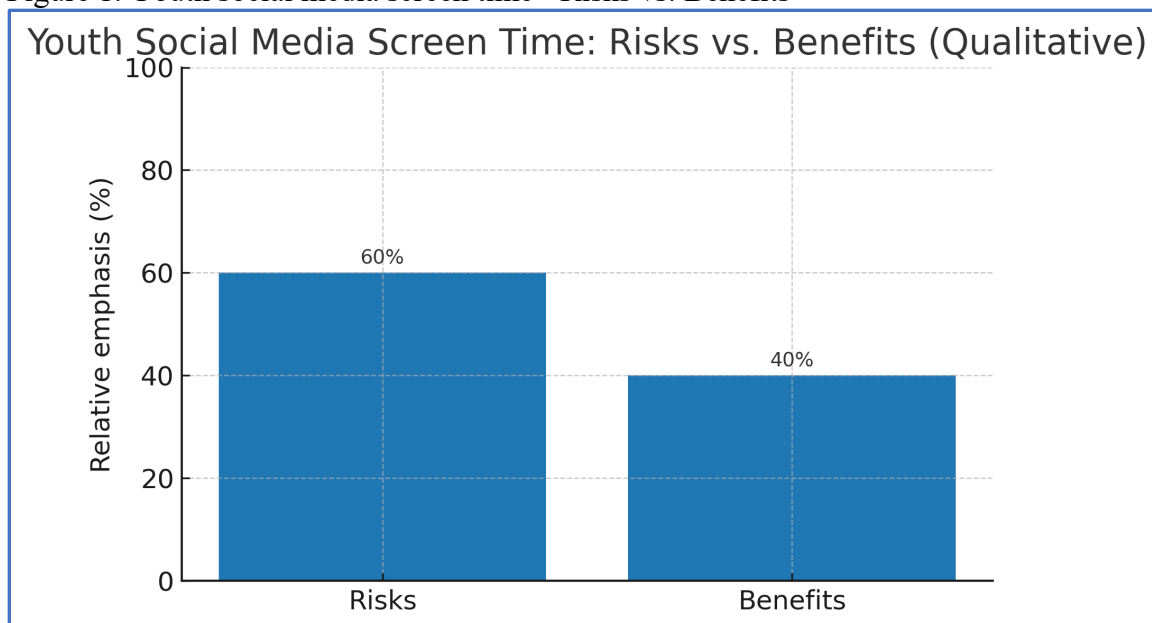
certain social media platforms, and over half of respondents reported that it would be hard to give up social media (OSG, 2023).

- Frequency or time spent on social media was found to intensify feelings of depression or anxiety, fear of loss among youth (Guo & Cheung, 2023). Suicide deaths increased for those ages 13-18, adolescents with depressive symptoms, especially among females (Twenge, Joiner, Martin, 2015).
- A UK-based study reported more symptoms of depression as hours of social media increased among 14 year olds; and a strong link between time of use and negative psychological symptoms (Lancet, 2019).

## Discussion

The use of cell phones and social media is common place today whereby their use is considered a normal part of everyday life. The amount of time today's youth spend on social media is becoming a growing concern for parents, educators, law enforcement, and policymakers. Two of those growing concerns involves how much screen time is too much

Figure 1. Youth social media screen time - Risks vs. Benefits



*Note. Based on the abstract "Is social media screen time a healthy option for youth?" and Kaye, L. K., Orben, A., Ellis, D. A., Hunter, S. C., & Houghton, S. (2020). The impact of social media use on appearance self-esteem from childhood to adolescence. Journal of Youth and Adolescence, 49(6), 1161–1175.*

for youth to spend using social media, and what are the short- and long-term physical and mental health impacts on youths of excessive screen time use? As discussed in this study's findings, there is research evidence of both positive and negative effects of youth using social media, dependent upon the types of use and the duration of those uses (Figure 1). However, there does appear to be a growing consensus in the research literature that excessive social media screen time use is producing more negative physical and mental health outcomes for youth.

Whether this excessive use can be effectively labeled “addictive” is still being debated; however what is not debatable are the multiple areas being impacted by this growing issue. Areas such as education, physical and mental health, law enforcement, employment, and social interactions are all being impacted to various degrees by the growing problem of youth screen time use. Urban areas with their large and diverse populations, inter-connected economic and social systems, and expansive technology infrastructure are particularly prone to magnify both the positive and negative effects of youth social media screen time use. With a growing body of research evidence suggesting youth “excessive screen time use” is getting worse across multiple areas (especially physical and mental health areas), there is a special urgency to addressing this societal problem sooner rather than later.

There are many complex and evolving concerns that have emerged regarding how social media should be used, by whom, and for what duration of time. This research brief focused on how those concerns are impacting today's youth from multiple perspectives, especially from the physical and mental health aspects. Positive interventions and safe guards are needed to address the negative impacts flowing from the excessive screen time use of social media by youth. Society cannot count on social media companies to adequately address this growing issue of excessive screen time use. The following quote so aptly states the reasons why . . . “As long as

social media companies profit from outrage, confusion, addiction, and depression, our well-being and democracy will continue to be at risk” (Montag, C., and Hegelich, S., 2020). Therefore, it is the responsibility of parents, educators, community members, and policymakers to step forward and counter this growing problem potentially impacting millions of youths and their families. In the meantime, additional research on this topic is needed to fully address the impact of social media screen time on adolescent and youth health.

### **Recommendations**

Based upon this study’s research findings, the following recommendations are offered to help address the physical, mental, educational, and societal issues flowing from excessive social media screen time use by youths and adolescents:

- Develop school and home policies for social media use and time restrictions (e.g. limiting the amount of time youth are allowed to use social media)
- Educate students, parents, teachers, administrators, community members, and policymakers on social media trends, uses, and issues
- Increase awareness of social media benefits and potential risks
- Emphasize using marketing and outreach activities of the research-substantiated impact of social media screen time on health
- Draft social media “use” policies to guide and manage the use of social media in educational and other institutional settings as a way of avoiding unwanted incidences of misuse
- Encourage monitoring social media content and use via existing technology device features (e.g., parent safeguards, lock/unlocked screens, blocking certain content)
- Encourage parents to develop a “Communication Plan” to inform youth regarding controversial and/or uncomfortable social media content
- Encourage more “in-person” social interactions among and between youths.
- Create time periods when social media screen time use is restricted or prohibited (e.g., at meals, at bedtime, during study periods)

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### **Abstract<sup>2</sup>**

This research commentary examined the debate over social media and cell phone use in classrooms, exploring various perspectives that included teachers, parents, students, and school administrators. It utilized a mixed-methods approach combining the lead author's observations along with an artificial intelligence-assisted rapid evidence assessment (REA) of 27 empirical studies. The goal of this commentary was to identify key issues influencing school policies governing the use of social media and cellphones in the classroom. REA assessment findings varied and included results such as lower standardized test scores being linked to unrestricted cellphone use in schools (Schumann, 2020; NCES, 2025); findings of a six percent rise in pass rates after a district-wide cellphone ban was implemented (Kedmey, 2015); and findings of high-frequency social media use being correlated with elevated anxiety and sleep disruption levels (Cheever, 2014; Magnusson, 2023; Langreo, 2023). Overall, REA findings leaned more towards negative academic and social results from the unrestricted use of cellphones and social media in classrooms. However, some results also indicated that when integrated purposefully (e.g., for augmented-reality field trips or formative-assessment apps), the use of smartphones and social media could lead to moderate learning gains (Hatfield, 2024; Lamb, 2023). Conclusions include recognition by the authors of digital devices now being a permanent part of youth culture, and that a compromise is needed to balance learning opportunities associated with using social media/cellphones, and managing the classroom distractions that also come with those uses.

Keywords: social media, cellphones, schools, phone bans, teachers, parents, administrators, students, academic performance

### **Introduction**

Student access to social media and cell phones in the classroom is a highly debated topic, with significant concerns regarding the potential learning distractions being generated from the growing use of social media and cellphones in schools. Due to these growing concerns, many school districts are now developing and implementing policies restricting their use during instructional time, although some educators see potential benefits when used responsibly and integrated into the curriculum (Hatfield, 2024; Lamb, 2023).

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<sup>2</sup> The ChatGPT .03 Model analysis tool was used to help gather data presented in this research commentary.

This research commentary broadly examines the issue of social media and cellphones in the classroom from multiple perspectives (e.g., teachers, parents, students, and school administrators). The goal of this commentary is to help identify some of the key issues influencing the development and adoption of school policies guiding the use of social media and cellphones in the classroom. It is hoped that by better understanding the multiple perspectives encompassing the issue of social media and cellphones in the classroom, policymakers and school officials will be able to draft and implement laws, rules, regulations, and guidelines that encourage technology-enable learning while also limiting the distractions accompanying such learning opportunities.

### Exploring the Pros and Cons

Some proactive arguments for social media and cellphone use include accelerated student learning, enhanced access to digital content, and serving as a communications tool for parents regarding student safety. Oftentimes, teachers can also facilitate educational games such as Kahoot, Wordle, and Minecraft Education. Smartphones enables access to encyclopedias, videos, and entire libraries of knowledge, right in a student's pocket. It is smaller than a traditional laptop, therefore takes up less space on the desk and in the student's backpacks. Another advantage is the potential for collaborative learning, especially on group projects. Students are able to organize, share notes and information, and connect at a deeper level than ever before. The argument is often made that students can benefit from having access to their phones in the classroom because they can do amazing things with their phones.

The counter argument to allowing students unregulated use of social media and cellphones includes the difficulty in monitoring and controlling the use to ensure the student is using the phone for academic purposes (Hatfield, 2024). Normally, teachers do not have time to

spend circulating the room checking every student's screen to make sure they are doing class work, and kids are quick at switching between screens and activities to allude being caught red-handed on the wrong sites. There is also the issue of potential negative physical and mental health effects of excessive social media and cellphone use by students (Cheever, 2014; Magnusson, 2023; Langreo, 2023; NCES, 2025).

The next section describes the methodology used to compose this research commentary, along with a brief review of data sources helping to provide context and insight on issues impacting the use of social media and cellphones in the classroom.

### **Methodology**

This research commentary utilized a mixed methods approach that relied heavily on the lead author's observations and experiences working with students both in- and out of the classroom. In addition to the qualitative observations providing a foundation for this commentary, this report also utilized a ChatGPT .03 model rapid evidence assessment (REA) of several bibliography databases that included ERIC, PsycINFO, and Google Scholar. Keywords used to guide the bibliography search included cellphone, smartphone, classroom, academic performance, social media, and policy.

The ChatGPT .03 inclusion criteria for the selection of research articles and data sources were (a) being an empirical study, (b) location being a K-12 setting, (c) the sample sizes  $\geq 100$ , (d) and the sources being published in English between the time period 2019-2025. The REA search returned twenty-seven articles that met the above criteria; effect sizes were harmonized via Cohen's d. The findings from this search were then grouped into four reporting categories: (1) Distraction and Performance; (2) Equity Considerations; (3) Mental-Health Outcomes; and (4) Pedagogical Opportunities.

## Findings

The following section presents findings from a traditional data search, and an REA data search conducted utilizing the ChatGPT .03 research model:

### Distraction and Performance

- Some researchers have found that cellphone use is negatively impacting student academic performance on standardized and un-standardized tests (Schumann, 2020; NCES, 2025). A Canadian natural experiment observed a 6-percentage-point rise in pass rates after a districtwide 'phones-in-locker' mandate (Kedney, 2015).

### Equity Considerations

- Banning devices may differentially burden low-SES (social economic status) learners who rely on phones for translation and internet access (Keppler, 2025).

### Mental-Health Outcomes

- Cellphone use, and bans, in schools have been found to increase levels of anxiety, sleep disruptions, and other negative health outcomes (Cheever, 2014; Magnusson, 2023; Langreo, 2023).

### Pedagogical Opportunities

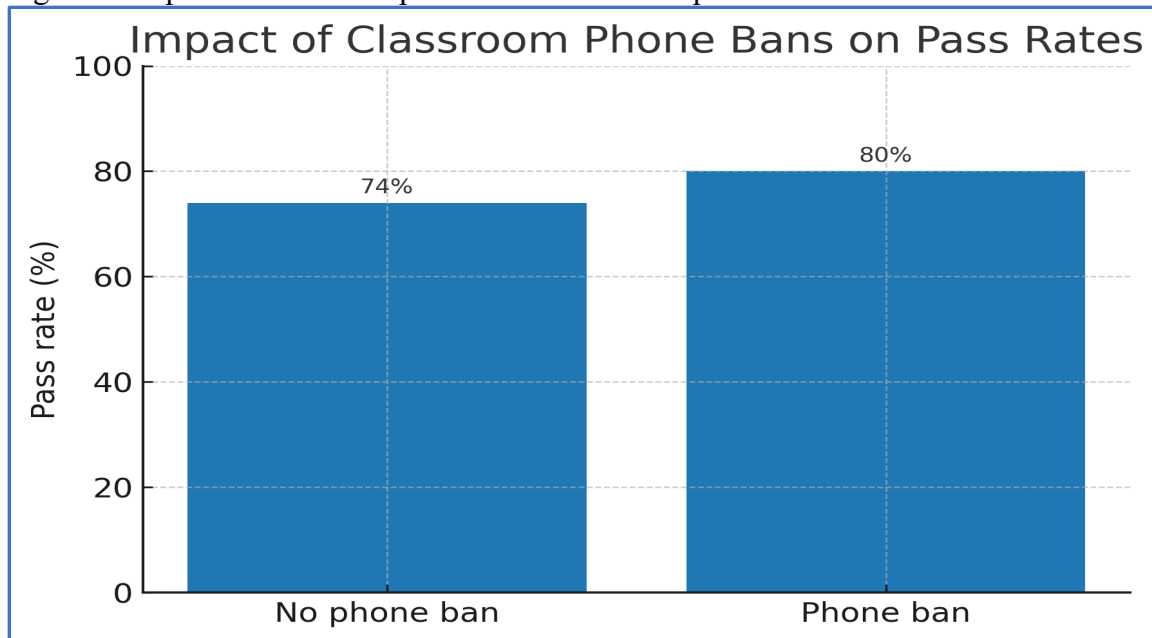
- Creative and innovative uses of cellphones in the classroom can also help to increase student test scores and lower levels of learning anxiety (Keppler, 2025; Cheever, 2014; NCES, 2025).

### Summary of Data Findings

Broadly speaking, the above studies did find evidence of social media/cellphone use in classrooms generally having a negative impact on student learning. However, there were also findings indicating that, depending upon the deployment and utilization, social media/cellphones could also have a positive impact on student learning and achievement. These somewhat contradictory findings illustrate the dilemma teachers, parents, school administrators, and

legislative policymakers face when deciding how to manage the presence and/or use of such technology in the classroom.

Figure 1. Impact of classroom phone bans on student pass rates.



*Note. Illustrative pass rates reflect a 6-percentage-point rise in pass rates after a district-wide phone ban as described in the study. (Kedmey, 2015)*

The remaining sections of this commentary will examine the issue of social media/cellphone use in the classroom from various perspectives of persons significantly involved with the issue. The goal is to reveal the complexity and sometimes conflicting viewpoints connected with trying to find a workable balance between allowing the use of social media/cellphones in the classroom, and restricting their use to eliminate distractions and promote higher levels of learning.

### **Lead Author's Observations**

#### **Teacher Perspective**

Teachers are primarily concerned about the distracting nature of social media and cell phones in the classroom, often citing that their presence significantly disrupts learning by pulling

students' attention away from lessons, leading to decreased focus and engagement, and impacting overall academic performance. Many educators believe that limiting or banning cell phone usage during class time is necessary to maintain an effective learning environment (Walker, 2024). A teachers' main concern is being able to provide the instructional delivery required by their respective school curriculums, and to provide the student with the necessary information needed as well as required to be academically proficient in the subject in which they are being taught. At some point, the student and teacher will be held accountable for the information exhibited on assessments when they are given and scored for the school district. If teachers have to compete with a phone for the attention of their students, there is a high probability the teacher will lose that battle for several reasons that include: 1) the teacher only has a limited amount of time to teach the course; 2) the teacher has to provide instructions to a class size often at a minimum of 20-30 individuals; and 3) the teacher cannot monitor every student in possession of a phone and hold them accountable without taking up the whole class period. In an attempt to monitor every student with a phone, it will be difficult for the teacher to accomplish any delivery of subject matter within a 50 to 90-minute class period. Further, there are safety concerns about confiscating the phone from a student, especially if the student becomes aggressive, combative, or violent with the teacher.

#### Parent Perspective

Parents are primarily concerned about the potential for distraction and negative impacts on their children's academic performance when it comes to social media and cell phones in the classroom, often voicing worries about cyberbullying, exposure to inappropriate content, and general overuse. However, many parents still advocate for limited access by students in case of emergencies, or for educational purposes, depending on the specific school policy and age of

their child. Parents and school districts are concerned about the impact of social media and cell phones on students, about student distractions, potential negative impacts on academic performance, and concerns about cyberbullying and mental health issues associated with excessive screen time (Lamb, 2023; Magnusson, 2023; Walker, 2024).

Parents are also concerned with the many school shootings and tragic incidents that have taken place throughout this country; therefore underscoring the parents' desire for their child to have access to their cell phones all the time. Sadly, we are at a point in society where there is a major possibility of something bad happening, and consistent fear for everyone involved in the educational arena. School is a place where children should be at a safety level so elevated, that getting such notifications would be hard to imagine. Parents want the same level of safety for their kids at school that they provide at home, if not better because there are more lives at stake. Students having their devices in the classroom (especially their cell phone) is a tiered situation for everyone, parents included. While some parents want kids to have their phones for mainly emergencies, there are some parents however who pay out lots of money to please and accommodate their kids without any real directions or accountability. This is another problem in itself, but it contributes to the student's lack of discipline to go without the phone, and the student's failure to defer to authority.

#### Student Perspective

Of course, students have a different viewpoint regarding the allowability of cellphone devices in the classroom. Most are totally in favor of having their devices in hand or readily accessible (Anderson, 2023). They can use them during approved screen time, but it is the use of social media and cellphones during unapproved times where the problem comes in. Students that are ahead academically or become bored easily in the classroom will tend to use the device to

entertain themselves when the teacher is attempting to provide instruction (Anderson, 2023). This may cause teachers to approach the student to remove the device or ask them to put it away, possibly causing a disciplinary incident to ensue. Also, current students are “tech babies”, who live for their phones and to be on social media apps throughout the school day for the purpose of staying connected to see what the “influencers” or celebrities are doing moment to moment (Anderson, 2023; Keppler, 2025). Students are not grasping that most of this information is fiction, not fact, and strictly for entertainment on behalf of the influencer/celebrity. Sadly, the more a student is disconnected from real life, the more they seem to be fascinated with social media representations.

#### School Administrators’ Perspective

School administrators and state educational departments have serious concerns about devices in the classroom as well (Walker, 2024). Many are concerned with academic instruction, subject matter comprehension and retainment, and success of students taking and passing assessment and test-taking instruments. This is a main factor for many administration officials because evaluations and reports will be used as evidence for obtaining and continuing educational funding, and for acquiring adequate instructional materials and resources (Walker, 2024).

### **Conclusions**

In examining the still emerging research literature and data findings on this issue, the bottom line is social media and digital devices are likely to continue being a permanent fixture of our youth daily interactions both in and out the classroom. Teachers, parents, school administrators, and legislative policymakers must continue to search for a comfortable medium

between “the use and non-use” of cellphone devices. This comfortable medium should allow for enhanced learning while also limiting unwanted classroom distractions.

Technology is deeply embedded in our culture and will be used in the educational arena from now on. Social media and cellphones are likely here to stay, and are continuously evolving into new, uncharted territories in human society. The two are forever linked with our children moving forward. In line with our best interest, a compromise is needed so that healthy academic instructions can continue in every classroom without causing the teacher so much aggravation and stress. The devices (cell phones and laptops) in the possession of the students can be used for instruction, but can also serve as a source of distractions if not monitored, or without a level of respect for their use in the classroom by students and parents. Individual teachers will have to set parameters for social media and cellphone use in their classrooms and strive to hold students accountable without losing too much instructional time enforcing the rules. Either way, the future of this journey will be interesting in terms of whether a healthy balance can be obtained between allowing the constructive use of social media and cellphones in the classroom, while also limiting the distractions and loss learning opportunities that can occur if not properly managed.

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## Epilogue - Looking Towards the Future

This document began by discussing how the growing use of social media is particularly impacting urban communities. This impact is noteworthy due to urban areas, in contrast to rural areas, tending to have higher population density and group distinction levels, higher numbers of technological devices and usage levels, and higher levels of political, social, and economic stratifications. Because of those distinctions in comparison to rural areas, the use (or mis-use) of social media can have a far wider impact on the people, institutions, and services in urban areas.

A major overlapping theme flowing from all four research briefs is the evolving nature of social media. The early iterations of social media were fairly innocuous and focused more on personal communications among individuals and small groups. The later iterations have become much more global and complex, with its impact ranging from being helpful to being dangerous and unpredictable. This compendium report describes what is known today about social media, how it can amplify misinformation, reshape law-enforcement, influence community relations, affect youth health and learning, and challenge or support classroom practice. But that is only half the story. The other half of the story is unfolding in real time. Social media itself is continuing to evolve via its distribution platforms, messages, and impact. The “rules of the road” governing social media and its uses are also evolving regarding how people, platforms, and public institutions are allowed to use it. Looking forward, the question for urban areas is not merely how to minimize harm from the use of social media, but also how to unlock its power to help cities, residents, and essential services perform better.

### From Findings to the Future

The findings presented in this compendium report highlight the uniqueness of social media to specific service areas (e.g., education, health, law enforcement). But they also highlight

some commonalities of social media across application areas. These commonalities include increasing communications between various parties, overcoming physical distances and spaces, extending the viability of existing resources, allowing more people to participate in various endeavors, and increasing the speed in which change can occur. This listing of commonalities has two important implications for the future deployment and use of social media in urban areas.

The first implication is that scale and speed matter --- dense urban networks, diverse communities, high speed-enabled technology infrastructure, and high device saturation make cities uniquely vulnerable to misinformation and online conflict. The second implication is that design and use matter --- when social media platforms and public agencies establish benevolent purposes, clear guardrails (that is, “rules and regulations”), ethical practices, and community-focused engagement, social media can become a lever for transparency, trust, and problem-solving. As related to social media and the specific service areas addressed in this compendium report (i.e., health, law enforcement, education), a positive impact could be obtained if all interested parties would take an active role in helping to shape its future use.

The following listing of social media’s potential impact on the topics examined in this report was obtained by querying OpenAI’s ChatGPT 4.0 model. The prompt query asked the model to develop a listing of likely improvements in the topic areas if the future evolution of social media followed the speed, scale, design, and use implications described earlier. Below is the output generated from this query:

### *Education*

- Real-time family engagement: providing multilingual updates, two-way messaging, and meeting reminders that close attendance and homework gaps.
- Classroom extension: offering vetted micro-lessons, formative checks, and curated communities of practice for teachers.
- Student support: providing faster referrals to tutoring, counseling, and after-school programs, with clear norms to protect focus during the school day.

### *Public Health & Healthcare*

- Rapid outreach: providing targeted alerts for heat waves, air quality, vaccination clinics, or boil-water notices.
- Navigation & triage: providing city-verified threads that route residents to telehealth, clinics, or benefits—reducing ER overuse.
- Community health listening: facilitating privacy-preserving scans of public conversations to spot rising needs (e.g., asthma hotspots, food insecurity) and respond earlier.

### *Public Safety & Criminal Justice*

- Trust-building: providing consistent, plain-language updates; facilitating myth-busting during incidents; allowing for recognition of community partners.
- Missing persons and crisis response: facilitating time-sensitive, geo-targeted calls for information; providing multilingual updates to reduce rumor cascades.
- Reentry and diversion: offering social media as a bridge to job fairs, record-sealing clinics, and supportive services.

### *Civic Resilience & City Services*

- Emergency management: establishing distributed networks that carry official guidance faster than traditional channels.
- Mobility & infrastructure: offering real-time transit status, road closures, and service requests with feedback loops.
- Economic inclusion: establishing campaigns that connect residents to training, small-business support, and city procurement opportunities.

### *“Rules of the Road”/Regulations*

- Provenance and authenticity tools (e.g., content labeling, media provenance standards) to help users distinguish organic content from manipulated or synthetic media.
- Algorithmic accountability - providing risk assessments, impact audits, and clearer user controls over feeds.
- Age-appropriate design and well-being defaults for youth; addressing friction for late-night use, stronger privacy protections, and simpler reporting pathways.
- Civic integrity protocols between platforms and public agencies for crisis communications, rumor control, and rapid correction.
- Digital literacy as infrastructure being taught in schools, embedded in libraries and community centers, and supported by multilingual micro-learning for adults.

Source: (OpenAI, 2025)

## Final Thoughts

The research briefs contained in this compendium report provide a brief examination of the role, uses, mis-uses, and evolution of social media in urban areas over the last 20 years for select services. With clearer “rules of the road/regulations”, smarter tools, ethical practices, and positive intentional use, social media can evolve from being an unpredictable tool to a reliable asset. This in turn could help educators better personalize student support and academic achievement; help medical/health officials reach and provide a wider array of services to vulnerable populations; help law enforcement reduce crime rates while also strengthening community trust; and help cities deliver services with greater speed, fairness, and efficiency. Urban areas have often been engines of growth, innovation, prosperity, and optimism. While implementing all or most of the recommendations contained in this report will not eliminate the risks associated with social media in urban areas, they could help narrow that risk considerably. Thus creating a more predictable operating environment for urban governments, schools, law enforcement agencies, and health systems to use social media responsibly and at scale. If the lessons learned from the past and current use of social media are paired with the aforementioned guardrails and goals of tomorrow, social media can help urban areas become more informed, more connected, more resilient, more prosperous, and a better place to live. That is the potential of social media for urban areas, a potential that can be realized by all concerned parties working together to make it so.

## Background Information on JSU/MURC

### **Jackson State University**

The mission of Jackson State University (JSU), a Historically Black College and University (HBCU) and comprehensive urban research public university, is to provide quality

teaching, research, and service at the baccalaureate, masters, specialist, and doctoral levels to diverse populations of students and communities using various modalities to ensure that they are technologically-advanced, ethical, global leaders who think critically and can address societal problems and compete effectively. JSU is accredited by the Commission of the Southern Association of Colleges and Schools to award the bachelors', masters', education specialist, Doctor of Education, and Doctor of Philosophy degrees. JSU now offers 45 bachelors', 34 masters', one specialist-in-education, and 13 doctoral degrees.

### **Mississippi Urban Research Center**

The Mississippi Urban Research Center (MURC) at Jackson State University was authorized through Mississippi Senate Bill 2720, Chapter 512, Section 1, cited as the “Universities Research Institutes Act of 1983” (MS Code § 57-55-17 (2019)). That enabling legislation states it shall be the function of MURC to conduct basic and applied research into urban problems and public policy, and to make available the results of this research to private groups, public bodies, and public officials. MURC enacts its mission through a wide array of services that include basic and applied research; distributing research through various types of publications; conducting policy analysis and program evaluation services; providing consultation and general advisory services; Census data research and training; providing focus group facilitation services; providing survey development and implementation; conducting statistical analysis and needs assessment services; offering instructional programs, forums, conferences, workshops; and providing technical assistance addressing urban-based issues.

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