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Social Service Workers' Use of Social Media to Obtain Client Information: Current Practices and Perspectives on a Potential Informatics Platform

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Abstract

To gain insight into current use of social-media platforms in human services delivery, we systematically surveyed 172 social-service workers from six agencies in a Midwest US city to gather data about social-media usage among social-service providers, potential challenges and benefits of using social media, and whether a social-media-based informatics platform could be valuable. Quantitative analyses showed that approximately half of participants have used social media to collect client-related information; nearly one-quarter indicated “often” or “nearly daily” use. Adjusting for the effects of worker characteristics, social-media use was associated with the type of agency involved and with increased tenure in social services. Adjusted results also showed that participants’ comfort with using the potential application was greater in those agencies substantially involved with investigative/legal work. However, trust in the information collected by the potential application was a stronger, independent predictor of comfort using the tool. Qualitative analyses identified numerous challenges and ethical concerns, and positive and negative aspects of a social-media-based informatics platform. If the platform is to be created, work must be done carefully, fully considering ethical issues rightly raised by social service workers, existing agency policies, and professional standards. Future research should investigate ways to negotiate these complex challenges.

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Keywords

App development; client information; ethical issues; social media; social service

Introduction

Over the past decade, the use of social media data to guide decision-making in the provision of health and human services has grown substantially, especially in response to events such as natural disasters and large-scale emergencies (Hiltz et al., 2020; Houston et al., 2015; Panagiotopoulos et al., 2016; Santoni & Rufat, 2021; Xie & Yang, 2018; Yuan et al., 2021). Social media use has also accelerated in several health domains, including suicide, self-harm (non-suicidal self-injury such as cutting or burning), and interpersonal violence. Regarding suicide and self-harm, the growing literature has focused on detecting suicidal/self-harm ideation and disseminating suicide-prevention methods through social media and mobile apps (Brown et al., 2018; Cheng et al., 2017; de la Torre et al., 2017; Emma Hilton, 2017; McClellan et al., 2017; Moreno et al., 2016; Rassy et al., 2021; Shanahan et al., 2019; Wilks et al., 2021). In terms of interpersonal violence, research attention has seemingly gravitated toward tracking both the amount of social media activity (e.g., volume of postings or tweets); and users' emotional or psychological states after large-scale mass shootings (Doré et al., 2015; Heverin & Zach, 2012; Jones et al., 2017) or terrorist attacks (Jain & Vaidya, 2021; Lin et al., 2017), as well as examining social media use involving "small-scale" or localized incidents of interpersonal violence (e.g., homicide, assault) that occur daily in urban settings (Elsaesser et al., 2021; Frey et al., 2020; Kounadi et al., 2015; Parkin & Gruenewald, 2017; Patton et al., 2017; Patton et al., 2019).

Collectively, these studies have provided invaluable insight into characteristics of the public's social-media use around events of interpersonal violence: (1) individuals communicate information about interpersonal violence through social media; (2) the information posted on open sources captures as much if not more than information obtained from official law-enforcement data; (3) communication typically begins rapidly after an incident; (4) a substantial proportion of the postings are made in relatively near physical proximity to the location of the incident; and (5) given incorporation of features such as neighborhood identities/locations and names into tweets, controlled terminological systems for reference are needed. Although the literature is limited, available evidence indicates that work-related social media use is more common among staff with greater years' experience as well as with staff involved more in child protection compared to mental health (Ryan & Garrett, 2018).

In addition to scientific inquiry into the public's use of social media around interpersonal violence, a growing literature has focused on how individual social-service workers utilize social media data to inform provision of services to persons affected by violence. This seems to have happened most extensively with child protection workers, where several studies have documented social media use for tracking individuals' location and monitoring activities (Breyette & Hill, 2015; Dolinsky & Helbig, 2015; Long et al., 2021; Sage & Sage, 2016). However, the literature on non-child-protection workers' use is more limited.

In this regard, Patton et al. (2016) research has provided fascinating descriptions of the use of social media among outreach workers of local violence prevention agencies in a large US urban area. These workers monitor social media platforms (e.g., Facebook), interpret postings, identify instances where violence or risk of violence is escalating, assess threats, and target in-person or on-line intervention and outreach activities to the individual(s) involved. Similarly, outreach workers in the E-Responder Program in New York City utilize social media to monitor situations, assess risk and intervene as appropriate to de-escalate conflict and support youth (Sichel et al., 2021).

To add to the growing literature about the use of social media in social service provision, we report the findings of a systematic survey undertaken as part of a pilot project to develop a multi-format informatics platform that gathers and analyzes social media data to help social service workers better understand circumstances surrounding their cases and guide their work. The survey targeted social-service workers in a broad range of agencies: mental health, crime victim support, substance abuse treatment, homelessness, family health and social services, and child well-being. The study was informed by two conceptual frameworks: (1) human centered design, which prioritizes the needs and preferences of a technology's end users, in this case social service workers (Giacomin, 2014; Patel et al., 2020); and (2) affordances, which suggests that a technology's utility depends on both its intrinsic features and users' experiences and intentions with the technology (Chan & Sek-Yum Ngai, 2019; Nordesjo et al., 2022; Norman, 2002). Hence, our inquiry involved topics such as user needs, preferences, intentions, and experiences. Specifically, we were guided by the following research questions:

1. How many workers across a range of agencies were currently using social media?
2. For workers using social media, what platforms did they use?
3. Were any worker characteristics associated with social-media use?
4. How did workers use social media?
5. Did workers have negative experiences using social media?
6. What were workers' experiences using social media in general (non-work-related)?
7. What features would workers like in a social media tool that gathered client-related information?
8. Would workers feel comfortable using the tool?
9. Would staff trust the information it collected?
10. Were worker characteristics associated with perceived worker comfort using a tool designed to collect and analyze social media data?

Materials and Methods

Procedure

The study was approved by Case Western Reserve University's Institutional Review Board. The authors report there are no competing interests to declare. The study site consisted of a large metropolitan area in a Midwest state. To collect data, we administered an online survey using REDCap, a secure, web-based application that permits electronic administration of surveys (Patridge & Bardyn, 2018). We sought to recruit social service workers involved in a range of services, and therefore invited participants from the staff of six organizations. Collectively, the services involved mental health, crime victims, substance abuse treatment, homelessness, family health and social services, and child well-being.

Of note, none of the agencies had a formal policy regarding whether staff could seek out information about clients from social media. Policies, when present, prohibited (1) posting of information about clients; (2) interacting with clients in any way via social media; and (3) interaction with the mass media (e.g., news stations, newspaper) about agency-related matters via social media. Thus, the survey did not inquire about activities prohibited by agency policy. That said, some social media activities, while allowed by agency policy, might violate professional standards/canons for some licensed workers. Based on input from agency staff, the survey was structured in a manner to ensure anonymity of participants: e.g., not inquiring about specific position titles or length of time in one's current position, which might be identifiable. Moreover, the specific agencies were not identified in this manuscript to protect the anonymity of both participants and agencies.

Following approval from agency leadership, study staff obtained the staff's work email addresses. Each staff member was individually sent an email message describing the study and its voluntary nature. Interested persons used a REDCap-produced individualized link to the survey webpage. After indicating their consent to participate in the survey, individuals were directed to the survey itself. The survey took approximately 10 minutes to complete. In agencies that permitted its staff members to be compensated for participating in the survey, participants received a \$10 electronic gift card for a beverage company.

A total of 172 agency workers participated out of 833 who received an invitation (20.6%). Although it was not possible to systematically collect information about reasons for declining participation, anecdotal reports from agency staff discussing the survey indicated the following reasons: Covid-19-related fatigue with working on computers; fatigue with completing surveys in general, given the number of email invitations persons receive that are generated by commercial purchases.

Study Variables

The survey collected information about worker demographic characteristics and work history, social media use for work and in general, and perspectives on a potential social media tool that could be developed to assist workers with collecting client information.

Worker Characteristics and Work History—The following worker information was collected: *Age* in years; *gender* (female, male, other); *education* (categorized as high school

or equivalent, some college, associate's degree, bachelor's degree, some graduate work, master's degree or higher; for analytic purposes recategorized as a binomial variable bachelor's degree or less versus greater than bachelor's degree); *race* (categorized as African American/ Black, White, American Indian/Alaskan Native, Asian, Native Hawaiian/ Other pacific Islander, Bi- or Multi-racial; for analytic purposes recategorized as African American, White, Other); *Hispanic ethnicity* (yes/no); *agency/organization* (categorized as a binary variable indicating whether or not the agency's work involves substantial legal/ investigative tasks); *number of years worked in social services* (categorized as < 1, 1–3, 4–5, 6–9, 10–14, 15–19, 20 or more; for analytic purposes recoded into terciles as 5 years or less, 5–14 years, 15 years or more); *how often the staff member worked with client victims of violent crime, suicide, or child mal-treatment* (4-pt scale from 1 = “less than once a month” to 4 = “Most or every day”).

Work-Related Social Media Use – Frequency of Use, Platform(s) Used, Information Sought, Experiences with Use

—To assess *frequency of use*, participants were first asked whether they had ever used social media to obtain information about a case (yes/no). Participants who responded “yes” were asked the following question: “How often social media platforms were used to obtain information about a case (4-point scale from 1= “Rarely” to 4 = “Almost every day”). To assess *platforms used*, participants were asked to identify which social media platforms they used to obtain case information (non-mutually exclusive options were Facebook, Twitter, Instagram, TikTok, Snapchat, or Other, with an opportunity to specify “Other”). To gather additional information about their *experience with work-related social media use with clients*, participants were asked the following open-ended questions and responded narratively: “What types of information do you look for?” “How often does it take you to find relevant information from social media sites?” “Think about the last time you used social media for a case? What platform did you use and what information did you look for?” “Can you think of an instance where postings on social media made the situation more difficult for one of your clients (yes/no)? If yes, please describe what happened.” “Can you think of an instance where postings on social media made the situation more difficult for you as the service provider (yes/no)? If yes please describe what happened.”

Comfort with Social-Media Use in General—All participants were asked about their *level of comfort* with general (any) use for each of several social media platforms and responded using a 4-pt. scale: 0 = “Never use,” 1 = “Very uncomfortable,” 2 = “Somewhat uncomfortable,” 3 = “Somewhat comfortable,” 4 = “Very comfortable.” The platforms were Facebook, Instagram, Twitter, TikTok, Snapchat, and “Other,” (they were then asked to identify the platform and rate their comfort using it). Although Google, Yahoo, or Bing search engines are technically not social media platforms, we also queried comfort with their use in order to obtain a sense of participants' overall comfort with using web-based, online tools. The average rating of the three platforms with the overall highest comfort ratings—Google or Yahoo search engines, Facebook, and Instagram (see below)—was used for analytic purposes.

Perspectives on an Information-Collecting Software Tool – Comfort with Use, Trust with Information Obtained, Desired Features, Trust-Enhancing Features

—First, to assess *comfort with use*, participants were asked how comfortable they would feel looking at information about their clients from social-media platforms and responded using a 4-pt scale: 0 = “Very uncomfortable,” 2 = “Somewhat uncomfortable,” 3 = “Somewhat comfortable,” 4 = “Very comfortable.” For analytic purposes, responses were recoded as a binary variable: “very” or “somewhat” uncomfortable versus “very” or “somewhat” comfortable. To assess *level of trust* of the information collected by the tool, workers were asked the *degree to which they would trust the information from an app or desktop tool* and responded using a 4-point scale: 0 = “Not at all,” 1 = “A little,” 2 = “Some,” and 3 = “A lot.” These responses were also recoded into a binary variable indicating where the worker would trust the information “not at all” or “a little” versus “some” or “a lot.” Also, participants were asked an open-ended question to obtain information about *desired features*: “If there were an easy-touse app or desktop tool that could help you gather information from social media websites, what would you like it to be able to do?” To obtain information about *tool features or characteristics that would increase their trust of information* obtained by this informatics platform, participants were instructed: “Please describe anything that would increase your trust of this information.”

Analysis

Continuous variables were summarized by means and standard deviations. Categorical variables were summarized by frequencies and percentages. A logistic regression model was used to assess the relationship between outcomes (use of social media to obtain information about a client and level of comfort using a tool to gather information from social media websites) and worker characteristics and work history (predictors). To avoid overfitting the models, univariate associations between each predictor and the outcome were initially assessed using zero order correlations (ordinal or continuous data) or Chi-Square tests (categorical data), and then those predictors showing a statistically significant association were included in the final logistic regression model. Associations between the outcome and predictors are expressed as odds ratios (OR) with 95% confidence intervals (CIs). Data were analyzed using the Statistical Package for the Social Sciences version 28.0.0.0 (SPSS Inc., Chicago, Ill). Regarding the qualitative data, for each open-ended question, two study-team members independently classified each response using a coding system (“code-book”) developed by the study team to classify responses. Inter-rater agreement for the overall coding was acceptable: The pooled Kappa statistic was 0.79 (De Vries et al., 2008). After coding was completed, a third staff member who did not conduct the coding resolved any coding discrepancies.

Results

Sample

The sample consisted of 172 social service workers. Sample characteristics are presented in Table 1. The average age was 43.3 years (SD = 11.9). Nearly 80% self-identified as female. Concerning race, participants self-identified mainly as White (54.8%) or African-American (37.5%), with fewer numbers of Asian (3.0%) or Bi-Multi racial (4.8%) participants.

Unfortunately, due to an error in the REDCap database, Hispanic ethnicity was assessed in only 74 participants with 9.6% self-identifying as Hispanic. Approximately 42% of participants worked for an agency whose work involved substantial legal/investigatory tasks; 52% worked for “other” types of agencies: i.e., agencies largely providing health and other services but with less substantial criminal justice or investigatory activity. Over half of the sample had 10 years or greater of social service experience. A majority of participants (64.6%) worked “most or every day” with clients/families who had been victimized by violent crime, suicide, or child maltreatment.

Work-Related Use of Social Media

Frequency of Use—Just under half of participants ($n = 77$, 47.0%) indicated that they have used social media in their work to collect information about clients. Of those participants, 31.2% reported that they “rarely” used social media, 44.2% reported “sometimes” use, and nearly one quarter (24.7%) indicated that they used social media “often” to “almost every day.”

Platforms Used—The most used platform to obtain client-related information was Facebook (94.8%), followed by Instagram (51.9%), Twitter (14.3%); TikTok (6.5%), and Snapchat (3.9%). Other search platforms (e.g., Google Search, LinkedIn, YouTube) were used by 1–2.6% of participants. Most staff (63.6%) who used social media for cases reported that it took less than 15 minutes to find relevant information, while 29.9% reported it took 30 minutes, and 6.5% indicated it took over 1 hour.

Association between Client-Related Social-Media Use and Worker

Characteristics—Univariate analyses revealed statistically significant associations between social media use to obtain information about a client and the following variables: agency type, comfort with using social media in general, education level, years in social service, and frequency of working with clients/families victimized by violence, crime, suicide, or child maltreatment (Supplemental Tables S1 and S2). Race, Hispanic ethnicity, age, and gender were not associated with client-related social-media use and were not included in the multivariate logistic regression model.

Results adjusting for the effects of all predictors revealed a strong association involving type of agency (Table 2): persons working in agencies that were involved in substantial legal/investigatory activities had considerably greater odds ($OR = 20.27$, 95%CI 7.89, 52.14) of reporting having used social media to obtain information about a client compared to agencies not involved in substantial legal/investigative activities. Also, compared to workers with 5 years or less years of social service experience, those with 15+ years’ experience had greater odds of obtaining client information from social media ($OR = 3.60$, 95%CI 1.20, 10.81). Workers with some graduate education or a graduate degree had marginally greater odds of using social media to obtain client information than those with a bachelor’s degree or less ($OR = 2.15$, 95%CI 0.88, 5.23). Once adjusted for the effects of other variables, workers’ comfort with using social media (i.e., Facebook, Instagram, Google Search) in general and frequency of working with clients who were victimized by violence, crime, suicide, or child maltreatment were not statistically significant.

How Platforms Were Used—Over one-third of participants (36.4%) reported using social media to acquire current contact/identification information: e.g., full name, address, phone number, ID photograph (Supplemental Table S3). Likewise, 36.4% of participants reported obtaining information about the type and quality of a client's relationships with family or friends. Nearly 30% of participants reported having used social media to obtain an individual's physical location at a specific moment in time. Just over one-quarter of participants (28.6%) reported using social media to collect information related to clients' current and past activities and interests. Smaller numbers of participants reported obtaining information related to clients' demographic information, such as date of birth, sex, and race/ethnicity (18.2%); clients' substance abuse (14.3%); health (10.4%); legal history, concerns, or potential criminal activity (7.8%); information (unspecified in their response) about an event or incident that involved a client (5.1%); or community reaction to such a client-related events (3.9%). Three staff (3.9%) reported leaving messages for clients via social media. Also, a small number of workers (5.2%) specifically reported obtaining information about a client's offender: e.g., birthdate or contact information, threats made to a client. Nine workers (11.6%) provided miscellaneous responses: e.g., "active," "attitudes about agency," "what is being talked about."

Social Media's Negative Effects on Clients and Workers—We were curious to learn about incidents where social media postings created difficulties for both clients and workers. Thirty-eight of the 77 participants who had used social media for obtaining information about a client (49.4%) reported being aware of a situation where a social media posting created difficulty for a client. Of these 38 workers, most (60.5%) reported an instance when a client posted self-incriminating information (Supplemental Table S4): e.g., substance abuse, revenge pornography, prostitution, and possession of firearms. Ten workers (26.3%) described an event where a posting contained negative or hurtful comments about a client or deceased family member. For example:

People badmouthing and blaming her son for what happened to him.

They were making my client's son appear to be a "monster" when in fact he was just severely mentally ill.

Comments can be inflammatory, and families may feel their loved one is portrayed unfairly, or comments are insensitive.

Smaller numbers of participants reported other instances where a social media posting created difficulties for clients: Client received news of a family death via social media before being notified properly by officials (5.3%), misinformation about an event that led to further family trauma (5.3%); and aggressive threats to a client (5.3%). Miscellaneous comments (5.3%) consisted of "they are not public," and "negative opinions about [participant's agency name]."

Of the workers who used social media to obtain information about their clients, 12 participants (15.7%) described experiences with social media posts that they felt made their situation more difficult as a service provider (Supplemental Table S5). Six (50%), indicated that a post made the clients' treatment more difficult to provide: e.g., persons using fake social media accounts to harass the worker; frustration arising from seeing a client posting

at-risk behavior but being unable to locate her; victims of violence engaging in online “back and forth” with perpetrators’ family members; assisting a client whose job-related platform for advertising was utilized as a venue to disturb and manipulate her by another person. Three workers (25.0%) reported being frustrated by postings that criticized their work or their agency. For example:

A father posted on Instagram his perceptions on how his son [client] was unsafe and he tagged several national media sources.

Negative coverage on [agency name] workers.

In addition to these challenges, one worker indicated that “trying to explain how social media is often wrong” made her work with clients more challenging. Another worker described how her work is complicated when families first learn about the death of a loved one through social media:

Insensitive death notification that happens via social media - especially when pictures or video are part of a post - complicates trauma we are treating.

Frequency and Comfort of General Social Media Use—Of the social media platforms listed, the most frequently used platform was Google or Yahoo search engine (96.2%), and it had the highest mean comfort of use rating: mean = 3.7 (SD = 0.8) on the 4-pt scale, with 84.9% of participants indicating they were “very comfortable” using it. The second most-used platform, Facebook, was used by 88.3% of participants; mean comfort of use rating = 3.5 (SD = 0.9), with 67.8% of participants were “very comfortable” using it. In decreasing frequency of use, the remaining platforms were: Instagram with 79.4% use, mean comfort of use rating = 3.1 (SD = 0.9), 53.5% of participants indicating they were “very comfortable” using it; Twitter, with 62.9% use, mean comfort rating = 3.0 (SD = 1.0), with 39.0% of participants “very comfortable” using it; Snapchat, with 50.3% use, mean comfort rating = 3.0 (SD = 1.0), with 39.2% of participants indicating they were “very comfortable” using it; and TikTok, with 46.2% use, mean comfort of use = 2.9 (SD = 1.0), with 39.0% indicating they were “very comfortable” using it. In general, reported use and comfort of use increased hand-in-hand. A small number of other platforms were identified, each used by 1–3 participants: TruePeopleSearch, [Ancestry.com](#), YouTube, LinkedIn, GroupMe, and Bing.

Perspectives about a Social-Media Data-Collection Tool or App

Desired Features and Other Considerations—Participants were asked to consider what features they would like on an easy-to-use app or desktop tool that could help gather client-related information from social media platforms/websites (Supplemental Table S6). Of the 135 participants who provided an answer, the most frequently identified feature was one that would enable workers to identify clients’ current location (19.3%), followed by an “all-in-one” tool that amasses information from multiple sites simultaneously (9.6%), an overview of a client’s previous and current activities, including legal and health-related behaviors (9.6%), ability to find clients’ family and friends (9.6%), provision of real-time, current information (7.4%), the ability to contact clients or send messages (6.7%), and amass client demographic information (5.9%). Less mentioned features involved the ability to

assess validity of data and present valid social media data (5.2%), providing photos or video clips (5.2%), enabling to coordinate and provide resources to clients (5.2%), a “key words” search function (4.4%), help monitor safety of client and worker (3.7%), and inventory all “general/relevant/important” information about a case (3.0%). “Miscellaneous” features (2.2%) consisted of: “I would like the app to be safe and secure with personal information”; “See pictures or words without being identified or blocked”; and “See across different social media platforms what people are saying about a recent incident.”

Posing the question about desired features generated broader considerations about the appropriate use of social media data. For example, 9 (6.7%) participants noted potential issues with the reliability of posted information, with one participant stating, “People do not portray themselves accurately on social media.” As mentioned above, 7 participants specifically highlighted the need for the app to be able to assess validity and weed out unreliable posts. Furthermore, 9 (6.7%) participants raised ethical concerns. For example:

I’m not sure [I would use the app] because I do not want to infringe on individual/personal rights of anyone.

I’m not sure that I would [look at the information], somehow it seems like an invasion of privacy of my clients. If it isn’t information that [they] want to share with me, then I’m not sure that I should be privy to it.

Clients’ awareness of being observed by clinicians via social may influence the nature of what they choose to post, make public.

I think that’s a slippery slope. We don’t encourage direct service staff to search client’s social media sites and [their supervisors] only search them as a 2nd to last resort. Specifically, searching social media is generally the last effort we make prior to calling [law enforcement] to request a ping over concerns for the acute safety of the client.

If a counselor presented in conversation a piece of information collected through social media as opposed to directly from the client in conversation, trust and rapport may be threatened

Perceived Comfort in Using the Social-Media Tool—Participants’ ratings of their comfort level with viewing social-media-derived information about their clients ranged widely: 26.8% indicated they would be “very uncomfortable,” 27.4% “somewhat uncomfortable,” 25.6% “somewhat comfortable,” and 20.1% “very comfortable.” Fourteen participants (10.4%) stated outright that they would not use such an app, and an additional 22 (16.3%) indicated they were not sure about using the app. When disclosed, the explanation for not using or uncertainty about its use was largely for the ethical and reliability considerations described above.

In light of these considerations, two participants indicated that an important feature of the tool should be to notify clients that their social media postings are being monitored or offer clear directions for clients to block people and turn off their location (Supplemental Table S6). A third participant suggested implementation of a policy of transparency: clients could

be notified of the agency's use of social media data when they consent to receive services so that they could adjust privacy settings accordingly. This participant also suggested that the tool could perhaps abstract and synthesize information in a manner that would preserve some aspects of privacy yet provide potentially useful information:

It might be helpful if a software could filter through different social media platforms and provide any relevant information that indicated what topics clients might be sensitive to as a means of enhancing our provision of trauma-informed care. For example, if a public social media profile indicated that the client experienced a particularly painful relationship, family history of trauma, was in foster care, witnessed or survived someone lost to suicide, etc., then awareness of and sensitivity toward these issues may help us to avoid inadvertently triggering a stress response while engaging clients. With respect to client privacy, this information would need to be handled delicately and relayed to counselors vaguely, perhaps by checking a box that notified the assessing counselor that, "social media indicates that client has experienced trauma related to upbringing" or "client recently posted status indicating potential SI [suicidal ideation]." Balancing non-invasiveness and collaterally-granted knowledge would be challenging, but if done with respect for the client's rights at the forefront, this could potentially be a helpful tool.

Trusting the Informatics Platform's Social-Media Derived Data—In response to the question to rate their trust of the information gathering tool (4-pt. scale from 1 = "not at all" to 4 = "a lot"), the average rating was 2.6 (SD 0.8). Eleven percent of participants reported they would trust the tool "not at all," 26.8% "a little," 52.4% "some," and 9.8% "a lot." When asked how their trust of the information might be increased, 27.5% of the 91 participants who provided a response included the statement that self-reporting is not always reliable (Supplemental Table S7). Regarding approaches to increase trust, 30 (33%) participants indicated that having a way for the user to verify that the tool was working correctly to produce up-to-date information would increase trust. Eight of these individuals specifically suggested the user's ability to quickly access the reference information being amassed and its source. According to these individuals, they would then be able to make their own determination of the information's veracity.

Twelve individuals (13.2%) identified security features that they indicated would enhance trust: ensuring that searches were private, password protection, 2-step authentication, maintaining protection of worker's personal information, and having the tool's use limited to agency workers (i.e., not publicly available). Nine individuals (9.9%) identified other features that would enhance their trust: knowing if those who post are personally connected to the client or merely persons with opinions; easily accessible, user-friendly support system and availability of additional training; and documentation/reviews about the tools' functions.

Eleven participants (12.1%) indicated their trust of the information would be enhanced if ethical considerations were adequately addressed: i.e., appropriate policies were approved and in place regarding the tool's use to protect clients' privacy, limitation of the tool's use to work purposes only, client's understanding and consent regarding how and why information

is being collected. One participant also added the inclusion of a feature that allowed a client to disable the tool if desired.

Eight individuals (8.8%) reported that their trust of the information would increase if they knew more about the tool's developer: if creation of the tool was not motivated by financial gain, whether the developer is selling user's information to a third party, no advertising, developer's impartiality, credibility, and intentions for the tool.

Associations between Worker Characteristics and Perceived Comfort Using the Social-Media Tool—Univariate analyses revealed statistically significant associations between workers' level of comfort using the social media tool and the following variables (Supplemental Tables S8 and S9): degree of trust in the information that the tool would collect, worker's use of social media to obtain information about a case, agency type, and Hispanic ethnicity. Worker education, gender, age, race, number of years working in social services, frequency of working with clients affected by violence, suicide, and child maltreatment, and level of comfort using social media platforms in general were not significantly associated with worker's level of comfort with the tool and were not included in the multivariate logistic regression model. Lack of variation in the study outcome by Hispanic ethnicity (i.e., all persons indicating Hispanic ethnicity also indicated comfort in using the tool) precluded further analyses using this variable.

Results of the logistic regression showed that after adjusting for the effects of other variables in the model, workers' level of trust in the information collected by the app showed the strongest association with comfort of using the tool: workers who reported trusting the info "some" or "a lot" had nearly four times the odds of reporting comfort using the tool, compared to those who indicated they would trust the information "not at all" or "a little": OR = 3.86, 95%CI 1.82, 8.22 (Table 3). Also, persons working in agencies involved in substantial legal/investigatory activities had over three times the odds of reporting being comfortable with using the proposed tool compared to workers in other agencies: OR = 3.31, 95%CI 1.39, 7.89. After adjusting for the effects of agency type and trust in the information collected by the tool, whether workers used social media to collect client information was not statistically significant.

Discussion

The purpose of this study was to capture how staff across a range of human-service agencies and organizations are currently using social media in their role as social service providers, potential challenges and benefits they have experienced using social media, and their initial thoughts about an informatics platform that used social media data to provide them additional contextual information to help them in their work. Approximately, half of the surveyed participants have used social media to collect information about clients, with nearly one-quarter indicating "often" or "nearly daily" use. This information is congruent with reports from a 2021 national survey of over 3,300 US child welfare professionals (Long et al., 2021), a 2020 survey of 3,000 US and Canadian social workers (Mishna et al., 2021), as well as a 2015 study of 171 child welfare workers from a total of 8 US states (Sage &

Sage, 2016), where one-third to approximately one-half of workers indicated that they use social media for client-related purposes.

To our knowledge, this study *is the first to identify factors related to using social media for client-related purposes that adjusts for the effects of other factors*. Our findings showed that adjusting for the effects of a range of worker characteristics, using social media to collect information about clients was strongly associated with the type of agency involved: workers were much more likely to use social media in this fashion if they were employed in an agency substantially involved with legal/investigative work. Participants with longer tenure in social services were also more likely to obtain client information through social media. Our findings are congruent with a qualitative study that reported child protection workers (who could be considered to work in an investigative/legal field) were more comfortable using a social media platform to search for client-related information than were workers in agencies providing mental health services (Ryan & Garrett, 2018). Findings from another large, bi-national survey of social workers also indicated that more experienced workers are more likely to use social media than their less-experienced counterparts (Mishna et al., 2021). The reasons for this observation are unclear. Perhaps with increased experience, workers increasingly desire to use all tools within their grasp. Perhaps the difference in use reflects differences in position or responsibility within an agency or organization, which has been reported in the literature (Long et al., 2021) but necessitate data which our study did not collect to preserve participant anonymity.

Facebook was the most frequently used platform for work purposes, followed by Instagram. Workers were most frequently using social media to obtain contact or identification information and current location of clients, and to a lesser degree, information about clients' activities. As with our study, across the literature, common reasons for workers using these data were for locating clients and for obtaining specific information regarding a client's case or circumstances (Breyette & Hill, 2015; Cooner et al., 2020; Long et al., 2021; Ryan & Garrett, 2018; Sage et al., 2017; Sage & Sage, 2016) and Facebook and Instagram were the most commonly used platforms (Long et al., 2021; Sage & Sage, 2016).

Participants in our study who reported using social media for work related situations described situations where social media made circumstances more difficult for clients and for the workers themselves. Regarding difficulties for clients, this typically involved workers observing client self-incriminating behaviors (from the workers' perspective) or situations where a client had to deal with hurtful and in some cases potentially retraumatizing posts. For workers, harassment or criticism of their work and/or agency by clients via social media posts, frustration with not being able to intervene when observing a client engaging in 'at risk' behavior, as well as trying to correct misinformation or improper information (e.g., family member learns about a death of a loved one via social media) clients received from social media postings made the workers' service provision more difficult. Worker uncertainty about what to do (if anything) in response to client posts, and frustration over inability to respond in situations where a client is exhibiting at risk behavior in a post have been previously reported (Breyette & Hill, 2015). Clients' posts voicing frustration with agency workers and harassment of workers from clients via email messages has been reported in the literature (Breyette & Hill, 2015; Sage & Sage, 2016). Our study suggests

these types of messages have expanded to other social media platforms. Moreover, our findings highlight the particular challenge that social service workers face when working with clients who are dealing with cruel, hurtful and in some cases potentially retraumatizing posts. This is an area that merits further investigation.

The literature has documented workers' concern with the appropriateness of using social media data about their clients (Mishna et al., 2021; Ryan & Garrett, 2018). Opinions vary; while some workers indicate that publicly available information should be used, others indicate such information should not be used for a range of reasons, including loss of client privacy, blurring of boundaries between client and worker, and potential risk to the collaborative or therapeutic relationship between a client and worker (Cooner et al., 2020; Mishna et al., 2021; Nordesjo et al., 2022; Ryan & Garrett, 2018; Wardi-Zonna et al., 2020). In our study, participants' ethical concerns and divergence of opinion about using social media information emerged most strongly in their responses to questions about their comfort with using a tool developed to collect this information: nearly equal numbers of participants endorsed each option across the entire spectrum of responses (from "not at all comfortable" to "very comfortable"). As might be expected, our quantitative analyses indicated that comfort level with using such a tool was greater in those agencies substantially involved with the investigative/legal work; it is the workers in these same agencies who are more likely to be using social media now. Yet, compared to agency type, trust in the information collected by the tool was a stronger, independent predictor of comfort using the tool.

Study Limitations

Study limitations should be noted. First, the participation rate was low, which may have decreased the representativeness of the sample. For example, perhaps individuals who use social media were more likely to participate, thereby giving an inflated sense of the degree of use. A second limitation arose from the desire to protect the anonymity of participants, which was urged by service staff who assisted in the survey development. Our actions to protect anonymity precluded collecting information about an individuals' specific positions in the agencies as well as conducting analyses stratified by agency. Future research to collect information from a number of agencies across multiple sites might allay these concerns. While no one was being asked to report behavior contrary to their agency policies, it is possible that some individuals might have been concerned about reporting behavior contrary to professional codes or standards: e.g., the National Association of Social Workers Code of Ethics provision indicating that information should not be collected electronically without the consent of the individual (Code of Ethics, 2021).

Conclusions

Our study indicated substantial use of social media to collect client-related information by social service workers across a number of agencies. This finding speaks to the need for agencies and organizations to clarify (or formulate if not yet created) policies around this use of social media in order to guide their workers.

Our study also revealed substantial diversity of comfort level with the idea of a tool to help amass client-related information. Study findings suggest that if such a tool is to be

created, work in this direction must be done carefully, with full consideration of the ethical issues rightly raised by social service workers, agency policies in place, and established professional standards (Code of Ethics, 2021; Reamer, 2013; Sage & Sage, 2016). In this regard, the suggestion of one worker—aware of both the ethical issues and potential utility of social media information in what could be critical aspects of a case—to find a middle ground, where an informatics platform provides a type of general alert to the user while not compromising privacy may be a fruitful area of future research.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1.

Sample Characteristics (n = 172 unless otherwise noted).

Demographic characteristics	Mean ± SD	Frequency	%
Age (n = 165)	43.4 ± 11.87	–	–
Gender (n = 170)			
Male		34	20.0
Female		135	79.4
Nonbinary		1	.6
Education (n = 170)			
HS diploma/GED		3	1.8
Some college		9	5.3
Associates degree		7	4.1
Bachelor's degree		63	37.1
Some graduate work		22	12.9
Master's degree or higher		66	38.8
Race (n = 168)			
African American/Black		63	37.5
White		92	54.8
Asian		5	3.0
Bi- or Multi-racial		8	4.8
Hispanic ethnicity (n = 74)		7	9.6
Agency & work experience			
Agency type			
Substantial legal/investigative work		72	41.9
Not substantial legal/investigative work		100	58.1
Years involved in social service work			
<1 year		11	6.4
1–3 years		22	12.8
4–5 years		19	11.0
6–9 years		27	15.7
10–14 years		31	18.0
15–19 years		20	11.6
20+ years		42	24.4
Frequency of working with clients who are victims of violent crime, suicide, child maltreatment (n = 164)			
<once a month		19	11.6
Couples of times a month		22	13.4
At least once per week		17	10.4
Most or every day		106	64.6

Table 2.

Adjusted logistic regression model: Associations between use of social media to obtain client-related information and predictor variables (n = 153).

Predictor	Odds ratio	95% CI	P-value
Frequency of working with clients/families victimized by violence, crime, suicide, child maltreatment	0.97	0.66, 1.43	.88
Agency type			
<i>Ref=does not involve substantial interaction with criminal justice/legal system</i>			
Substantial legal/investigative tasks	20.27	7.89, 52.14	<.001
Education			
<i>Ref=Bachelor's degree or less</i>			
Some graduate work or graduate degree	2.15	0.88, 5.23	.09
Years in social service			
<i>Ref = 0–5 years</i>			
6–14 years	2.30	0.77, 6.87	.14
15 or more years	3.60	1.20, 10.81	.02
Comfort with social media use in general	1.37	0.90, 2.10	.15
Constant	.017		

Note: Ref = reference category. 95% CI = 95th percentile confidence interval.

Table 3.

Adjusted logistic regression model: Associations between degree of comfort using an app or tool to obtain client-related social media data and predictor variables (n = 163).

Predictor	Odds Ratio	95% CI	P-value
Worker has used social media to obtain information about a client			
Ref = no			
Yes	1.11	0.47, 2.63	.87
Agency type			
Ref = does not involve substantial interaction with criminal justice/legal system			
Substantial interaction with criminal justice/legal system	3.39	1.43, 8.05	.006
Level of trust in the information provided by the tool			
Ref = "not at all"/"A little"			
"Some"/"A lot"	3.94	1.86, 8.36	<.001
Constant	.214		

Note: Ref = reference category. 95% CI = 95th percentile confidence interval.