Role of empathy in facilitating help-seeking and therapeutic self-disclosure through online platforms

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Nina Seppala

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Abstract

Patients with psychological disorders can find it difficult to seek help or share information with their therapist. Contacting a web-based helpline can serve as a first step in getting support and disclosing therapeutically relevant information. An empathetic response on an online platform may make it easier to seek further help and to subsequently share the information with a health professional. An experimental study with 183 participants and two levels of feedback (no feedback versus empathetic feedback) showed that an empathetic response to disclosing information online does not increase help-seeking or make later self-disclosure to a health professional more likely, and the hypothesis was therefore not supported. However, the results suggest that an empathetic response decreases the likelihood of seeking help from a friend. The quality of interactions on an online platform may hence not have an effect on help-seeking or self-disclosure to a health professional, but the online interactions may influence help-seeking from other sources.

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Chapter I

Introduction

Web-based services and helplines have become an increasingly important way of meeting the demand for mental health care, especially among younger age groups (Brody et al., 2020). They can be seen as a form of brief mental health interventions that have been studied as a resource-efficient way of improving access to mental health care (Hoermann et al., 2017; Kauer et al., 2014). The popularity of online helplines has increased across the world where services are available. For example, in the United States, contact with Lifeline which offers call and chat-based services increased from over 800,000 users in 2011 to 2,500,000 users in 2021, a surge of over 300% in a period of ten years (Lifeline, 2022). Similarly, when a new text-based mental health service, Shout 85258, was launched in the United Kingdom in 2019, it reached 500,000 conversations in its first 18 months (Mental Health Innovations, 2022).

Online health services are particularly important in the context where mental health issues are widespread and many people do not seek help for mental health conditions. In 2022, 21% of adults in the US reported experiencing a mental health issue, but 55% of adults with a mental health condition did not receive treatment (Reinert et al., 2022). The primary barrier for not getting treatment is the cost of care, but not knowing where to access care and preferring to handle mental health issues without treatment are other barriers to treatment (Reinert et al., 2022). The stigma associated with mental health is also a barrier that reduces help-seeking for mental health issues (Bharadwaj et al., 2017). Online helplines offer one way of reducing these barriers and enabling access to

healthcare and treatment. Online services may also serve as a bridge between spontaneous help-seeking and advice that will lead to more clinical and longer-term support.

Web-based services do not only help deliver timely support to large numbers of people, but they may also have other benefits related to the willingness of people to disclose information online, referred to as the online disinhibition effect (Suler, 2004). As will be discussed next, there is some evidence to show that the online disinhibition effect applies to self-disclosure that is important for therapeutic purposes. For example, patients show more willingness to disclose information about their health online than offline in person (Lucas et al., 2014; Robinson & West, 1992), and they disclose more information online to their therapist at the early stages of a therapeutic relationship when the relationship is being formed (Hall & Farber, 2001; Gieselmann & Pietrowsky, 2016). In what follows, research findings related to self-disclosure are discussed in three parts in connection to psychotherapy, health, and general self-disclosure in online versus offline environments.

Self-Disclosure in Psychotherapy

Self-disclosure has been defined as the sharing of personal information with others (Archer & Burleson, 1980). In the context of psychotherapy, self-disclosure refers to the nature and extent of personal information revealed to a health professional about therapeutically relevant topics (Miller et al., 1983). Self-disclosure is important for a therapeutic relationship and has been studied from the view of the patient as well as the therapist (Hall & Farber, 2001; Farber et al., 2006; Farber et al., 2019). Patients report that self-disclosure provides a sense of relief from tension and that therapists should

explore topics that are difficult to disclose (Farber et al., 2004). Patients generally disclose thoughts about low self-worth, relationships with others, and low mood or anger, and conceal information about sexual thoughts, feelings and experiences (Farber et al., 2003).

Previous research shows that self-disclosure of intimate topics in psychotherapy increases the likelihood of further disclosure. In an interview-based study of twenty-one patients in psychotherapy, 78.9% of the participants believed that disclosing intimate information made future disclosures to their therapist easier, and the patients also reported that following disclosure to a therapist, they were able to share the same information with a spouse or a friend (Farber et al., 2006). In another study, a survey of 147 psychotherapy patients suggested that two factors, the length of time in therapy and the strength of the therapeutic relationship, were associated with higher levels of self-disclosure (Hall & Farber, 2001). Self-disclosure therefore increases over time as information is shared in a therapeutic relationship and the relationship becomes more established.

However, patients also conceal information from their therapist (Farber et al., 2019). For example, in an open-ended survey of 68 patients in psychotherapy (Love & Morgan, 2021), half of the participants reported concealing information about suicidal thoughts or behaviors from their therapist. The main motivation for non-disclosure was a fear of unwanted outcomes such as hospitalization, while disclosure of information was motivated by help-seeking. This finding is aligned with the results of a study of 115 patients undergoing psychotherapy with about a half of the participants concealing information, although the majority believed that they would eventually disclose the

information to their therapist (Baumann & Hill, 2016). In the study, patients concealed information because of shame and not wanting to disappoint the therapist and disclosed information when they trusted their therapist and thought they could benefit from the disclosure.

Past studies therefore suggest that self-disclosure increases in therapeutic relationships over time as the relationships become more established and trust develops in the relationships (Hall & Farber, 2001), but patients may conceal information that is important for therapeutic outcomes (Baumann & Hill, 2016; Love & Morgan, 2021). Previous research also suggests that self-disclosure to a therapist makes further disclosure more likely, not only to a therapist but also to others including family and friends (Farber et al., 2006), indicating that if self-disclosure performed on an online helpline has a similar effect, it may lead to increased self-disclosure to health professionals and other parties.

Online and Offline Self-Disclosure about Health

Because research about self-disclosure in psychotherapy is limited, studies about more general health-related self-disclosure can help to shed light on any potential differences in disclosure between online and offline settings.

Early evidence from the use of computer mediated communication technology suggests that it is easier for patients to reveal information to a computer than to a health professional. For example, the parents of patients in a psychiatric hospital ($N = 24$) gave more candid answers with fewer discrepancies when computers were used to interview them in comparison to when the interviews were carried out by a social worker (Ferriter, 1993). Similar findings were established among patients at a genito-urinary clinic ($N =$

69) who were either providing information via a computer, on a paper questionnaire or to a physician (Robinson & West, 1992). The patients reported more symptoms in a computerized interview and on a paper questionnaire than what was recorded by a physician, and more previous visits were recorded in computerized interviews than by a physician.

In a more recent study related to counselling and online platforms, similar results were found in a study involving 31 student participants experiencing procrastination (Gieselmann & Pietrowsky, 2016). The students disclosed more information to their counselor in chat-based written communication than in a face-to-face condition, but only when self-disclosure was measured through the content analysis of disclosures by independent raters rather than through self-reports where the participants were asked about the extent to which they thought they had disclosed information.

In another study about self-disclosure (Lucas et al., 2014), a larger pool of 239 participants were recruited for a health screening to interact with a virtual person. The participants were told that the virtual person was either automatic or controlled by a human. The participants interacted with the virtual assistant verbally with the conversations recorded and later transcribed for analysis and coding by independents raters. The participants who thought they were interacting with an automated virtual assistant showed lower fear of self-disclosure and independent observers rated them as more willing to disclose information in the experiment.

Only one study investigating the effect of online self-disclosure on subsequent disclosure to a health professional was found. In the study (Lee et al., 2020), the researchers recruited 47 university participants to interact with a chatbot for several

weeks. The researchers designed the chatbot so that it gave believable answers to a wide range of topics. The participants were asked to interact with the chatbot for about 10 minutes every day for a period of four weeks. After the first three weeks, the participants were asked if they were happy for a medical professional to see their interactions with the chatbot. For the last week of the experiment, the participants then reviewed and had the opportunity to edit their prior answers before sharing them with the medical professional. The information shared before and after the introduction of the medical professional was analyzed with the analysis showing that over 90% of chat content was shared and there were no significant changes in the information disclosed before or after the medical professional saw the content.

However, the study did not include participants in psychological distress, as assessed on the Kessler Psychological Distress Scale (Kessler et al., 2002), and it is therefore not known whether the findings apply to individuals with psychological disorders. Also, the participants shared their disclosures with an unknown medical professional via the online chat platform rather than in person or in an ongoing therapeutic relationship that typically involves face-to-face interaction instead of sharing existing information through an online application.

Taken together, studies about self-disclosure in health contexts suggest that in initial, brief encounters with health professionals, more information is disclosed through computer-mediated technology than in person (Ferriter, 1993; Lucas et al., 2014; Robinson & West, 1992). However, subjective self-reports and an evaluation of disclosed information by independent external raters have shown different results (Gieselmann & Pietrowsky, 2016), indicating that patients may not be aware of disclosing more

information when asked to do so through computer-mediated technology. Moreover, it is not clear whether the findings apply to how self-disclosure takes place in longer-term patient-therapist relationships. Also, with the exception of the study by Lucas et al. (2014), previous studies have had relatively low sample sizes of fewer than 50 participants (Ferriter, 1993; Gieselmann & Pietrowsky, 2016; Lee et al., 2020), and the results would therefore need to be corroborated in larger studies involving more participants.

Online Versus Offline Self-Disclosure about Non-Health Topics

Because research about self-disclosure in psychotherapy and health contexts is limited, it is important to explore more general research findings about self-disclosure in online and offline settings.

As framed in the stranger-on-the-train effect, individuals can find it easier to reveal information about themselves to an unknown person than to someone they know (Rubin, 1975). In such situations involving strangers, people disclose information at a faster rate than they would with people they expect to meet again (John et al., 2011). A similar tendency to disclose more information and to feel less restrained has been discovered in online environments (Suler, 2004). This online disinhibition effect has been studied extensively on social media platforms where many people interact with each other (e.g., Cheung et al., 2015; Luo & Hancock, 2020), but it has also been observed in one-to-one online conversations facilitated by technology (e.g., Atheunis et al., 2007; Joinson, 2001; Schouten et al., 2009).

A meta-analytical review of 15 studies about online versus offline disclosure suggested that the method used in investigating the topic is associated with the findings

(Nguyen et al., 2012). In particular, experimental studies generally show that there is greater self-disclosure online (e.g., Atheunis et al., 2007; Schouten et al., 2009; Tidwell & Walther, 2002), while survey-based studies suggest that self-disclosure is higher offline (e.g., Buote et al., 2009; Chiou & Wan, 2006; Schiffrin et al., 2010). There are also studies exploring other factors such as personality that have an effect on the preference to self-disclose online versus offline (Chen et al., 2017; Kang & Gratch, 2010). In what follows, the mixed findings about self-disclosure in online and offline settings are explored in more detail.

Experimental Studies

Experimental studies suggest that people make more self-disclosures that are intimate when they communicate online versus offline (Atheunis et al., 2007; Coleman et al., 1999; Joinson, 2001; Schouten et al., 2009; Tidwell & Walther, 2002). For example, in a study of 40 student participants, Joinson (2001) assigned the participants into pairs and asked them to discuss an imaginary situation either through an online chat or in person. He found that the participants disclosed significantly more about themselves online than in person. Similarly, in a study involving 158 university students, Tidwell and Walther (2002) asked pairs of students to get to know one another or to work on a decision-making problem. They discovered that the participants who interacted online made a higher proportion of disclosures that the participants who interacted in person.

In another experimental study, Atheunis et al. (2007) recruited 162 university students and allocated them into pairs in three conditions: online communication, online communication with a window on the computer screen where the dyad partner was seen, and face-to-face communication. The participants were asked to get to know each other

as well as possible during a conversation. The researchers found that personal disclosures were higher in both the online communication and online communication with video condition in comparison to face-to-face communication. In each of these experimental studies, two people who did not know each other previously were brought together and asked to engage in a conversation. The findings show that in such one-off encounters between strangers, more personal disclosures are made online versus offline environments.

Survey-Based Studies

In contrast to experimental research, survey-based studies predominantly suggest that people disclose more information about themselves offline than online (Buote et al., 2009; Chan et al., 2004; Chang & Cheng, 2004; Chiou & Wan, 2006; Schiffrin et al., 2010). In these studies, participants have been asked to answer survey items about self-disclosure with a friend (Buote et al., 2009; Chan et al., 2004; Schiffrin et al., 2010) or about their typical behavior online and offline (Carballo-Diéguez et al., 2006; Chiou & Wan, 2006). For example, Schiffrin et al. (2010) recruited 99 undergraduate students to their study. They measured self-disclosure through the 10-item Self Disclosure Scale developed by Miller et al. (1983), asking the participants to think about someone they are "fairly well acquainted with, but is not their best friend". The participants answered the same items about self-disclosure in face-to-face and online communication. The findings showed that the participants reported disclosing more information face-to-face than online. Chan et al. (2004) and Chiou and Wan (2007) made similar findings showing that both the breadth and depth of disclosures is higher offline than online.

In contrast to the other self-report studies, Carballo-Diéguez et al. (2006) found that their participants reported significantly greater HIV-status disclosure to potential partners met in an online environment than in person. This finding suggests that disclosures about particularly sensitive topics may not follow general patterns of self-disclosure. If mental health is a sensitive topic in a similar way as HIV-status, people may find it easier to share information about mental health online than in person and they are also self-aware of this behavior.

Taken together, the findings of survey-based studies (Buote et al., 2009; Carballo-Diéguez et al., 2006; Chan et al., 2004; Chiou & Wan, 2006) are relatively consistent about greater offline disclosure, but the focus of the studies has been on self-disclosure with acquittances and friends rather than with strangers. The findings may therefore not apply to situations where people have only one encounter on an online helpline. Even when people may contact an online helpline on several occasions, these helplines are staffed with changing volunteers or paid workers so it is unlikely that an interaction happens with the same person. It would also be important to know if the findings about survey-based research are supported when disclosure is measured by independent raters, not only via self-reports.

Summary of Findings

To sum up, past research suggests that when self-disclosure is studied in experimental designs involving one-off encounters between strangers, people disclose more information online compared to face-to-face conversations (Atheunis et al., 2007; Coleman et al., 1999; Joinson, 2001; Schouten et al., 2009; Tidwell & Walther, 2002). However, when personal disclosures are studied in surveys and involve better known

acquaintances or friends, people disclose more information offline than online (Buote et al., 2009; Chan et al., 2004; Chiou & Wan, 2006; Schiffrin et al., 2010). In addition to the different study populations in experimental and survey-based studies, the differences in findings may be related to the way in which self-disclosure is measured. In the majority of experimental studies, the volume and quality of disclosures has been evaluated by independent raters whereas in survey-based research, disclosures have been measured with self-report items that refer to longer time conversations and the development of self-disclosure in longer-term relationships. When self-disclosure involves more anonymous and shorter-term engagements, research suggests that people disclose more online than offline.

Empathetic Response to Self-Disclosure

Empathy, defined as an ability to appreciate another person's feelings and experiences (Decety & Jackson, 2004), has the potential to increase self-disclosure by acknowledging a person's feelings and experiences. Empathy can be expressed booth verbally and non-verbally during psychotherapy (Johnson et al., 2005). Empathetic responses show that a therapist understands a patient's perspective and they contribute to creating a sense that a patient's feelings and experiences are valid (Elliott et al., 2022). Empathy in therapeutic relationships is a moderately strong predictor of therapeutic outcomes with empathy accounting for 9% of variance in outcomes (Elliott et al., 2022). Empathy is an especially important predictor for the therapeutic outcomes of severe and chronic psychological disorders compared to milder disorder symptoms (Elliott et al., 2022).

The expression of empathy online involves written statements of affirmation and acknowledgement. Grondin et al. (2019) proposed a conceptual framework for understanding how empathy emerges and is expressed in computer-mediated interactions. They suggested that empathy involves the four separate steps of:

1. Emitting socioemotional cues.
2. Feeling empathy.
3. Conveying empathy.
4. Perceiving empathy.

With online self-disclosure, it is the third step, conveying empathy, that is particularly important for providing supportive responses to self-disclosure. Conveying empathy has also been framed as the behavioral component of empathy which refers to the active acknowledgement of another person's perspective (Decety & Jackson, 2004). According to Grondin et al. (2019), in online contexts, communication of empathy relies on verbal statements because non-verbal cues cannot be used. Such verbal statements consist of affirmations and symbolizations of the client's thoughts, feelings and experiences.

There is some empirical support for the importance of verbalization of empathy in online therapy. Based on an online survey of 363 mental healthcare professionals carried out immediately after the coronavirus epidemic (Feijt et al., 2021), communication is more focused on verbal content and more explicit in nature when empathy is conveyed in online settings. For example, health professionals ask about emotions and experiences more regularly than in face-to-face situations and they also check their understanding

with the client more often to ensure they have understood the client's perspective correctly.

Past research further shows that empathetic responses can be incorporated into online communication and that empathy can have an effect on behavioral intentions of the users of online platforms. For example, Morris et al. (2018) designed a chatbot that expressed empathetic support through brief written statements. They used data that was already available about peer support online to design a set of empathetic responses, and recruited 37,169 users to assess the responses. They also conducted an experiment with 1,284 participants to test whether the responses were considered empathetic with 79% being viewed as empathetic.

In another study, Ellis et al. (2017) recruited 103 student participants to an experimental study where the participants were allocated to either a low-empathy or a high-empathy condition. In the low-empathy condition, a virtual narrator asked information about the participants' drinking habits without empathic statements. In the high-empathy condition, the virtual narrator was programmed to show empathy through statements that reflected participant drinking behavior. The participants in this high-empathy condition felt more supported and less criticized than participants in the other condition. The results also suggest that high empathy is associated with increased intention to reduce drinking. The findings show that empathy can be conveyed in computer-mediated platforms through verbal statements and this form of empathy can be associated with intention to change behavior. There are also other studies showing that empathy can be expressed online.

In addition to experiments, empathetic responses have been found to be effective in naturalistic settings. Mokkenstorm et al. (2017) studied the role of empathy in online chats involving service users and 78 volunteers working for a Dutch suicide prevention help-line, 113Online. A total of 526 chat logs were analyzed by two independent coders with one of the coders focusing on rating volunteer behaviors and attitudes. One attitude measured in the chats was the level of empathetic understanding rated on a 5-point scale by the independent coder. Statistical analysis showed that low empathy levels were associated with service user satisfaction, but empathy levels were not associated with improvement in service user emotional state. The researchers did not analyze self-disclosure in the chats, but the findings provide further support about the positive effect of empathy in chat-based communication with people experiencing psychological distress.

In sum, past research has explored the expression and effects of empathy in online environments, showing that empathy can be incorporated into online communication with effects on user satisfaction and intention to change behavior (Ellis et al., 2017; Mokkenstrorm et al., 2017; Morris et al., 2018). While no research has been carried about the direct relationship between empathetic responses and self-disclosure in online settings, the combined findings of past research suggest that empathy can be expressed effectively online and empathy may enforce further self-disclosure through the validation of feelings and experiences which therefore may become more likely to be expressed again.

Study Hypothesis

Web-based chat services can be an important way to access mental health care in a context where 55% of adults with a mental health illness in the United States receive no treatment (Reinert et al., 2022). No previous research was identified about the direct connection between empathy and self-disclosure in online settings, but previous research suggests that self-disclosure about health and sensitive topics is easier on computerized platforms than in person when collecting initial information from patients or in relatively short-term engagements with health professionals (Gieselmann & Pietrowsky, 2016; Lucas et al., 2014).

Also, when self-disclosure involves one-off engagements with strangers, research suggests that people disclose more information about themselves online than offline (Atheunis et al., 2007; Coleman et al., 1999; Joinson, 2001; Schouten et al., 2009; Tidwell & Walther, 2002). It may therefore be easier for people to make initial self-disclosures about therapeutically relevant issues online over chats before the same information is shared with a health professional. Moreover, previous research suggests that empathy is a reliable predictor of therapeutic outcomes, especially among those suffering from severe mental health conditions (Elliott et al., 2018), and that empathy can be expressed on online platforms in a way that is perceived as supportive (Mokkenstorm et al., 2017; Morris et al., 2018). As a result, it can be predicted that empathetic responses to online self-disclosure increase the likelihood of subsequent help-seeking and the disclosure of personal information to a health professional.

An online experiment with two levels of feedback (no feedback versus empathetic feedback) and a follow-up survey was used to investigate the hypothesis. A total of 183

participants with a history of psychological disorders were recruited to share information about their mental health online in order to investigate whether the same people subsequently sought further help and made related disclosures to a health professional. Two surveys were administered two weeks apart from each other in order to study both the intention to seek help and actual help-seeking and self-disclosure behavior among the participants.

The research extends knowledge in several areas of inquiry. First, the research contributes to the emerging field of online interventions in mental health (Hoermann et al., 2017; Kauer et al., 2014) by showing how empathy may be relevant for increasing the likelihood of further help-seeking and self-disclosure about psychological disorders. Second, the research contributes to the literature on self-disclosure by investigating whether empathy is a way of increasing self-disclosure in the same way as self-disclosure has been shown to make subsequent self-disclosure more likely (Faber et al., 2006). The research also adds to knowledge about the role of empathy on web-based helplines by showing whether empathetic interactions have other benefits than user satisfaction which has already been established in previous studies (Ellis et al., 2017; Mokkenstorm et al., 2017).

The research has practical implications by demonstrating how online helplines may facilitate access to health care. More specifically, the research shows how empathetic online interactions may play a role in increasing help-seeking and self-disclosure to a health professional. If empathy is important for further help-seeking and disclosure, helpline workers can be trained to use empathetic techniques in their interactions with service users. Also, online platforms could be employed in parallel to

in-person appointments to ensure that therapeutically important information is shared with health professionals.

Chapter II

Method

To test the hypotheses, a between-subjects study with two groups was conducted (feedback: no feedback versus empathetic feedback). The study involved self-report questions about psychological wellbeing, help-seeking and self-disclosure to a health professional. The study was conducted using two separate online surveys administered on Qualtrics in May 2023. The surveys were run two weeks apart from each other.

Participants

The sample consisted of 183 participants with 93 participants in the no feedback group and 90 participants in the empathetic feedback group. Participant ages ranged from 18 to 85 years (M = 37.6, SD = 12.5). The gender composition was 64 men (35.0%), 108 women (59.1%), 2 transmen (1.1%), 2 transwomen (1.1%), and 6 non-binary (3.3%). The respondents were mainly White/Caucasian (77.0%) with lower participation from other ethnic groups: Black or African American (9.8%), Asian (4.4%), mixed (6.6%), and other (3.8%). The detailed gender and ethnicity characteristics for the two experimental groups and the full sample are shown in Table 1. The participants had a diversity of educational and income backgrounds as can be seen in Table 2. Table 3 shows the current mental health support of the participants. A total of 144 participants took the second survey, which represents a response rate of 78.7% compared to the first survey.

Table 1. Gender and Ethnicity Characteristics of the Sample.

Baseline characteristic	No feedback		Empathetic feedback		Full sample	
	n	%	*n*	%	*N*	%
Gender						
Female	54	58.1	54	60.0	108	59.1
Male	35	37.6	29	32.2	64	35.0
Transfemale	0	0	2	2.2	2	1.1
Transmale	2	2.2	0	0	2	1.1
Non-binary	2	2.2	4	4.4	6	3.3
Ethnic background						
White	72	77.4	67	74.4	117	77.0
Black or African American	7	7.5	11	12.2	18	9.8
Asian	3	3.2	5	5.6	8	4.4
Mixed	5	5.4	7	7.8	12	6.6
Other	6	6.5	1	1.1	7	3.8

Table 2. Educational and Income Characteristics of the Sample.

Baseline characteristic	No feedback		Empathetic feedback		Full sample	
	n	%	*n*	%	*N*	%
Educational level						
Graduate or professional	12	12.9	15	16.7	27	14.8
Bachelor's	34	36.6	32	35.6	66	36.1
Associates or technical	16	17.2	7	7.8	23	12.6
Some college, but no degree	21	22.6	21	23.3	42	23.0
High school diploma/GED	9	9.7	15	16.7	24	13.1
Some high school or less	1	1.1	0	0	1	0.5
Income level						
Less than $50,000	37	39.8	35	38.9	72	39.3
$50,000-$99,000	36	38.7	37	41.1	73	39.9
$100,000 or more	13	14.0	15	16.7	28	15.3

Table 3. Current Mental Health Support and Treatment.

Support for mental health	No feedback		Empathetic feedback		Full sample	
	None	At times	None	At times	None	At times
	n %	n %	n %	n %	n %	n %
Pharmacotherapy	39 55%	28 44%	46 51%	43 48%	85 46%	84 46%
Talk therapy	62 67%	30 32%	60 67%	31 34%	122 67%	61 33%
Use of online services						
Call/phone lines	83 89%	9 10%	83 92%	6 7%	166 91%	15 8%
Online chats	82 88%	10 11%	79 88%	10 11%	161 88%	20 11%
Email	87 93%	4 4%	84 93%	5 6%	171 93%	9 5%
Self-help apps	69 74%	23 25%	73 81%	16 18%	142 78%	39 21%

The participants were recruited using Prolific, an online platform designed for researchers to find participants for experiments and surveys (Palan & Schitter, 2018). When the quality of data acquired through Prolific has been compared to other platforms and university pools, Prolific participants have been more demographically diverse and less aware of commonly used experimental tasks (Peer et al., 2017). Four filters were applied on Prolific to recruit the sample:

5. Minimum age of 18.
6. US nationality.
7. Fluency in English.
8. Ongoing mental health condition.

The Prolific filter for an ongoing mental health condition was based on the participants answering positively to the following question about their mental health: "Do you have – or have you had – a diagnosed, on-going mental health/illness/condition?" (www.prolific.co, 13 May 2023). Prolific participants had answered this question positively when they first signed up on the platform. There were 14,083 participants on Prolific who met the inclusion criteria and could choose to participate to the study.

Participants were compensated for their time by using the rate recommended by Prolific which was based on a minimum pay of USD 9 per hour (www.prolific.co, 13 November 2022). Because the first study was expected to take 10 minutes to complete, each participant was paid USD 1.50 for their participation. The second survey was predicted to take 6 minutes to fill in and the participants were therefore paid USD 0.90. The participants were informed about the payment before they agreed to participate to the study and they were paid within 48 hours from finishing each survey. The payment was

made after it had been checked that the participants had answered an attention question correctly, which all the participants had done.

In order to obtain informed consent, the participants were told about the general purpose of the study, survey content, and the length of the survey. Full details about the purpose of the study were given in the end of the survey so that this information did not cause bias in participant responses. The participants were also told that it was possible for them to experience some psychological distress when answering questions about their wellbeing, and they were given a list helplines and other resources in case this happened. They were also informed that their privacy was protected by not asking them for any information from which they could be identified. The participants were then told that they could withdraw from the study at any point and if they did, all the data they had submitted would be deleted and not used for the purposes of the study. Before starting the first survey, the participants were asked to give their informed consent by clicking on a bar on the Qualtrics survey platform after which they were asked three questions about the informed consent statement to ensure they had understood their rights as research participants.

Materials

Self-disclosure on an anonymous platform was measured through a set of questions developed from the qualitative answers given in a previous study about why patients do not disclose information to professionals caring for them (Swan & Andrews, 2003). In the study (Swan & Andrews, 2003), the researchers categorized answers to two main categories: (1) quality of the relationship with a therapist (e.g. lack of trust, fear of being judged) and (2) details of the kinds of issues not disclosed to a health professional.

Five items were created from the more detailed answers forming the latter category to provide the participants an opportunity to disclose information about their mental health on the online survey platform. The items were:

1. Significant challenges with mental health.
2. Failure to follow up a treatment plan.
3. Failure to take medication.
4. Fear of recovery.
5. Other harmful behaviors.

For example, the participants were asked to report whether they had experienced significant challenges with their mental health in the last 30 days. The answers were recorded on a self-report scale from 1 (not at all) to 5 (to a great extent).

Self-disclosure to a health professional was measured in two ways. First, the participants were asked whether they had shared information about their mental health with a health professional around the same five categories as they had been given about self-disclosure. The answers were recorded on a scale from 1 (not at all) to 5 (to a great extent). Self-disclosure to a health professional was also measured with the **Self-Disclosure Index (SDI)** (Miller et al., 1983), which assesses the extent of disclosure in ten different areas including personal habits, deepest feelings and worst fears. The Self Disclosure Index has shown good reliability and validity (Trepte et al., 2014) and it has been related to other individual variables (Sprecher & Hendrick, 2004). An example item is: “I have talked about the following subjects to a health professional: My deepest feelings.” The answers were recorded on a 5-point scale from 1 (strongly agree) to 5 (strongly disagree). The participants were asked to complete the measures twice, once for

the first survey and once for the follow-up survey in order to see if self-disclosure had increased after the first study.

The quality of relationships with a therapist was measured with the patient version of the **Therapeutic Relationships in Community Mental Health Care (STAR-P)** scale (McGuire-Snieckus et al., 2007). STAR-P assesses the therapeutic relationship between a patient and a clinician. The patient version of the scale consists of 12 items rated on a 5-point agreement scale. The scale has been found to be valid in different patient samples (Loos et al., 2012; Tryon et al., 2007) and reliable when patients have a relatively long relationship of at least 12 months with a clinician (Licthveld et al., 2016; Rugkåsa et al., 2015). The scale contains three subscales: positive collaboration, positive clinician input, and non-supportive clinician input. An example item is: "My clinician and I share a trusting relationship."

Help-seeking was measured with the **Mental Help Seeking Intention Scale (MHSIS)** (Hammer & Vogel, 2013) and **General Help Seeking Questionnaire (GHSQ)** (Wilson et al, 2005). When the validity of MHSIS and GHSQ has been evaluated, the MHSIS has shown higher level of internal consistency, reliability and predictive validity (Hammer & Spiker, 2018). Because the GHSQ is a flexible scale that has been adjusted to different contexts, the reliability and validity of the scale has sometimes been low (e.g., McDermott et al., 2017), but it is useful for providing information about help-seeking beyond mental health professionals. The MHSIS consists of three items that were designed to measure intention to seek help from a mental health professional. An example statement is: "If I had a mental health concern, I would plan to seek help from a mental health professional". Responses were collected on a 6-point scale from 1

(definitely false) to 6 (definitely true). In addition, the GHSQ scale was used to study whether the participants would seek help from other sources beyond mental health professionals. The GHSQ is a flexible scale that can be amended to assess help seeking intentions from different sources and for different problems. The scale was adjusted to fit the purposes of the research with the following sources of help: health professional, partner, family (non-partner), friend, helpline (call/text/chat), pastor/priest, and "would not seek help". The participants were asked the following question: "If you were having problems with your mental health, how likely is it that you would seek help from the following people?" The responses were recorded on a 7-point scale from 1 (extremely unlikely) to 7 (extremely likely).

Psychological distress was measured using the ten-item (K10) version of the **Kessler Psychological Distress Scale** (Kessler et al., 2002). The Kessler scale was developed to assess non-specific psychological distress in population samples (Kessler et al., 2003; Oakley et al., 2010) and it is therefore a useful general indicator of the extent a person is experiencing the symptoms of a psychological disorder. The validity of the Kessler Scale is supported by its strong association with other instruments used to measure psychological disorders in adult populations, especially depression and anxiety (Andrews & Slade, 2001; Oakley et al., 2010). An example item from the scale is: "During the last 30 days, about how often did you feel that everything was an effort?" The answers were recorded on a 5-point scale from 1 (none of the time) to 5 (all of the time).

In addition to the Kessler Scale, six questions were used to measure substance abuse among the participants using the **Severity of Dependence Scale (SDS)** (Gossop et

al., 1995) because the Kessler Scale is not as strongly associated with substance abuse as with depression and anxiety (Oakley et al., 2010). SDS is widely used scale that has been demonstrated to be a reliable and valid measure of drug use among adult and adolescent populations (Martin et al., 2006). The scale consists of five items assessing substance abuse on a 4-point scale. A sample item from the scale is: “Do you think your use of substances is out of control?” The answers were recorded on a 4-point scale from 1 (never/almost never) to 4 (always/nearly always).

Self-esteem was measured using the ten-item **Rosenberg Self-Esteem Scale** (Rosenberg, 1989). The scale is the most used measure of self-esteem, and it has been confirmed as a reliable and valid measure of self-esteem in multiple studies over time (Gray-Little et al., 1997). It also correlates highly with other measures of global self-esteem (Robins et al., 2001), and its factor structure has been found to be stable across 53 different countries (Schmitt & Allik, 2005). Five of the ten scale items are reverse items. An example item from the scale is: “I feel that I'm a person of worth, at least on an equal plane with others.” The answers were recorded on a 4-point scale varying from 0 (strongly agree) to 3 (strongly disagree).

Current treatment and use of mental health support resources was measured in two ways. First, the participants were asked to report about whether they were receiving any current treatment or support for their mental health in the following four categories: (1) pharmacotherapy (psychiatrists and nonpsychiatric physicians), (2) talk therapy (psychiatrists, psychologists, social workers, and mental health counselors), (3) spiritual counseling (priests, rabbis, and ministers), and (4) any other form of support (online support groups, self-help groups). The information was recorded in the following

categories: none, daily, weekly, monthly, less often than monthly. The participants were also asked whether they had used any anonymous online mental health services in the previous year: (1) call/phone lines, (2) online chats, (3) text-based services and (4) email, and (5) self-help apps. The following categories were used to record the answers: never, 1-3 times, and 4 or more times.

Finally, a question was used in both the first and second survey to ensure the participants were paying attention when answering survey questions. Placed among other answer scale items, the participants were asked to select the neutral option from the following five options: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree.

Design

The participants were randomly assigned to two conditions (feedback: no feedback versus empathetic feedback) in a between-subjects experimental design. The randomization was applied as a survey feature on Qualtrics. The participants were not aware about being assigned to a specific group in the study, although they were explained the purpose of the study and the experimental design once they had answered the second survey. The manipulation in the empathetic feedback group consisted of three statements that were presented to the participants at equal intervals after the participants had answered scale items about their mental health, psychological distress, and disclosing information to a therapist. Participants in the control group were not given any feedback.

The empathetic statements were designed by the researcher based on the definition of empathy as the active acknowledgement of another person's perspective, feelings and experiences (Decety & Jackson, 2004). In order for the statements to apply

to all the participants, the statements were developed to be relatively general affirmations about mental health and how difficult it can be to share personal information about psychological disorders. The three statements can be seen in Table 3 below. The three statements were placed across the survey so that the participants saw a statement in regular intervals in between answering scale items about their psychological wellbeing and self-disclosure. As a manipulation check, the participants were asked to report in the end of the survey about the extent to which they thought the survey experience had been empathetic. A 5-point scale was used to record the answers (1 = not at all empathetic, 5 = very empathetic).

Table 4. Empathetic Feedback Statements.

	Feedback text in the survey
Statement 1	Thank you for sharing information about your thoughts and feelings. We appreciate your honesty and willingness to share personal information that may be sensitive to you.
Statement 2	It can be difficult to share information about mental health, even though these issues can affect anyone. Thank you for participating in our research by sharing your thoughts and reactions to the survey questions.
Statement 3	We appreciate it takes self-awareness and courage to discuss private thoughts and feelings with a therapist and we thank you for sharing information about these discussions with us.

Procedure

After the study had received approval from the Committee on the Use of Human Subjects (Harvard University Area Institutional Review Board), it was advertised on the Prolific platform as a two-stage study involving two surveys. The advert was visible to the Prolific participants who met the inclusion criteria. These participants could click on a link on Prolific that took them to the first survey on Qualtrics. Once the relevant page opened on Qualtrics, the participants were informed about the purpose, content, and length of the survey. They were also informed about their rights as research participants before they were asked to click on a button to confirm they agreed to take part in the study.

The survey started with questions relating to demographic information. The participants were then asked to disclose information about their psychological wellbeing. The survey continued with answer scale items about help-seeking intentions, psychological distress, self-disclosure to a therapist, the quality of therapeutic relationships, and current treatment and support. In the end of the survey, the participants were provided a list of resources and helplines about mental health and wellbeing. The payment for the first survey was made within 48 hours from when the participants had submitted their answers.

After a period of two weeks, the participants were invited to take part in the second survey. The invitation was sent via a message on the Prolific platform. The message included a link that took the participants to the second survey on Qualtrics. The participants were reminded about the topic of the research and the length of the survey as well as who to contact if they had any questions, concerns or complaints. The participants

were then asked to answer questions about help-seeking, disclosing information about their mental health to a health professional as well as psychological distress and the quality of their relationship to their therapist if they had one. In the end of the survey, the participants were thanked for their contribution and reminded about how to access support for mental health and wellbeing. They were also provided a brief summary of the purpose of the study and the experimental design. The payment for the second survey was made within 48 hours from when the participants had submitted their answers.

Chapter III

Results

The mean value for psychological distress in the total sample was 33.52 (*SD* = 10.04), indicating that the participants were experiencing symptoms of psychological disorders that are associated with values higher than 20 on the Kessler Psychological Distress Scale (Andrews & Slade, 2001). No baseline differences were identified between the two experimental groups in psychological distress, self-esteem, or substance use. The mean values for these variables can be found in Table 4.

Table 5. Psychological Distress, Self-Esteem and Substance Use.

Baseline characteristic	No feedback		Empathetic feedback		Full sample	
	M	*SD*	*M*	*SD*	*M*	*SD*
Psychological distress	33.32	10.01	33.72	10.04	33.52	10.04
Self-esteem	22.97	3.54	23.00	3.56	23.04	3.56
Substance use	6.71	3.12	6.66	3.10	6.61	3.10

The manipulation was successful between the two experimental groups. The effect of the manipulation was measured with a question about how empathetic the survey experience had been for the participants. The mean score was higher in the empathetic feedback group (M = 4.79, SD = 1.06) than in the no-feedback group (M = 4.33, SD = 0.89), $t(181) = -3.17$, $p = .002$.

Help-seeking was measured in two ways as help-seeking intention and help-seeking behavior. First, help-seeking intention was measured on a 7-point scale (7 = extremely likely) for six sources of help in Survey 1. Overall, the participants were most likely to seek help for mental health problems from a health professional (M = 5.23, SD = 1.42), a partner (M = 4.90, SD = 1.85) or a friend (M = 4.17, SD = 1.75). As can be seen from Table 5, the Kolmogorov-Smirnov test was significant for all the dependent variables, meaning that the data was not normally distributed. As a result, the Mann-Whitney test was used to test the hypotheses.

Table 6. Kolmogorov-Smirnov Results for Help-Seeking Intention.

	No feedback			Empathetic feedback		
	D	*Df*	*p*	*D*	*Df*	*p*
Health professional	0.215	92	0.001	0.238	89	0.001
Partner	0.188	92	0.001	0.201	89	0.001
Family (non-partner)	0.201	92	0.001	0.109	89	0.001
Friend	0.265	92	0.001	0.175	89	0.001
Helpline (call/text/chat)	0.219	92	0.001	0.215	89	0.001
Pastor/priest	0.440	92	0.001	0.371	89	0.001

The results did not indicate any systematic difference in help-seeking intention between the no-feedback group and the empathetic feedback group. The results are shown in Table 6. The difference between the groups was statistically significant only for help-seeking intention from a friend with the participants being more likely to seek help in the no-feedback group (M = 4.47, SD = 1.54) compared to the empathetic feedback group (M = 3.87, SD = 1.90), U = 3370.50, z = 2.08, p = 0.038. The results therefore indicate that empathetic feedback given online may make people with psychological disorders less likely to seek help from a friend.

Table 7. Help-Seeking Intention.

	No feedback		Empathetic feedback		*U*	*z*	*p*
	M	*SD*	*M*	*SD*			
Health professional	5.37	1.46	5.09	1.38	3535.50	-1.64	0.101
Partner	4.95	1.91	4.84	1.80	3888.50	-0.60	0.552
Family (non-partner)	3.88	1.90	3.97	1.90	4193.00	0.29	0.775
Friend	4.47	1.54	3.87	1.90	3377.50	-2.08	0.038*
Helpline	2.63	1.72	2.85	1.75	4396.00	0.88	0.378
Pastor/priest	1.61	1.31	2.04	1.70	4633.00	1.89	0.058

** $p < .05$.*

Help-seeking behavior was measured two weeks after the participants had taken the first survey by asking if they had sought help for mental health problems from different sources. Help-seeking behavior was recorded on a 5-point scale (5 = to a great extent). Overall, the participants were most likely to have sought help for mental health problems from a partner (M = 2.00, SD = 1.26), a friend (M = 1.99, SD = 1.19) and family (M = 1.82, SD = 1.11). Because the Kolmogorov-Smirnov test was significant for all the outcome variables, normality could not be assumed. The results of the Kolmogorov-Smirnov test are shown in Table 7.

Table 8. Kolmogorov-Smirnov Results for Help-Seeking Behavior.

	No feedback			Empathetic feedback		
	D	*Df*	*p*	*D*	*Df*	*p*
Health professional	0.438	68	0.001	0.433	76	0.001
Partner	0.333	68	0.001	0.298	76	0.001
Family (non-partner)	0.324	68	0.001	0.334	76	0.001
Friend	0.293	68	0.001	0.300	76	0.001
Helpline (call/text/chat)	0.536	68	0.001	0.531	76	0.001
Pastor/priest	0.536	68	0.001	0.533	76	0.001

The Mann-Whitney test was used to test whether differences existed between those in the no-feedback group and those in the empathetic feedback group. As can be seen in Table 8, no differences were found in help-seeking behavior between individuals in the no-feedback group and the empathetic feedback group. In contrast to help-seeking intention where the participants in the no-feedback group were more likely to seek help from a friend, this difference did not exist for help-seeking behavior.

Table 9. Help-Seeking Behavior.

	No feedback		Empathetic feedback		*U*	*z*	*p*
	M	*SD*	*M*	*SD*			
Health professional	1.72	1.26	1.59	1.08	2522.50	-0.31	0.755
Partner	1.99	1.31	2.01	1.22	2676.50	0.40	0.687
Family (non-partner)	1.79	1.03	1.84	1.19	3535.50	-0.10	0.918
Friend	1.91	1.12	2.05	1.25	2695.00	0.48	0.632
Helpline (call/text/chat)	1.18	0.73	1.09	0.52	2532.00	-0.56	0.577
Pastor/priest	1.09	0.54	1.01	0.12	2541.00	-0.70	0.487

Self-disclosure was measured using the Self Disclosure Index (Miller et al., 1983) where a lower value is associated with a higher level of disclosure. The total level of disclosure was lower in Survey 1 (M = 39.02, SD = 12.44) compared to Survey 2 (M = 26.76, SD = 17.93), indicating that all the participants had shared more about their mental health after Survey 1. Differences between the two experimental groups ($M_{no\ feedback}$ = 25.59, SD = 19.09; $M_{empathetic\ feedback}$ = 27.97, SD = 16.66) were not statistically significant in Survey 2, U = 4423.00, z = 0.67, p = 0.50. Empathetic response was therefore not associated with a higher level of self-disclosure.

Chapter IV

Discussion

Developments in technology have made it increasingly popular to provide mental health support online (Brody et al., 2020; Hoermann et al., 2017; Kauer et al., 2014). The aim of the present research was to explore whether empathy experienced on an online helpline plays a positive role by facilitating subsequent help-seeking and self-disclosure to a health professional about therapeutically relevant topics. Given the importance of empathy in therapeutic relationships (Elliott et al., 2022), it was predicted that getting an empathetic response online encourages individuals with a psychological disorder to seek further help and to self-disclose more to a health professional. The results of the present study did not support this prediction, showing no significant relationship between an empathetic response experienced online and subsequent help-seeking or self-disclosure to a health professional. Instead, the findings suggest that receiving an empathetic response online decreases the intention to seek help from a friend, but this intention is not followed up by a decrease in actual help-seeking behavior.

Effect of Empathy on Help-Seeking and Self-Disclosure

The present research sought to investigate whether an empathetic response online promotes help-seeking and self-disclosure to a health professional. Given the online disinhibition effect which means that people disclose more information about themselves online than offline (Joinson, 2001; Schouten et al., 2009; Tidwell & Walther, 2002) and that self-disclosure about health and sensitive topics is easier online than in person (Gieselmann & Pietrowsky, 2016; Lucas et al., 2014), self-disclosure online could be a

first step in supporting a person to share therapeutically relevant information with a clinician. Yet, the findings of the present research suggest that empathy may not be related to the connection between online disclosure and later disclosure to a health professional, so the lower barrier of sharing information online does not necessarily lead to further self-disclosure outside the online environment. It needs to be studied in future research whether there are other ways in which the online disinhibition effect could be used to support therapeutic self-disclosure. For example, the information shared online could be made directly accessible to a health professional as far as the service user is informed about this and agrees to it. In previous research, participants have shown high likelihood of sharing information they have already shared on an online chatbot (Lee et al., 2020).

The findings of the present research also contribute to research about self-disclosure by showing that an empathetic response to self-disclosure does not always lead to further disclosure. In contrast, previous research has suggested that self-disclosure to a therapist increases the likelihood of further disclosure to the same therapist and to others including friends and family (Farber et al., 2006). In the present research, an empathetic response to online self-disclosure was not associated with increased self-disclosure to a health professional. The inconsistency in the findings in previous research and the present study suggests that there may be other factors that influence the relationship between self-disclosure and further self-disclosure. For example, convenience may be an important factor in enhancing self-disclosure. In a study by Lee et al. (2020), the participants interacted with a chatbot for over several weeks and were given a chance to disclose this information to a therapist on the same platform with the majority of the

participants sharing the information. The study suggests that self-disclosure can be facilitated by making it convenient or easy.

The findings also contribute to research on the role of empathy in providing support to people with psychological disorders. First, the findings support the work of Grondin et al. (2019) by showing that empathy can be expressed effectively in an online context. Indeed, the manipulation of empathy through explicit statements was significant in the empathetic feedback group when compared to the no feedback group. The findings further suggest that the experience of empathy is not associated with increased help-seeking or self-disclosure after the online interaction has taken place. The findings are therefore aligned with the research by Mokkenstorm et al., (2017) which showed that while empathy increases satisfaction with online interactions, it does not improve service user mood. The benefits of empathy may therefore be limited to experiencing satisfaction with an online interaction, and they may not extend to a beneficial effect on behavior, although this would need to be investigated further. There is some contrasting evidence to show that empathetic online interactions can have other benefits in addition to user satisfaction. For example, empathy experienced online can lead to an intention to reduce drinking (Ellis et al., 2017), which suggests that empathy has the potential to have an effect on disorder-related behavior.

Role of Online Helplines and Friends

The findings also contribute to knowledge about the role of online platforms (Hoermann et al., 2017; Kauer et al., 2014) and friends in supporting people with a psychological disorder (Thoits, 2011). The findings suggest that when individuals with a psychological disorder receive an empathetic response online, their intention to seek help

from friends decreases. This result suggests that discussing mental health issues with a friend may be partially motivated by a desire to be acknowledged and validated in an empathetic way. If a person already feels that their thoughts and feelings have been validated on an online helpline, they may feel less need to speak to a friend. The finding also suggests that sharing mental health information with friends may serve a different function from sharing the same information with a health professional because an empathetic response only had an impact on seeking help from a friend, not from a health professional. More specifically, information may be shared with a friend in order to get empathy, while information is shared with a health professional for at least partially different reasons. It could be explored in future research why people contact online helplines and whether it is done for a different reason than reaching out to a friend or a health professional.

Future research could also study how empathetic online interactions can contribute in a positive way to social support structures over a lifetime of psychological disorders. Empathy experienced online can be viewed as a form of emotional support, one dimension of the tri-partite social support construct, together with informational and practical assistance from family, friends, and other people (Thoits, 2011). The role of social support has been studied especially in the development and severity of psychological disorders among children and adolescents (Rueger et al., 2016; Wang et al., 2018) as well as in alcohol and drug dependency (Warren et al, 2007) with the results showing that social support acts as a protective factor, but psychological disorders erode social support over time. Given this context, online interactions may fasten the erosion of existing social support structures, especially emotional support provided by friends. Yet,

online platforms may be a useful resource when other social support structures are not available or wear away over time.

Limitations

There are important limitations to the present research that could be addressed in future studies. First, it would be important to investigate whether the results of the present study are replicated when the research design mirrors more closely the circumstances of contacting an online helpline in real life. When people reach out to helplines, they do so pro-actively to discuss issues that are important to them at the time. In the present study, participants disclosed therapeutically relevant information when they may not have done so without prompting. Moreover, in order to protect the participants from disclosing sensitive information without psychotherapeutic support, closed survey items were used to ask the participants to share information about their mental wellbeing, meaning that the participants were not able to choose the topic or disclose information in their own words like they would be able to do on an online helpline. Moreover, the self-disclosure in the experiment took little time to make, when disclosures on online helplines take longer and may therefore have a different effect.

Second, the results rely on self-report items about intention to seek help and self-disclosure to a health professional. Past research in self-disclosure (Gieselmann & Pietrowsky, 2016; Lucas et al., 2014) has shown that subjective and objective measures do not always produce similar results with participants often underestimating the amount and depth of self-disclosure online. It would be important to use both kinds of measures in future studies to corroborate the findings.

Finally, the second survey was administered two weeks after the participants had taken the first survey. The time between the surveys was determined on the basis that the participants would have had sufficient time to see a health professional between the two surveys, but a longer delay may have been needed for the participants to have time to make an appointment and see a health professional. The longer-term effect could be studied at different time intervals from online self-disclosure.

Implications for Practice

The present research has practical implications by shedding light on the role played by online helplines in supporting people with psychological disorders. The findings suggest that an empathetic response to online self-disclosure may not lead to help seeking or further self-disclosure to a health professional. As a result, if one aim of online helplines is to support service users to get clinical support and to share information with a health professional, it should be studied in future research whether help-seeking and disclosure can be encouraged in other ways. For example, service users could be specifically advised to contact a relevant health professional. Past research has shown that creating a step-by-step implementation plan (Gollwitzer & Sheeran, 2006) about how and when a service user may contact a professional can increase the likelihood that advice is followed.

The results of the present research also show that getting an empathetic response to online self-disclosure may decrease intention to seek help from a friend for a mental health issue. This result suggests that because subsequent help-seeking may decrease, online helplines can provide a form of release or support for mental health issues. Such support is especially valuable when other sources of support are not immediately

available. At the same time, getting a sense of relief from disclosing information online may mean that other more effective social support structures are not being built. It is therefore important to consider what advice is given to users of online helplines about building social structures for supporting their mental health and wellbeing.

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