Original Research

"It's Hard to Show Empathy in a Text": Developing a Web-based Sexual Assault Hotline in a College Setting

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Abstract

To increase access to counseling and advocacy services and respond to changes in communication preferences, many victim service programs are expanding their traditional telephone hotlines and adding web chat or text hotlines. However, there is little research available about these web and text-based hotlines. We examined program data collected in the first year of operation of a web-based crisis hotline for sexual assault survivors at a large Midwestern university in the United States as part of a larger evaluation project. We examined how often the web-based chat hotline was used and explored patterns of use by time of day and month, comparing to records from the phone hotline operated by the same campus-based victim service program. We also conducted interviews and two group discussions with volunteers and staff about their experiences with providing crisis intervention in a web-chat medium. Findings suggest that the web-based crisis hotline is being used frequently, nearly as often as the telephone hotline and doubling the total number of crisis contacts the organization had in the year prior to adding the web-based chat hotline. Staff and volunteers identified a number of advantages of a web-based hotline, including increased privacy

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and accessibility for survivors. Difficulty identifying and conveying emotions in the web-chat context was one of the primary challenges described by staff and volunteers. Operating the web-hotline, therefore, requires additional training for volunteers and staff on how to translate crisis intervention skills into a text-based medium. Suggestions for how to communicate effectively in text-based crisis intervention are discussed, along with other considerations for designing a web or text hotline.

Sexual assault can lead to a range of adverse outcomes including depression, post-traumatic stress disorder, anxiety, injuries, and other health complications, as well as have harmful effects on relationships, reduced educational performance, and lower lifetime earnings (Campbell et al., 2007; Dworkin et al., 2017; Jina & Thomas, 2013; Peterson et al., 2017; Ullman et al., 2007). Despite the demonstrated benefits of counseling and advocacy, survivors of sexual assault rarely seek out support from victim service programs (Brooks & Burman, 2017; Campbell, 2008; Sabina & Ho, 2014; Wasco et al., 2004). This is especially true on college campuses where only 15.8% of survivors seek support from formal services, such as criminal justice systems, health care providers, campus safety or conduct offices, and counseling resources (Krebs et al., 2007; Sabina & Ho, 2014). Some victim service programs have begun offering web and text-based crisis hotlines in an attempt to make their services more accessible to survivors. In response to an increasing preference for text communication especially among young people, web and text-based hotlines create new avenues for seeking support that align more closely with contemporary communication trends (Skierkowski & Wood, 2012; Smith, 2011; Smith & Anderson, 2018). Despite growing interest in these alternative hotline modalities, there is little research to help guide programs in their decision to invest resources in offering an online hotline, nor effective practices in internet-facilitated crisis intervention.

Literature Review

Sexual Assault Help-seeking

Most survivors seek support from friends and family, with up to 96% disclosing to an informal support person at some point over the course of their life

(Jacques-Tiura et al., 2010). College students most frequently disclose to friends and somewhat less often to family, although their disclosures are not always immediately after the assault (Sabina & Ho, 2014). The outcomes of these disclosures vary, and when friends or family have negative responses, such as engaging in blaming or controlling behaviors, survivors can experience an exacerbation of trauma symptoms or other negative psychological outcomes (Orchowski et al., 2013; Ullman & Peter-Hagene, 2016). Interactions with formal supports, including law enforcement, health care, and other systems, are both less frequent and more fraught, with many survivors describing these interactions as a second victimization that left them feeling distressed, frustrated, distrustful, and reluctant to seek further help (Campbell, 2005; Campbell & Raja, 2005; Konradi, 2007). On college campuses, a review of research found that only 3%-20% of survivors use any formal services either on or off campus (Sabina & Ho, 2014).

Therapy and advocacy, however, especially when provided by victim service programs in the community, decrease survivor distress and self-blame, increase sense of control and self-efficacy, and are even associated with better treatment by other formal service providers (Campbell, 2006; Howard et al., 2003; Wasco et al., 2004). Yet, college student survivors rarely seek out these counseling and advocacy services (Sabina & Ho, 2014). When asked, survivors in campus and non-campus settings say they did not utilize services for reasons including shame, fear of being blamed, and concerns about their privacy and confidentiality (Carson et al., 2020; Holland & Cortina, 2017; Spencer et al., 2017; Wood & Stichman, 2017). Other research in the campus context suggests that the decision to seek help is dependent on whether survivors see services as available, affordable, accessible, acceptable, and appropriate (Holland & Cortina, 2017). In other words, survivors consider what they know about available services on or off campus and determine whether they believe those services are likely to meet their needs in an acceptable manner. Low rates of help-seeking may suggest that services are not always considered accessible, acceptable, or appropriate by survivors, and therefore that victim service programs can increase help-seeking by improving the fit of services with what survivors find appealing.

Web and Text-based Hotlines

Internet communication technologies, such as texting and messaging, have opened new avenues for anti-sexual violence advocates to connect with survivors. Texting and messaging have become increasingly comfortable modes of communication, particularly among adolescents and young adults who are both most likely to engage in texting and show greater preference

for texting over voice-based communications (i.e., telephone; Bradbury, 2018; Lenhart et al., 2015; Skierkowski & Wood, 2012; Smith, 2011; Smith & Anderson, 2018). Responding to the shift toward preferring text communication, the Rape, Abuse, and Incest National Network (RAINN) began offering an online web-chat hotline for survivors of sexual violence in 2006 (Finn & Hughes, 2008). Other nationwide text hotlines, such as Crisis Text Line, are frequently used by those experiencing suicidal thoughts (Thompson et al., 2019).

A meta-analysis of 64 studies about internet therapeutic services, including synchronous and asynchronous services delivered via website, email, forum, and chat, found no differences in the effectiveness of face-to-face services and internet-mediated services, suggesting that the provision of support and therapy can be effectively done over the internet (Barak et al., 2008). Of the limited research on web-based hotlines, much of it is exploratory and not rigorously designed (Dowling & Rickwood, 2013). However, some studies suggest that online hotlines might be an effective means of addressing issues like suicidal ideation (Gilat & Shahar, 2007) and veteran's concerns (Predmore et al., 2017). An evaluation of RAINN's online hotline found that, overall, 72% of clients were highly satisfied with the experience, with 85% of clients rating the service as easy to use and 74.4% saying they would recommend the service to others (Finn & Hughes, 2008). However, 27% of these hotline sessions included technical difficulties, mostly linked to server functionality issues. Clients also said they were highly satisfied with the volunteer advocate (70%) and intended to use the referrals they were provided (65%), suggesting that online hotlines might be an important tool in connecting survivors to support services (Finn & Hughes, 2008). To our knowledge there is no research that specifically examines online hotline use by college student sexual assault survivors.

Preliminary research has identified numerous benefits of web and text hotlines, including increased confidentiality in public/shared settings, ease of typing vs. speaking about problems, as well as being more accessible than a telephone hotline (Evans et al., 2013; Predmore et al., 2017; Thompson et al., 2019). Some challenges have also been identified, including technology and security concerns (Finn & Hughes, 2008; National Association of Social Workers [NASW], 2017), and the absence of verbal cues to indicate context/ meaning (Navarro et al., 2020; Predmore et al., 2017; van Dolen & Weinberg, 2019). Finally, research has shown that phone and web-based hotlines may capture different populations of clients. For example, some research shows that web-based hotline users have higher levels of suicidality (Gilat, & Shahar, 2007; Predmore et al., 2017). National online hotlines are frequently used access points for support and resources, perhaps because they are a safe,

anonymous "landing pad" for those considering seeking formal support (Feeney, 2019, p. 69). Less is known, however, about the feasibility and demand for these hotlines at local community-based or campus-based victim service programs.

The web-based hotline described in this article is offered by a sexual assault survivor support and advocacy program (hereby referred to as the Support and Advocacy Center, SAC) at a large, Midwestern public university. SAC is a well-established victim advocacy program that has existed for more than 20 years. It offers a 24-hour telephone hotline, group and individual therapy, and advocacy for survivors navigating criminal justice or university discipline systems. SAC provides support to well over 500 survivors each year, a number which has been increasing in recent years. The web-based hotline, launched in August 2018, is accessed through the SAC's webpage and is available from 10 am to 10 pm. The interface is familiar and intuitive to users of text, chat, and messaging platforms, and is optimized for use on mobile devices. As part of a formative evaluation of the web-based hotline, we collected a range of data about the program, including call/chat logs completed after each telephone and web-based hotline interaction, stakeholder interviews with staff and volunteers who answer both hotlines, and observations of program staff and volunteer meetings. In particular, we monitored the web-based hotline in its first year to assess: (a) How often the web-based hotline was used? (b) How the web-based interactions were similar or different from telephone hotline calls (e.g., in length, time of day)? (c) The perspectives of volunteers and staff implementing the web-based hotline related to the benefits and challenges of offering a chat service, as well as the strategies they use to adapt services to the chat modality.

Methods

Sample

Call/Chat logs.

After each and every telephone hotline call and web chat, the volunteer or staff member completed a form logging details of the call or chat. We reviewed completed logs from all telephone and web hotline interactions from October 2018 through September 2019 ($n = 393$), the first year that the web-based hotline was fully operational. We also reviewed agency records gathered from these call logs in 2017-2018 to determine the number of hotline telephone calls in the year prior to the chat service's debut in order to contextualize the number of calls and chats in the first year the web-based hotline was offered.

Stakeholder Interviews.

The SAC volunteer supervisor forwarded an invitation to participate in an interview to the pool of active volunteers, which usually averages around 50 volunteers. Not all volunteers take shifts on the web-based hotline, as some prefer the telephone hotline or providing support to survivors at in-person events. In order to reach the volunteers with the most experience on the web-based hotline, the volunteer supervisor also consulted her records and reached out directly to the volunteers who had completed the most shifts on the web-based hotline to ask if they would be willing to participate in an interview. The research team also directly emailed SAC staff on the subcommittee that had designed and overseen implementation of the web-based hotline. All four staff members involved in the planning and implementation of the web-based hotline and five volunteers who were most active on the web-based hotline agreed to be interviewed (total $n = 9$).

Observations.

SAC invited the research team to observe program meetings relevant to the web-based hotline. The first author, and sometimes additional members of the research team, attended portions of volunteer training (totaling 10 hours), two continuing education meetings with volunteers focused on the web-based hotline (each 90 minutes), and four staff meetings focused on coordination of the web-based hotline (each about an hour long).

Procedures

Call/Chat Logs.

SAC volunteer supervisor created copies of all call and chat logs and removed any identifying information. These de-identified copies were transferred to the research team regularly (about monthly). Information from the logs was entered into a spreadsheet for analysis.

Interviews.

To recruit staff and volunteers for interviews about their experiences with the web-based hotline, the research team sent email invitations. Those who expressed interest in participating in an interview were emailed further information about the study, including an informed consent document which was discussed and signed prior to the start of the interview. Interviews took place in person, generally in the first author's office or at the SAC offices. All interviews were recorded and transcribed, with identifying information removed from the transcripts in order to protect the confidentiality of the participants. Interviews lasted from 36-76 minutes, with most being approximately an hour long.

Observations.

SAC staff and the first author reviewed meeting schedules to identify meetings that were likely to focus heavily on the web-based hotline or be instructive about the program's underlying logic and philosophy. At each observation, SAC staff introduced the research team who provided a brief explanation of the research and informed consent.

All data collection methods were reviewed by the [Michigan State University] human subjects review board.

Measures

Call/Chat Logs.

From the logs, we retrieved the following information: date and time of call/chat, duration in minutes, and caller/chatter demographics when available including gender, type of victimization (adult sexual assault, intimate partner violence, child sexual assault, or other), and whether caller/chatter was a survivor, friend or family, or someone else. We also gathered information about the type of services provided (referrals, information about criminal justice, safety planning), and whether there were any technical problems with the call or chat. Technical problems are defined as any unexpected disconnection of a call or chat, which could include a caller hanging up, a chatter no longer responding to chats, a lost internet connection, or malfunctioning software or equipment. These unexpected disconnections are grouped together, as it is not always possible to know the reason for an abrupt ending to a call or chat. Finally, there is a section of the form that allows volunteers to write a brief summary of the call/chat. We reviewed all of these written comments for common themes and indication of services provided.

Interviews.

The semistructured interview included questions about the staff or volunteer's history with the program, their thoughts on the benefits of operating a web-based hotline, perspectives on the challenges of such a hotline, and perspectives on how providing support in a web chat differs from telephone or in-person support. The research team followed the lead of the interviewee, asked probing questions, and asked for specific details or examples to draw out additional detail in each interview.

Observation.

During meetings, the research team took notes using a field note template with space for description of the meeting, and columns for descriptive notes (i.e., the content of the conversation) and reflective notes (i.e., researcher

comments, questions, and thoughts). No information that would identify participants in the meetings was recorded. For this analysis, we reviewed notes from discussions related to the benefits and challenges of the web-based hotline and skills used to facilitate web-based crisis intervention.

Analysis Plan

All quantitative data derived from the call/chat logs was entered into SPSS (version 26) for analysis. First, we conducted descriptive analysis in order to assess the number of calls and chats. Next, we conducted comparison tests to compare hotline calls and web-based chat interactions, using *t*-tests or an equivalent nonparametric test such as a Mann-Whitney U-test, as appropriate given the distribution of the data. We used listwise deletion to account for missing data. Most variables had limited missing data (i.e., less than 5% missing); however, two variables had more missing cases and correspondingly lower sample sizes after accounting for listwise deletion, including safety planning ($n = 347$), and whether the caller/chatter was a survivor, friend/family, or other type of caller ($n = 336$).

Interview and observation data were analyzed in Dedoose, using principles of thematic coding (Braun & Clarke, 2006). Thematic coding is a flexible method which involves careful coding of the data to identify patterns or themes. After transcribing and reviewing the data, the first and second author developed a preliminary list of codes based on the interview guide, familiarity with the data, and the goals of the larger evaluation project. For example, there were codes for benefits of the web-based hotline, challenges of the web-based hotline, differences between the phone and web hotlines, and one for specific techniques for providing support in a chat setting. The second author then coded the data using this codebook, with frequent consultation and review by the first author. After the data were coded, the first and second authors reviewed all of the excerpts assigned to each code in order to identify the patterns, or themes, within each broad code. For example, excerpts coded as describing the benefits of a web-based hotline were further categorized into themes such as the benefits of increased privacy for chat users, flexibility for providers responding to chats, and chat user's increased control over the pacing and content of the conversation. The dataset was reviewed multiple times during this iterative process to check that the identified themes for each code were consistent with the data.

Results

To answer our first research question about how often the chat service was used, we examined the number of chats, which we compared to the number

of hotline calls in the previous and concurrent year to provide context. In the first year of the web-chat operation (October 2018-September 2019), there were 173 web-based chat sessions and 220 hotline calls for a total of 393 contacts across the two modes of hotline delivery, nearly double the previous year total of 200 hotline telephone calls.

Next, we examined characteristics of the chat users and content of the interactions, comparing with hotline calls when relevant (see Table 1). The majority of the chats were initiated by survivors (66.9%), with a smaller number of contacts made by friends or family of the survivor (14.0%). Most chatters had experienced sexual assault as an adult (59.5%). The next most common categories of victimization included adults who experienced sexual abuse as a child (6.4%) and adults who experienced domestic violence (5.8%). In 22.4% of chats, the chatter disclosed that they were a student at the university, but in 63.5% of chats the student status of the chatter was unknown. The proportion of chatters where gender was marked as "not reported" was higher in chats compared to hotline phone calls (X^2 = 129.55, p < .001), though both services were used more frequently by women than men (with very few contacts specifically noting other gender identities). In 37.6% of chats and 40.8% of hotline calls, the user was referred to a victim service organization for additional services, which includes the SAC's counseling and advocacy services. Other kinds of referrals, such as homeless shelters and suicide hotlines, were made in 17.3% of chats and 24.8% of hotline calls. A higher proportion of hotline calls than chats included safety planning (23.4% of calls compared to 9.2% of chats, X^2 = 12.46, p < .001). There were significantly more unplanned disconnections, which can indicate technological issues or someone ending the interaction without warning, on chat (23.7%) than the telephone hotline (15.1%), (X^2 = 4.70, p < .05). In 5.8% of chats and 5.9% of hotline calls, the advocate suspected the chat/call was a prank, obscene, or otherwise inappropriate.

We also examined and compared duration of chat and hotline interactions, as well as patterns of usage over time (both time of day and time of year). A Mann-Whitney U-test was conducted to compare the distribution of phone and chat interactions by duration of the interaction in minutes. Chat interactions were significantly longer (Median = 13, Range = 1-180) than phone interactions (Median =10, Range = 0-120), U = 22397.0, p < .01. Figure 1 depicts the number of chats and calls by time of day. During the hours the chat service was available (10 am-10 pm), there were the same or more chats than hotline calls in each four-hour period. Figure 2 shows the number of chats and calls by month. In the initial months of chat (Fall semester), there were more hotline calls than chats, but by Spring semester the numbers of chats and calls became more similar with some months having more chats and some having more calls.

Table 1. Percentage of Chats (*n* = 173) and Hotline Calls (*n* = 220).

	Chat	Hotline
Chatter/Caller Type		
Survivor	66.9%	68%
Friend or family member	14%	22%
Other (e.g., professional)	19.1%	10%
Victimization Type		
Sexual assault as adult	59.5%	57.7%
Sexual abuse as child	6.4%	14.1%
Domestic/dating violence	5.8%	14.1%
Chatter/Caller Demographic		
University student	22.4%	18.8%
Nonstudent	14.1%	41.8%
Unknown student status	63.5%	39.4%
Gender—Man	7.0%	20.7%
Gender—Woman	16.9%	61.0%
Gender—Not reported	75.6%	18.3%
Chat/Call Content		
Provided Info on criminal justice	1.7%	12.4%
Referral to victim services	37.6%	40.8%
Referral to other services	17.3%	24.8%
Safety planning	9.2%	23.4%
Unexpected disconnection	23.7%	15.1%
Suspected prank, obscene or inappropriate chat/call	5.8%	5.9%

Source:

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Our third research question centers on staff and volunteer perspectives on the benefits of the chat service, challenges of providing support in a web-based medium, and their strategies for optimizing crisis intervention via chat. Staff and volunteers saw a number of benefits of the chat service. For example, they explained that chat allows for increased privacy as users could reach out during class, with a roommate in the room, without anyone overhearing or even knowing that they were chatting with a crisis hotline. One staff member explained,
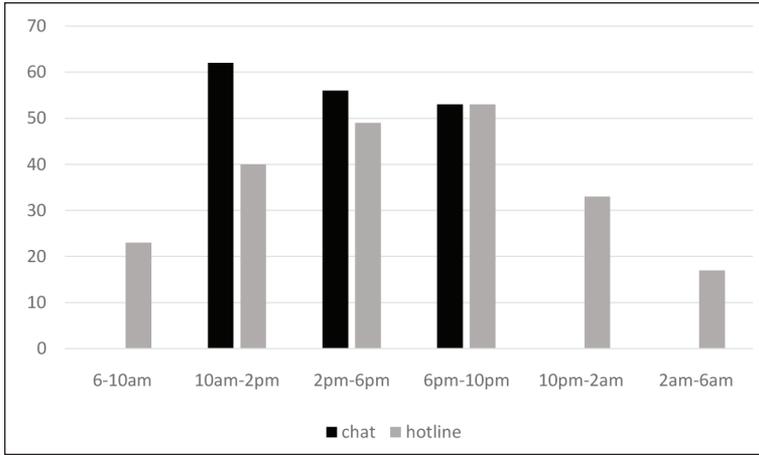
Figure 1. Number of chats (*n* = 171) and hotline (*n* = 216) calls by time of day.

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Note. Chat service was only in operation from 10 am-10 pm. Hotline was operated 24 hours a day.
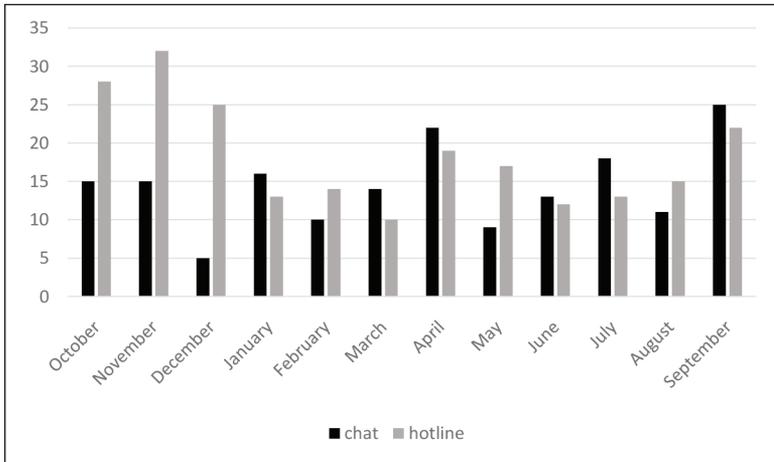
Figure 2. Number of chats (*n* = 173) and hotline calls (*n* = 220) by month.

Source:

Note. Chat was not in operation over the semester break beginning in mid-December through the first Monday in January.

> Certainly our hotline is anonymous, but there's even bigger anonymity, I think, when nobody hears your voice. Also, when you're a student and you share a dorm room with somebody, or you are around people all the time, a phone is less anonymous because people can overhear you.

Volunteers also explained that this same privacy and ability to interact via chat regardless of others' presence to be a benefit for them as well, as it allowed them to respond quickly even when around other people, while still maintaining privacy and confidentiality. Others noted as a benefit that the written, chat format allows survivors more control over how they present themselves. For example, they can take the time to write out their full story, they can take time to think and reflect, or take a break from the chat if the conversation is intense. Others suggested that it might be easier to type things that are difficult to verbally express.

Staff and volunteers also identified some challenges to providing crisis intervention support by chat. Staff and volunteers noted that in the absence of vocal cues (e.g., tone of voice, pauses), it can be difficult to read the chatter's emotional state. One volunteer described how a lack of nonverbal cues limited their ability to infer a chatter's emotional state by saying

> You can't hear emotion in a text message, right? There is always just this ambiguous... it could be read this way, but it also could be read this way, so not knowing if you're crying on the other side is a big deal. If someone is crying, obviously you're going to go and comfort that and deal with that.

At times, this left them feeling unsure about whether they were accurately understanding the chatter's needs or responding to their level of emotionality. One volunteer described their uncertainty:

> Am I hearing what they're saying? Am I responding back in a way that they're wanting to hear? What are they really needing? Because there's just so much obscured when you don't have tone of voice, and it's not a back and forth conversation is the same way that phone is immediate.

Though the volunteers acknowledged that survivors may find it appealing to have the ability to mask their emotions in chat, they saw the difficulty of reading emotions over text to be a barrier to building rapport and providing support.

Staff and volunteers also explained that they similarly had difficulty expressing empathy and connecting by chat. As one volunteer said, "it's hard to show empathy in a text." Typical rapport building skills like reflection felt more artificial and formal in writing. One experienced staff member lamented,

"I have this voice that I use on the [telephone] crisis line that I can't use. It feels like starting over from scratch." Volunteers expressed concern that chatters might "think we're robots" if their chats felt too stiff. The slower pace of chat (in which the user waits until they have composed a complete thought before conveying it to the other user) means that there is a delay of variable length where there is no feedback about how a message was received. This silence sometimes caused anxiety in volunteers as they wondered whether their response had been helpful to the chatter.

Another challenge in chat was that some communications are very dense, introducing a number of topics or questions. Choosing which thread to address and keeping up with multiple topics was difficult at times; one volunteer described how their response was delayed when a chatter sent "multiple [messages] at a time. So, I had to try to read through them first and then try and figure out what they were saying so that I could say something back." Volunteers and staff described feeling more pressure to say exactly the right thing over chat. On the phone, the pressure is to say something in a timely manner, but the slower pace of chat means that volunteers felt they could take a little more time to compose the perfect response. Volunteers both saw this as a challenge (overcoming perfectionism) and a benefit (having more time to be thoughtful in their responses). Others described the slower pace of chatting to be a barrier because it limited their ability to respond in the moment:

> At least on the phone you can say I understand. I can hear you. Keep going. Just reassuring words that you're still there and you're still listening to them. But, with the text I have to wait till they actually send [a message] and I'm like, okay, let me read through this.

Staff and volunteers shared their strategies for managing these communication challenges. For example, to counter the robotic feeling of communication via chat, volunteers described deliberately using informal language to seem more human, including using more casual words like "nope" instead of "no," and using exclamation points, or even double exclamation points. Others described composing their response verbally, and then typing exactly how they would speak in order to make their language feel more genuine and less formal. Similarly, others would read their written response out loud before sending it to better assess how it would sound to the chatter. One volunteer described this:

> I try and read my responses back before I send them and make sure that it sounds like me talking and not me writing an email... because then it's more of an informal conversation that you're having, whereas if you're writing an email, it's structured and very rigid.

A staff member also explained how they sometimes will acknowledge that communication over text is awkward, telling the chatter "This is going to be awkward over chat. If there's anything that you think I'm not picking up on, let me know." By pre-emptively commenting on the potential for communication to be ambiguous, this staff member hoped to make it easier for both parties to ask for and offer clarification and enhance the quality of the communication.

The chat workers have the ability to use pre-generated short cuts for common situations, such as sharing common resources. These shortcuts were frequently noted as having the potential to seem stiff and impersonal. Volunteers described ways they personalized these shortcuts, including altering the text to be more specific to the chatter's unique situation, sending an original short summary first and offering to send the more detailed script if desired, and prefacing the shortcut with a message indicating that they were going to cut and paste some information to acknowledge the change in tone. Others consciously asked chatters a question about their emotional state before cutting and pasting resource information in an attempt to open space for deeper discussion in the event that a chatter asked about a concrete question because it seems easier than to raise a more emotionally laden topic.

Volunteers and staff talked about matching language and tone in chats, including formality of language, length of messages, and specific use of language. Chat workers talked about the importance of asking whether they understood the chatter correctly and described using more frequent checking in comments than they typically use over the phone. When encountering extended silence on chat, volunteers described sending gentle messages like "Take all the time you need" and "I'm still here if you'd like to continue chatting" in order to maintain connection without hurrying someone. Given that many chats end without a clear, formal goodbye, this was also a way to assess if the chatter was still present and engaged.

Discussion

This analysis of programmatic data revealed ample evidence that the new web-based crisis hotline was being utilized by survivors. In the first year of the web-based crisis line, there were 173 chats, compared to 220 hotline calls. Given that the web-based crisis hotline was a new service offering with shorter operating hours, the high usage of the service suggests that it is meeting a need for survivors. This is especially noteworthy as a recent university climate survey conducted in Spring 2019 found that between 79% and 85% of undergraduates were aware of the Center, but only 46-48% of undergraduates were aware of the chat service ((Lindquist et al., 2019) Similar patterns

were found among graduate students, faculty, and staff. The chat service was the campus-based resource that had the lowest level of awareness among students, faculty, and staff. The telephone hotline is still being used readily, suggesting that adding a web-based hotline does not make a phone hotline irrelevant. Rather, the usage of both services suggests that survivors may have preferences for which mode of communication to use when reaching out for help. Our finding that crisis hotline usage (combining the phone and web-based hotline) doubled the year that the web-based hotline was initiated suggests that adding the web-based hotline may encourage some survivors to contact the SAC when they otherwise may not.

Different patterns of usage were evident when comparing the telephone hotline and web-based hotline. Because the web-based hotline was a new service, it was difficult to disentangle the natural growth in the program from differences due to the modes of communication. The telephone hotline was most heavily used in the fall months (September, October, November), while the web-based hotline had a more erratic pattern of use across the year. However, the web-based hotline was launched at the very end of August, meaning that the fall months were the first few months of the service when the community was likely least knowledgeable about the service. Preliminary evidence from the fall 2019 year suggest that the number of chats seems to be continuing to increase, suggesting that low chat usage in fall 2018 is likely due to the newness of the service. While the SAC received more telephone hotline calls than chats overall, during the hours of chat operation (10 am-10 pm), there were more chats than calls. This may indicate that should the chat service move to 24 hours a day operation, the number of chats could be higher than calls. Regardless, the higher usage of chat during the hours of operation underscores that offering the chat mode of contact is appealing to survivors.

Other notable differences included that volunteers recorded fewer demographic details for web-based chats compared to hotline calls. Upon further reflection, however, we realized that volunteers may be using contextual clues (like tone of voice) to assess gender identity on hotline calls. This is similar to patterns observed on a national online hotline for sexual assault survivors (Feeney, 2019). Given the potential of mis-gendering callers when interpreting tone of voice absent other more reliable indicators (such as a caller identifying their gender), the program has elected to train volunteers to only record demographics when the caller or chatter specifically mentions their identity. This means we expect even fewer demographic details in future records. This reflects a tension in SA service delivery; anonymity increases comfort with services, but gives programs less information about who they are reaching (and who is not being reached). Interactions may inadequately address a chatter's unique cultural or identity-specific needs if volunteers rely

on the chatter identifying their various identities. Safety planning also occurred less often in web-based chats compared to hotline calls. Volunteers suggested two explanations for this. First, they feel as if chats lack the same emotional depth and level of information shared as in hotline calls, and therefore they may be less likely to hear details that suggest the need for safety planning. Second, several volunteers mentioned examples of when they offered safety planning in a chat and the chatter either ignored their offer or explicitly said they would rather talk about a different topic. Perhaps the rules of social engagement in chat make it easier to turn down an offer of safety planning when safety planning is not consistent with the survivor's goals for the conversation. This could suggest that web-based communication affords survivors more control in directing the nature of the conversation, which is consistent with the feminist, empowerment philosophy of rape crisis advocacy (Cattaneo et al., 2020; Martin, 2005).

Volunteers and staff similarly identify meaningful differences in the experience of providing service in web-based and telephone crisis intervention. For example, chat workers described the difficulty reading and expressing emotions and empathy over chat, which echoes concerns raised in research on web and text hotlines with other populations (Navarro et al., 2020; Predmore et al., 2017; van Dolen & Weinberg, 2019). This has implications for the training and support of those engaging in web or text-based crisis intervention with sexual assault survivors; however, there is little guidance for how to train for web or text-based crisis intervention. Much of what the program includes in their training for volunteers has been gathered through informal conversation with other providers of web or text-based crisis intervention. The program had a difficult time finding detailed guidance on the skills necessary for web or text-based crisis intervention. This is a clear gap in the research and in the practice-oriented field that leaves practitioners in a bind; there is a desire to offer these services, but little information about how to offer these services in an effective and appropriate manner. While many crisis intervention skills translate across mediums, other typical skills (e.g., rapport building) may look different in a web or text-based space.

Limitations

The findings presented here should be interpreted with caution, due to some limitations of the available data. First, the agency data we used (i.e., call logs) was not collected for research purposes, and therefore the dataset did not include some key information, such as a comprehensive list of all topics discussed in each chat. The logs were also completed by many volunteers, which potentially introduces error if the forms are completed inconsistently,

particularly in the open-ended call summary where volunteers varied in the amount of detail they shared. For these reasons, the call logs may not capture the full extent of what is happening on calls and chats. Further, we do not have data from the users of the hotline or web chat themselves about their experience or satisfaction using either service. We are unable, therefore, to make any assessments of the effectiveness or outcomes of the hotline or web chat. Third, the findings described here are context specific and may not generalize to other campuses or to community-based victim service programs. This may be especially true for communities where internet access is less common.

Implications

Based on our findings, programs serving sexual assault survivors, especially those in campus contexts, might consider offering text/chat lines as there appears to be a sizable demand for such a service. Programs should, however, understand that offering web or text-based services is resource intensive, both in technology costs and staff time designing and implementing the new service. Furthermore, offering a web or text-mediated crisis intervention service requires specialized training for those who will be answering the web/text crisis hotline. Volunteers and staff may need training and supervision in developing the necessary skills (or translating their skills from phone to the web/text medium). Ensuring hotline workers are well-trained is particularly important given the likelihood that some chatters may be experiencing high levels of stress, trauma, and possible suicidal ideation and therefore need high-quality support that effectively de-escalates crisis and connects survivors to on-going support when needed.

As sexual assault service programs continue to add web/text crisis line capabilities, technical assistance is needed to support program implementation. State coalitions and national victim service organizations should consider dedicating resources to developing the capacity to support local member programs in the design and operation of text and chat hotlines. Given the unique considerations of web/text communication, programs should consider whether policies need to be expanded to protect confidentiality of data given the written record that is produced both for the user and the provider. For example, chat services may need to be equipped with "escape" buttons that allow a user to quickly navigate away from the page, erasing the conversation. Providers could limit the amount of identifiable information they collect and have clear procedures that protect the safety of any records that are retained. Programs offering web chat or text hotlines should also identify best practice protocols for mandatory reporting of child abuse and risk to self or others, as authorities may be hampered in their ability to respond to an emergency if the

web-chat hotline does not collect identifying information. Some research has found higher rates of suicidality on web and text-based hotlines, which underscores the need for strong policies for protecting safety and upholding reporting obligations (Gilat & Shahar, 2007; Predmore et al., 2017).

Additional research is needed on the outcomes of web/text crisis hotlines, including whether users are satisfied with their interactions with web/text crisis lines and whether these services are an effective means of providing support and linking survivors to resources. Evidence from RAINN's online hotline suggests that users were largely satisfied with the service and intended to use resources they were offered; however, this research is over 10 years old and limited to a single, national online hotline (Finn & Hughes, 2008). Chat and text programs should engage in evaluation activities to monitor process and outcomes. Even informal quality assurance exercises, such as engaging staff and volunteers in a conversation about the techniques they use in chat, can provide ideas and suggestions to others about how to improve their web or text-based crisis intervention skills, as occurred in the continuing education sessions we attended. The analysis of data that we present in this article led to other insights, including the recognition that volunteers are assuming gender identity of callers based on tone of voice. This provided the SAC with an opportunity to retrain volunteers on more gender-identity sensitive practices. Evaluation, therefore, not only has the potential to grow the evidence base, but also to directly improve the program.

Conclusion

While many survivors heal without ever accessing formal helping services, hotlines have typically served as a soft entry point for those seeking information or support because they are free, anonymous, and can be accessed at any time that the need arises. Our findings suggest that there is a demand for web or text-based crisis intervention among survivors, at least for those in a university setting. Expanding traditional telephone hotlines with web and text-based chat services is aligned with sexual violence service philosophies focused on increasing support available to survivors, decreasing barriers to accessing supports, and providing survivors with choices about how to seek support. However, offering web or text-based hotlines may require additional training for staff or volunteers about the unique aspects of establishing rapport and communicating in a text medium.

Declaration of Conflicting Interest

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