

# Listen2Me

The experiences of CareText  
volunteers and its service users

---

JOHN LAM  
DELILAH TAN  
ANDRE SHIA  
SEYOUNG OH

SUPPORTED BY:

THE  
**Majurity**  
TRUST



# SUMMARY

This is the first exploratory study using CareText data since its inception in 2020. At present, the only service effectiveness measure are the clients' pre- and post-chat distress scores, which offers little insight into what happens during client-volunteer interactions. This study aims to identify what volunteers are doing in chats to reduce client distress levels, and examine the issues that lead clients (aged 10 to 19) to seek support via CareText. Using grounded theory, transcripts from January to June 2022 were analysed. Findings revealed varied use of CPR and PADI models, where volunteers adjusted the conversation to assess and match the client's needs. Safety contracts were established in 74% of chats, though success depended on client engagement. Volunteers' active listening skills included Affirmation (84%), Validation (52%), and Encouragement (26%). Some deviations from training were observed, such as misalignment in understanding, going off script, and rushed endings. Clients sought help mainly for Quality of social connection, Intrapersonal issues, and Life stage issues.

## Table of Contents

<b>Introduction</b> .....	<b>3</b>
<b>Walkthrough of CareText</b> .....	<b>5</b>
<b>Objectives of Listen2Me</b> .....	<b>10</b>
<b>Methods</b> .....	<b>11</b>
<b>Findings</b> .....	<b>12</b>
How do volunteers de-escalate crises? .....	12
Suicide Assessment using the CPR Model.....	12
Safety Planning .....	15
Crisis De-Escalation using the PADI Model .....	16
Active Listening.....	18
Deviations.....	21
Misalignment in Understanding.....	21
Going Off Script .....	22
Rushed Endings .....	23
Why do young people call or text in? .....	25
Quality of Social Connection.....	25
Intrapersonal Issues .....	27
Life Stage Issues .....	29
<b>Implications</b> .....	<b>31</b>
Implications for External Practitioners .....	37
<b>Conclusion</b> .....	<b>37</b>
<b>References</b> .....	<b>39</b>

**Trigger Warning: Content contains references to suicide, self-harm, sexual assault, and abuse.**

**Disclaimer: All chats used as examples in this paper are adapted from actual chats.**

## Introduction

**Suicide remains the leading cause of death for young people** (10-19 years old) in Singapore. Crisis intervention for the young is paramount. In 2021, there were 37 reported suicide deaths for this age group, which is a 23.3% increase from the previous year (Immigration and Checkpoints Authority Singapore, 2022). Cerel et al. (2018) estimate that for every suicide death about 135 people are affected, meaning these 37 youths are now remembered by about 5,000 of their family, friends, classmates, teachers, neighbours, and even strangers in the community. These tragedies raise questions such as: Who did these 37 youths reach out to before taking their own lives? And who will be there for the 5,000 affected?

For over 50 years, Samaritans of Singapore (SOS) has strived to be an available and effective helpline for those in crisis, thinking about suicide, or affected by suicide. Non-religious and not-for-profit, SOS offers a suite of services encompassing the continuum of care, including the prevention, intervention, and postvention of suicide. Our dedicated pool of volunteers and staff members have made themselves available on-site, through email, over the phone, and most recently, by text.

In July 2020, SOS piloted the country's first crisis text messaging service, CareText. This new service aimed to provide supervised, youth-friendly, and confidential online support for young people aged from 13 to 35 years. While targeted at a younger audience, CareText access has not been bound by age—18% of users in 2022 were 30 years and older. Since its launch, CareText has quickly become popular amongst the younger clientele, and to date, there have been over 15,000 text conversations.

For CareText, clients first make contact by sending a text to 9151-1767 on WhatsApp. After the initial text, clients are connected to trained volunteers who employ their empathy and active listening skills to assess for suicide risk and better understand the client's concerns. The client's distress is recorded before and after the chat on a scale of 0 to 5. The distress rating also considers the client's suicide risk at the closing of the chat as well as their

connectedness to resources. The pre-and post-chat distress scores, however, are the only current measures of service effectiveness. Unfortunately, little is known about what happens in between, such as the transactions and exchanges between the client and the volunteer. Recently, we have observed young clients replying to us that they “don’t need empathy,” “don’t ask me to put away the penknife,” and “don’t ask me the suicide question—or I will just tell you what you want to hear.” Our young clients are assertively telling us how they would like to be helped, but these exchanges happen within the chats. And thus, this project aims to gather insights from the client’s perspective by “listening” to them.

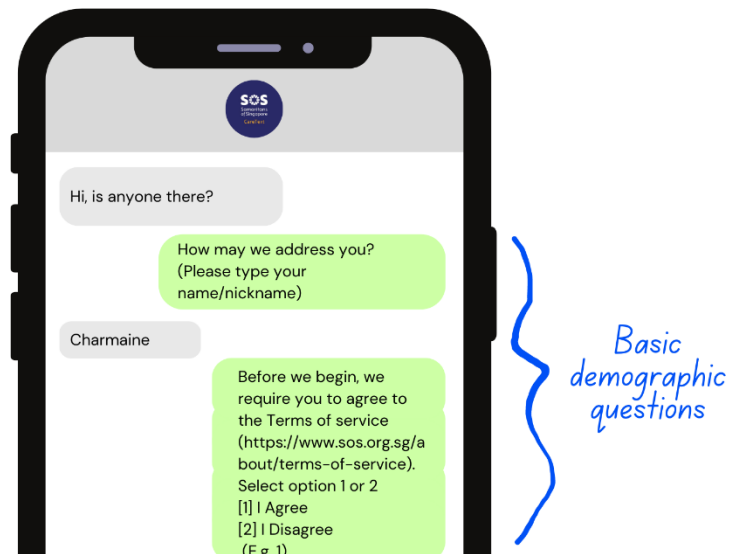
**The Listen2Me project had a two-pronged approach.** We aimed to internally review how we work with young clients in crisis to create a codebook, or corpus, of practice examples for future machine-learning projects that require examples of successful intervention points. This project resulted in two different codebooks and a problem code exercise which will be explained in later sections. Furthermore, the findings were shared with relevant internal stakeholders to formulate recommendations for practice and training curricula. For example, the finding that the PADI model is administered differently per client led to changes in the supervision structure. Lastly, our external reach focused on contributing to the local knowledge base on suicide precipitants of young Singaporeans who use CareText.

This report is divided into four sections:

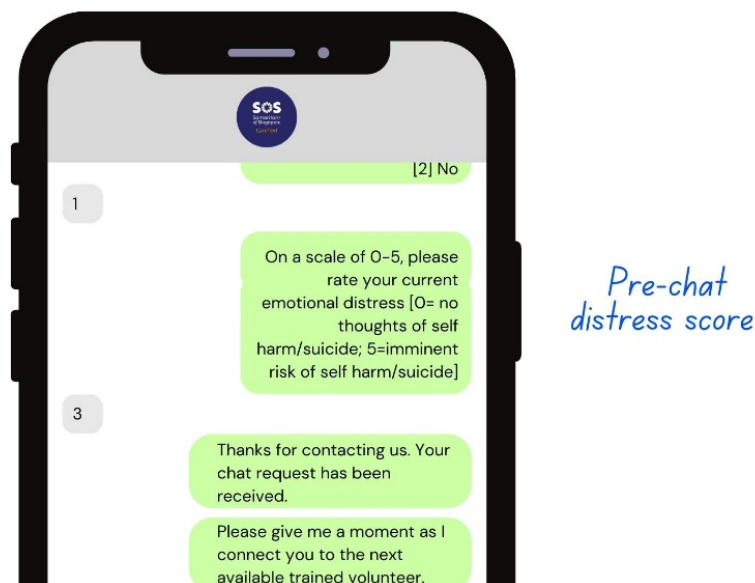
- 1** Walkthrough of CareText to contextualize the findings and implications.
- 2** Objectives and methods of Listen2Me project to describe how the chats were analysed.
- 3** Findings from data analysis which includes adapted excerpts from real chats.
- 4** Implications from the internal sharing of findings as well as the potential implications for external practitioners working with youth who are suicidal.

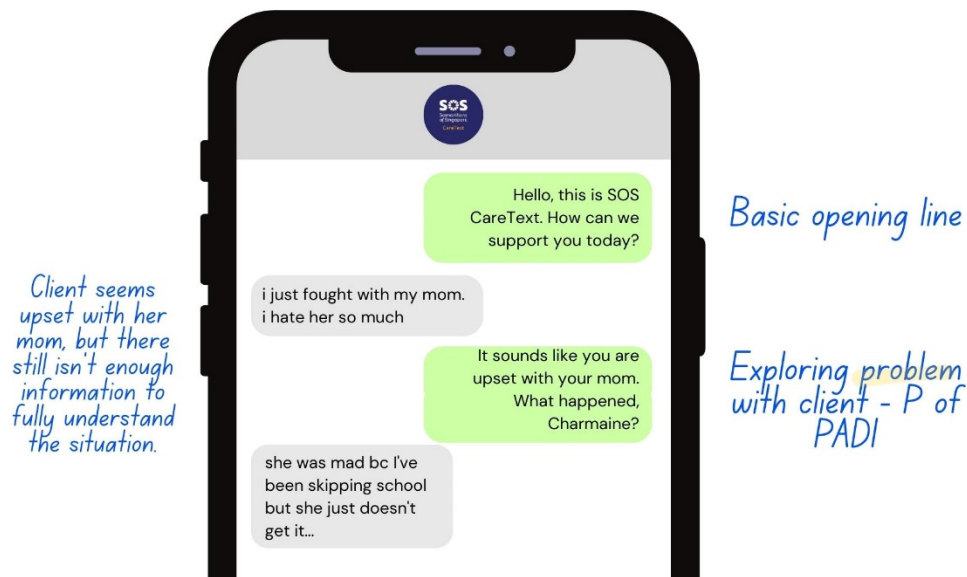
## Walkthrough of CareText

This section will demonstrate a pretend CareText chat to contextualize the findings from the Listen2Me project as well as the changes to the curriculum and processes. CareText starts with the client reaching out for help. Clients can access CareText via WhatsApp by messaging 9151 1767 or by our website. Clients



need to send the first message to initiate the conversation. Then there will be automated questions to collect demographic information such as their age, gender, and previous use of SOS services. Most importantly, clients are asked to self-rate their emotional distress on a scale of 0-5 with 0 being no thoughts of self-harm or suicide and 5 being an imminent risk of self-harm or suicide. Once these automated questions are answered, clients will be connected to a volunteer.



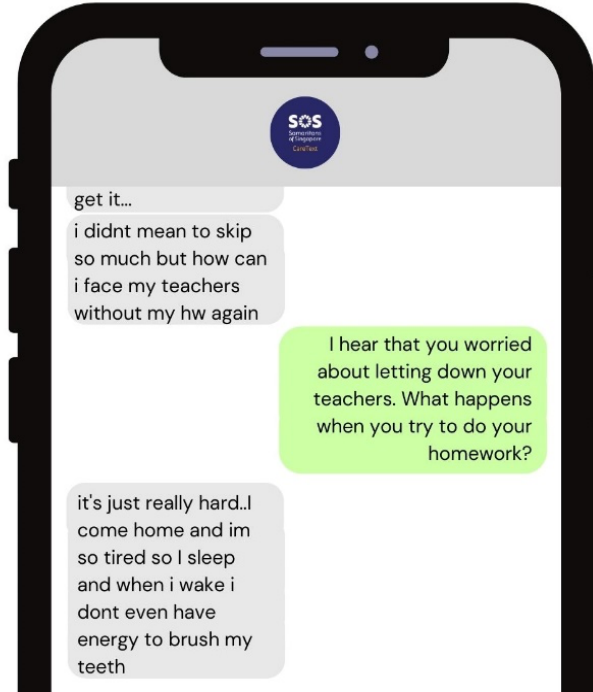


All volunteers start the chat conversation with the same prompt, “Hi this is SOS CareText. How can we support you today?” Then we wait to see what the client shares. In this chat, the client is sharing how she fought with her mother; thus, the volunteer starts with the PADI model. PADI stands for Problem Identification, Attempted Solutions (to the Problem), Desired Outcomes and Interventions. It is a framework that shapes the conversation and is used to pinpoint and de-escalate the client’s crisis that brought them to CareText. A detailed explanation of PADI can be found on page 16. Depending on how the conversation goes, the volunteer will try to go through all steps of PADI with the client. However, there are instances when not all components of PADI are implemented. For example, the client may want to spend the entire call on P, or Problem Identification, instead of moving on to A, or Attempted Solutions. Therefore, it is important to keep in mind that the PADI model is a recommended framework for conversations; however, volunteers are encouraged to follow the client’s lead especially since the volunteer’s role is to provide emotional support and “hold space” for distressed clients.

In this chat, the volunteer starts the conversation by using the P of the PADI model to explore the client's problem. The client goes on to share how she is skipping because she hasn't done her homework and does not want her teachers to know. The

*Volunteer now knows that client fought with mom because she was skipping school and seems to not have done her homework.*

*and that client sleeps often and has no energy to do basic tasks*



volunteer picks up on how the client is worried about what her teachers will say so they reflect that emotion to the client. Then the volunteer tries to understand why the homework is not getting done.

At this point, the client shares something that sticks out. They mention how tired they are and how they do not have the energy for basic tasks, which is alarming because fatigue is a



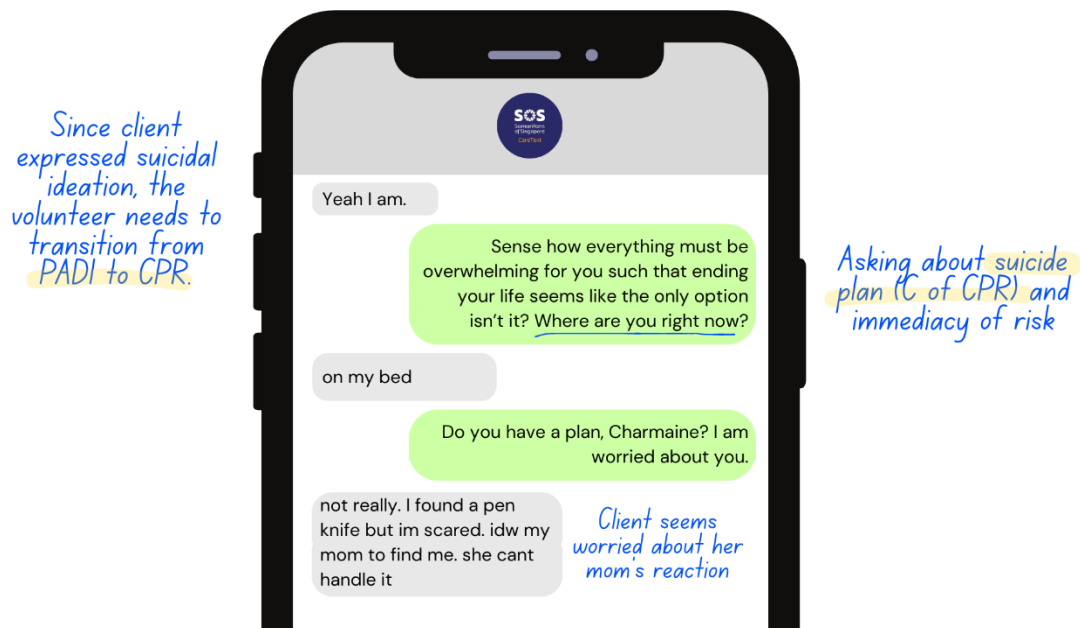
*Client drops a suicide hint.*

*Volunteer validates client and explores the 'low on energy' part of the problem.*

*Using the 'sometimes' approach to normalize asking about suicide, volunteer asks the SQ.*

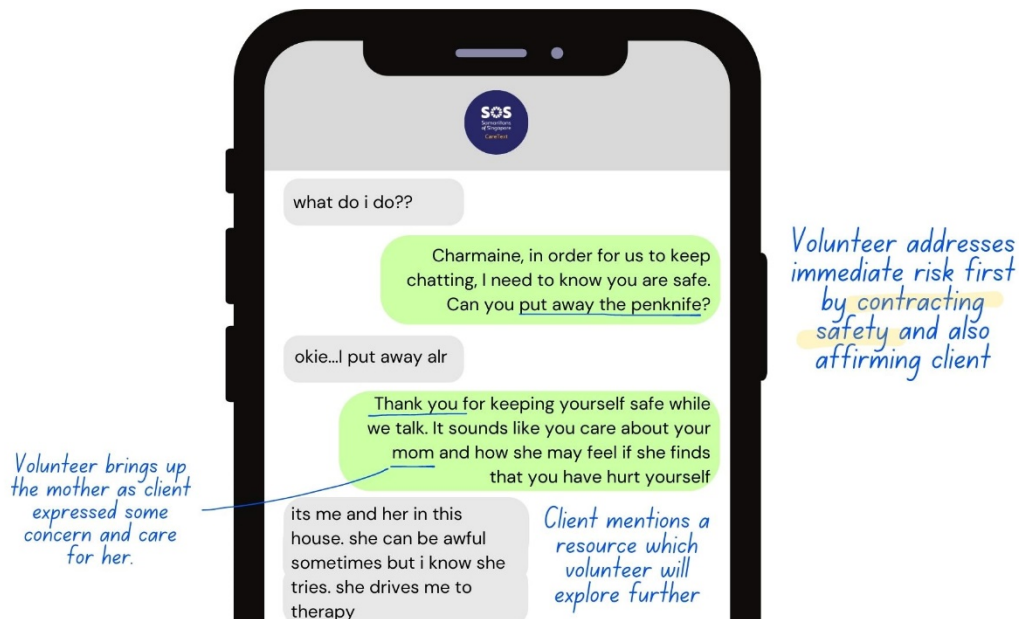


symptom of major depression disorder (American Psychiatric Association, 2013). Keeping the client's fatigue in mind, the volunteer continues to explore the P (or Problem Identification) of the PADI model. The client then shares something that changes the pace of the conversation. The client mentions how she doesn't want to wake up from her sleep which can be considered passive suicide ideation. The volunteer proceeds to ask the client if she is suicidal and transitions from using the PADI model to the CPR model.



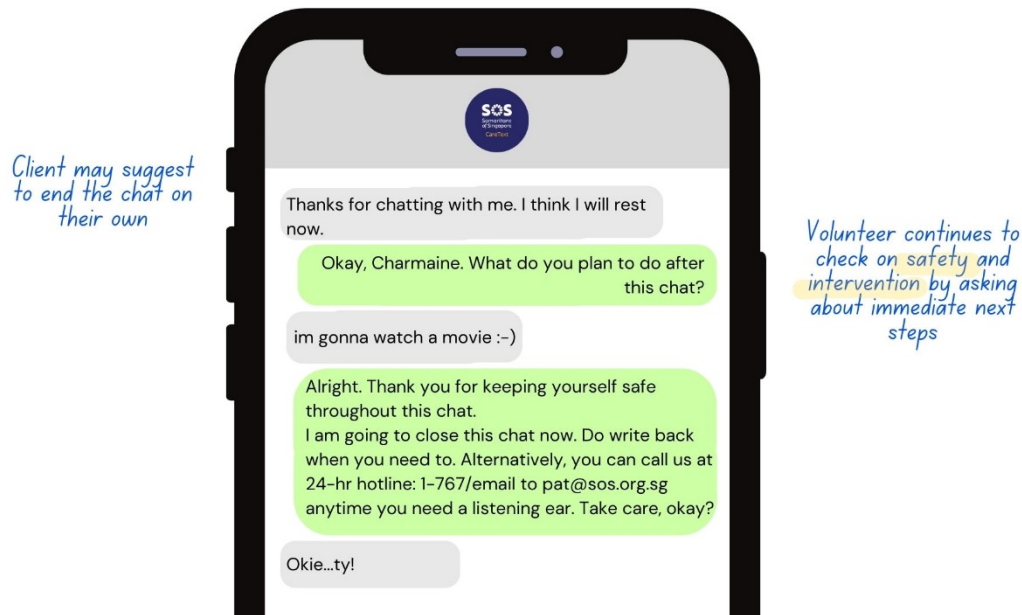
The CPR model is used for suicide assessment. It can also be used to assess any current risk to the client's safety when checking on the current suicide plan because volunteers ask about methods or rehearsal. CPR is usually administered early in the chat to assess the suicide risk of the client and ensure the safety of the client. It is administered once the client has expressed some form of suicidality. Rehearsal of a suicide plan refers to the testing of the suicide methods, for example, if they plan to jump then perhaps, they have scoped out potential buildings based on accessibility to rooftops. While administering CPR, the volunteer is balancing two things at once—assessing immediate risk and getting more information on the client's suicidality. The volunteer asks for the client's suicide plan including location and method. The client shares that she is in her room with a penknife.

The volunteer is quick to contract safety before the conversation continues. The volunteer asks the client to put away the penknife. They also affirm the client for working together with the volunteer. Once the client has made the effort to keep themselves safe, the volunteer resumes the conversation using the CPR model to focus on R or Resources. They circle back to the mother who may be a reason for living or a resource.



Although the client's mother seemed to be part of the problem, it becomes evident that there are multiple layers to each client and the volunteer must carefully unwrap them and decide which lead to follow. The rest of the chat (not pictured) will most likely be spent discussing the mother as a resource, what the client's therapist thinks about the client's tiredness, and what can be done immediately following the chat. In the context of PADI, the volunteer has transitioned to intervention as they explore the client's connected to resources (the therapist) and what can be done in the long term. In this case, it can be observed that while the volunteers are trained to administer PADI sequentially, volunteers may have to adapt accordingly to the needs of the client, therefore PADI may not be administered sequentially as trained. If possible, the volunteers might try to attempt circling back to administer the aspects of PADI that were not administered, however, as clients may want to end the chat before the volunteer could do so, the volunteer might not be able to administer all four aspects of PADI.

At the end of this pretend chat, the client is the first to suggest ending the chat and the volunteer subtly checks on safety by asking what she plans to do next. We always make sure to remind all clients that we are here to listen if they need us again.



## Objectives of Listen2Me

**The Listen2Me project is the first qualitative study using CareText data** since its inception in 2020. The main purpose is to identify what works in 'successful' chats, i.e., chats in which the client's distress has decreased. Thus, the first research question is: **During chats with clients who have low to high suicide risk, how do volunteers de-escalate the crisis?** The first research question aims to identify specifically what volunteers are doing in chats where distress levels seem to reduce at the end of the conversation. All CareText volunteers are trained as active listeners who provide emotional support, suicide risk assessment, and safety planning for distressed clients. However, what are the concerns of distressed clients? The second research question explores the problems that prompted clients to reach out for help via Caretext. In other words, given the circumstances or the presenting problems of each client with low to high suicide risk, how do the volunteers manage to de-escalate the crisis? The intention of focusing on these two perspectives is to

establish what CareText has done and is doing before the future direction of what *more should be done* is imagined.

## Methods

Chat transcripts from January to June 2022 were randomly extracted and screened so that only those meeting inclusion criteria were used. Eligibility was based on the client’s age (10-19 years old), suicide risk (low to high), change in distress level (decrease or no change in distress score and length of the chat (between 1.5 to 5.5 pages). “Successful” chats were defined as chats with a decrease or no change in distress scores. At the end of data extraction, there were a total of 50 random chat transcripts that met the screening criteria. See Table 1 for the demographics of clients bearing in mind that the age and gender are self-reported.

*Table 1. Suicide Risk of Clients (n=50)*

	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Total</b>
<b>Male</b>	2	9	14	25
<b>Female</b>	6	9	10	25
<b>Total</b>	8	18	24	50

There were four coders involved in this study with two coders per research question. All coders have undergone CareText training and/or Hotline training. Three coders were undergraduate interns from social work or psychology backgrounds and the fourth coder was a research associate at SOS. The coding process was iterative and used grounded theory (Walker and Myrick, 2006). In total, there were about 400 hours spent on coding per coder and approximately 6 weeks of training per coder as well.

## Findings

### How do volunteers de-escalate crises?

Each chat transcript was examined and coded to identify the different skills and techniques employed by the CareText volunteers to decrease client distress. **The identified themes were Suicide Assessment, Safety Planning, Crisis De-Escalation, Active Listening Skills, and Deviations.** The most important theme is the Suicide Question (SQ) which is asked of every client regardless of their distress level and intention, even concerned third parties are asked the Suicide Question. It is important to note that the order of the themes does not reflect the sequence of events for every chat. All clients are unique, meaning some express suicidality within the first message so suicide assessment or CPR must be done quickly whereas other clients want to discuss their problems first, so Crisis De-Escalation or PADI is conducted.

### Suicide Assessment using the CPR Model

Volunteers are trained to assess suicide risk by asking the suicide question (SQ) and by administering CPR which stands for Current Plan, Previous Attempts, and Resources to assess a client's acute suicidality. "Current Plan" refers to how and when the client intends to carry out his or her suicide. Clients who have a suicide plan are assessed to have a higher risk. "Previous Attempts" refers to whether the client has attempted suicide in the past which might suggest a higher risk of suicide. Finally, "Resources" refers to the client's reasons for living which can take the form of a person, mental health care professionals, objects, or beliefs that the client finds support in and keeps them from carrying out their suicide plan. The presence of resources might reduce the suicide risk of volunteers as they might serve as protective factors. The volunteer will assess the suicide risk of the client according to the answer of the client. The suicide question is expected to be asked in every chat, but there were differences found in our sample. Some clients disclosed suicidality immediately and explicitly, so volunteers did not ask the suicide question and instead proceeded to administer CPR, i.e., asking about their plan and rehearsal. However, the suicide question was answered,

directly or indirectly, in all chats; thus, all clients in this sample were reported to have low to high suicide risk.

After asking about suicide, volunteers are required to investigate further to determine the immediacy of suicide by administering CPR. This three-pronged approach had different rates of implementation, however. Client's current plan or suicide method and details were asked in 62% of chats; however, only 46% of clients were asked about their prior attempts and only 40% were asked about their reasons for living. The expectation from training is that all questions of CPR are asked in linear order, but the line of questioning may vary depending on what the client shares. For example, the below chat is an instance of when the CPR questions may be asked in a different sequence.

**Client:** I'm such a disappointment to my parents. I love them so much but always make them embarrassed or hate me. Maybe if I die, they would be happier. My siblings would be happier.

**Volunteer:** Sounds like it's a challenging time for you as you wish you can make your parents proud but think you are unable to at times. I'm worried for you when you said you think your parents might be happier if you were dead, are you currently thinking of ending your life?

**Client:** Yes I just dont know what to do anymore. Anyways it's better to just die now because im getting my results tomorrow and ill surely fail

**Volunteer:** I can only imagine how anxious you feel about getting your results tomorrow as you don't think you'll do well. If I may ask, what do you think of doing to end your life?

**Client:** Overdosing. Theres some bottle of medicine in the fridge so maybe that would work

**Volunteer:** I'm concerned for you, when are you planning on doing it?

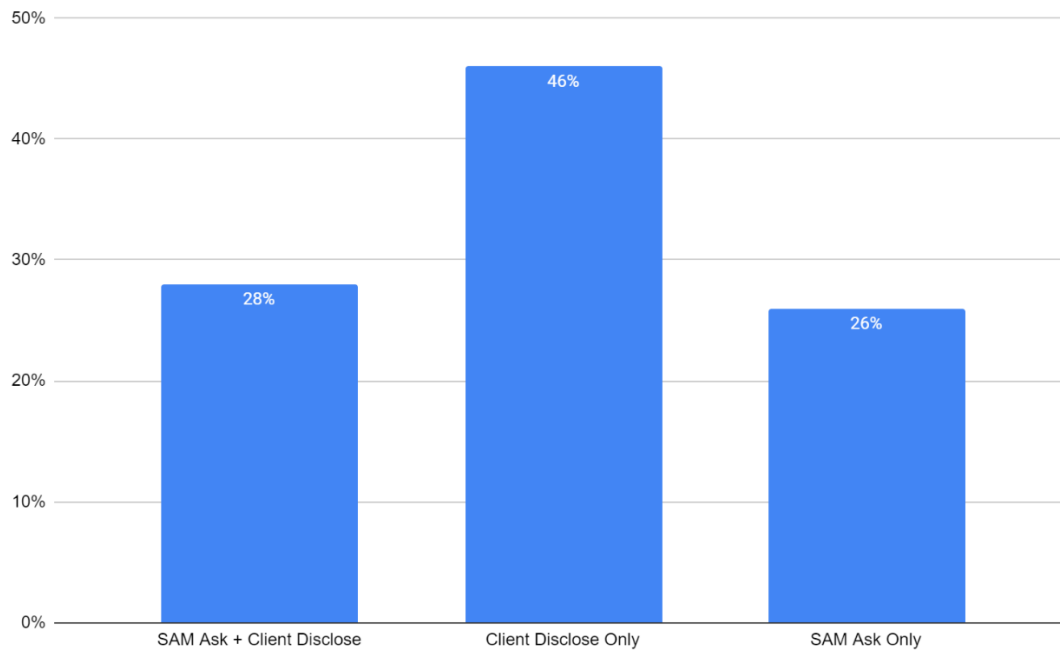
**Client:** 12 am later when everyone is asleep

**Volunteer:** Sense that it's so painful for you that dying is an option to end the pain. I hope you reach out to SOS before you hurt yourself alright? Earlier you mentioned about wanting your parents to be happy, wonder how is your relationship like with your parents?

In this chat, the client immediately expresses suicidal ideation ("Maybe if I die, they would be happier") so the volunteer notices this clue and asks the SQ. The client confirms and then the

volunteer explores their suicide plan. Instead of asking about previous attempts, the volunteer pivots to ask the client to elaborate on their family which the client had mentioned earlier on in the chat. In Figure 1, the patterns of suicide assessment are mapped out to reflect how often the client discloses suicide risk and immediacy before the volunteer's assessment. 46% of clients, or in 23 conversations, disclosed their suicidality first to the volunteer which necessitated the need to immediately administer CPR. Thus, in 23 conversations the volunteer did not ask the suicide question because they had already moved on to suicide assessment. In other words, the lower frequency of volunteers, or 26%, asking SQ does not mean that the SQ is not answered, but rather, there are three ways to get an answer—only volunteers asking the SQ, *only* clients themselves disclosing their suicidality before SQ is asked, *or* volunteers asking the SQ before or after the client has disclosed their suicidality. However, the rest of the suicide assessment concerning plan, rehearsal, previous attempts, and reasons for living is guided by the volunteer. There are more instances of volunteers directly asking about these components of suicide risk compared to the client's disclosure of such sensitive information. This finding is important for CareText training and supervision because it challenges the assumption that clients will disclose their suicide plan without any probing from the volunteer. Thus, all volunteers should understand the significance of their role in assessing suicide risk and that the client's disclosure of wanting to die is only the beginning of the assessment. Furthermore, the different rates of CPR implementation show the volunteer's adaptability in adjusting the conversation to assess and match the client's needs.

Figure 1. Suicide Question – Who Asks?



## Safety Planning

In addition to suicide assessment, SAMs are trained to carry out safety planning if the client seems to be at immediate risk of hurting themselves. There were 23 chats where the client was at immediate risk meaning they had already hurt themselves or were planning to do so within the duration of the conversation. The other 27 chats involved clients who expressed suicidal ideation but did not explicitly disclose that they were about to physically harm themselves during the conversation. When volunteers realized that the client's safety was compromised, they quickly encouraged the client to put away whatever they were using to hurt themselves or to move away from the ledge, towards a safe location. Volunteers then contracted safety as a condition for the conversation to continue: "I hope to lend you a listening ear and some support at this moment. You are not alone, [Name of client]. Promise that you will continue to keep safe during our conversation alright?"

There were also instances when the client's safety was severely compromised, which necessitated potential engagement with emergency services. Volunteers then directed clients to seek external help: "Hear that you are feeling overwhelmed right now, as I'm



worried for your safety, wonder if you can dial 995 for SCDF or approach the A&E department of your nearest hospital right now to ensure your safety?" Volunteers directed clients to safety on their own, meaning clients were instructed to step away from the window, close the window, or put down the pen knife. Safety contracts were established in 74% of the 23 chats that involved immediate risk for the client. There were six instances when safety was not contracted; however, volunteers failed to contract safety because the client left the conversation on their own accord, or the client refused to engage with the volunteer.

**Volunteer:** I'm worried about you being on your own right now. Wonder if you can see anyone around or near you at the moment?

**Client:** am sorry.. theres no one and my anxiety says no to approaching strangers

**Client:** my wrists are bleeding sorry

**Client:** my head hurts

**Volunteer:** Want to affirm your strength in reaching out to me here even though it's scary. You seem to be in pain right now and I'm worried about your safety. Can you take a lift down to the ground floor and sit down at a comfortable and safe place so we can keep talking please?

**Client:** im sorry..

**Client:** goodbye and thanks once again

**Volunteer:** I can sense you are doing your best to manage a lot of stress and hurt in your life and I want you to know that you don't have to be sorry when you are talking to us here ok? We just want to be here for you and support you. How do you feel about letting us get you some help so that you don't have to go through this alone?

<<CLIENT>> has been disconnected from the conversation.

<<VOLUNTEER>> has left the conversation.

It is important to acknowledge that although volunteers are equipped with the necessary skills to contract safety and to de-escalate crises, successful implementation depends on the client's willingness and engagement.

### Crisis De-Escalation using the PADI Model

Since SOS began operating its hotline, all volunteers have been trained to de-escalate the crisis by creating intentional spaces for clients to share the problems that pushed them to

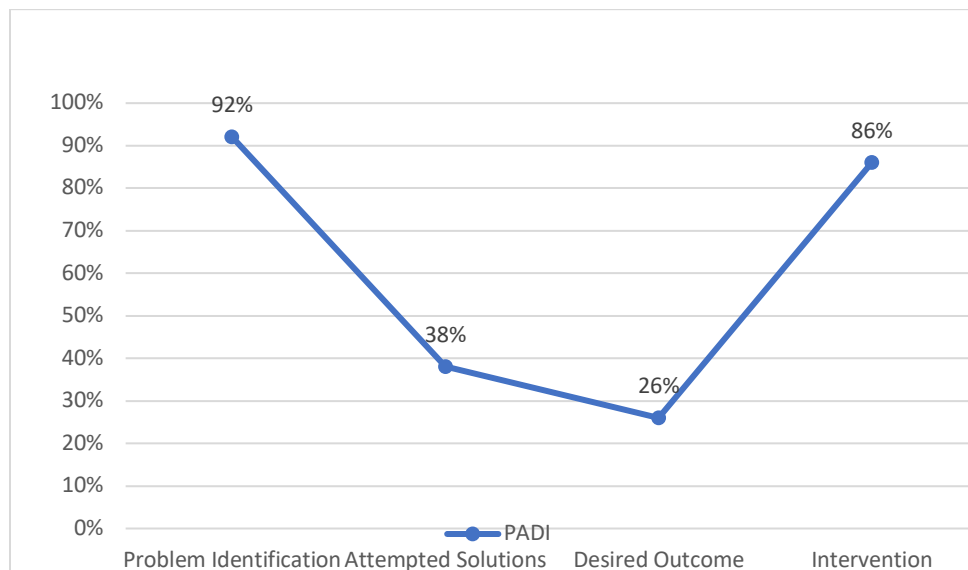
seek help. SOS volunteers use the PADI model, which stands for Problem Identification, Attempted Solutions, Desired Outcome, and Intervention (Yeo, 1993), to support distressed clients. See the table below for an explanation of PADI.

*Table 2. Explanation of P.A.D.I.*

<b>Problem Identification</b>	The volunteer will ask who, what, when, and how questions to clients to better understand the cause of their distress. It is important to note that volunteers are not allowed to ask “why” questions because the intention of problem identification is not to understand the client’s justification for their distress, but to understand in general what has happened. Moreover, “why” questions may be misconstrued as judgmental of the client.
<b>Attempted Solutions</b>	After identifying the client’s problem(s), the volunteer will proceed to explore the client’s attempted solutions. The intention is to be on the same level of understanding, to understand what the client has tried thus far, and to facilitate brainstorming for new potential solutions. It is also an opportunity to affirm the client’s efforts, e.g., “It must have been hard for you to handle this on your own. You are strong for managing for so long.”
<b>Desired Outcomes</b>	Then the next step is to identify the client’s desired outcomes and to support the client in verbalizing what they wish would happen to their problem(s) and/or at the end of the call/chat. After asking about their preferred outcome, the volunteer can then work together with the client to discuss the next steps.
<b>Intervention</b>	The last stage of PADI focuses on intervention or the action item. The intervention depends on what the client wishes to do. They may rely on their resources/solutions, or they may ask for new resources from the volunteer.

Our findings show that most chats had components of problem identification (92%) and intervention (86%) but attempted solutions and desired outcomes were explored in smaller frequencies, 38% and 26%, respectively. Like CPR (or suicide assessment), PADI is often conducted in different sequences depending on the client’s circumstances; however, the underlying intention of PADI is to place the onus of problem-solving on the client, which is the same principle upheld by other crisis hotlines (Ingram et al., 2008). Another guiding principle is to prioritize the client’s needs so that they are empowered to draw on their strengths. Thus, if the clients wish to focus on discussing their problems at length and

immediate solutions then the volunteers are obliged to proceed in this direction, which means PADI is adapted to meet the client's needs.



### Active Listening

Undergirding suicide assessment and crisis de-escalation is empathy, which is a longstanding skill of SOS volunteers since phone operations began in 1969. In all chats in this study, volunteers empathized with clients. In addition to empathy, volunteers are trained to utilize other techniques like encouragement (“Thank you for sharing this with me”); validation (“Anyone in your situation would feel very worried also”), and affirmations (“Despite the challenges you're facing, I hear how you've been trying to make things a better for yourself and just want to affirm you for pressing on and reaching out here”) to express concern and care for clients. These techniques are collectively known as EVA or Encouragement, Validation, and Affirmation. Our findings reflected that most volunteers affirmed the clients (84% or in 42 conversations out of 50), followed by validating them (52%) and then encouraging them to share (26%). Most importantly, volunteers reminded clients that they are not alone in their distress which seemed to have a positive impact on the clients. In the below chat, the volunteer validates the client's emotions and reminds them that they are not alone in their struggles. The client seems to respond positively to the volunteer.

**Volunteer:** [Client's name], I know things are rough right now but do know that we are here for you. From that phrase alone, can sense that you are a diligent person and that you work hard. However, your main concern seems to work around having someone there for you to better guide you on certain life decision. Am I right?

**Client:** Yep correct. And thanks I really appreciate it.

**Volunteer:** Not easy to be in your position right now but please know that you are handling it very well. Sometimes people who are facing similar situation might find it helpful to speak to a counsellor. Wondering if you are open to the idea?

**Client:** Yeah. I'm considering gaining the courage to ask my parents for therapy. It's expensive and a lot to ask...

On the other hand, the positive impact of the volunteer's reassurance and care may be more subtle. In the below chat, the client repeatedly tries to exit the conversation, but the volunteer is persistent in reassuring them to stay and to continue sharing.

**Client:** The will to move on and live has just disappeared...Can't laugh, can't cry...Sometimes I go high, sometimes I go low...I feel like I am lost in this world.

**Client:** It just feels hard to be truthful.

**Client:** It's 11pm right now...Everyone is going to sleep...Between 2 to 4am I was thinking of hanging myself and go to sleep forever...See you later...

**Volunteer:** Thanks for sharing with me – can imagine that everything feels like too much right now and the pressure to pretend is very tough on you. I'm still here for you okay? Can sense that a part of you wants to continue living and perhaps that's why you wrote in tonight, is that right?

In other words, the effectiveness of active listening can sometimes be reflected in the client's continued engagement with the volunteer. For suicidal clients, the willingness to keep sharing is profound, especially considering how suicide is still to a certain extent stigmatized in Singapore. Furthermore, EVA is utilized to ensure clients do not feel judged and can openly share their concerns. Below is another example chat in which the volunteer validates the client's self-harm behaviour and the underlying intention. In doing so, the volunteer manages to assure the client's safety, and the client is encouraged to continue sharing.

In the chat below, the volunteer repeatedly expresses concern for the client while simultaneously trying to ensure the client's safety.

**Volunteer:** Hi [Name of client], this is SOS Care Text, how may we support you this morning?

**Client:** I uhhhh I hurt myself

**Volunteer:** I am concern for you <<CLIENT>>. If you are in any imminent danger, do call 995/999 for immediate help to be able to reach you alright?

**Client:** Idk I don't want my brother to be pissed bcs he already hates my mental health

**Volunteer:** I hope to be able to give you my support

**Client:** If I tell someone my butt will be at IMH

**Volunteer:** Hear that life has been in distress, so much so hurting yourself seems to be a way to help relieve your pain. When you say you are hurt, is your wound bleeding and which part of your body is your wound at?

The volunteer continues and validates the client's emotions by acknowledging how self-harm may be to "reduce unwanted states of emotion, including anxiety, tension, and feeling overwhelmed" (Lewis and Santor, 2010).

**Client:** My arm. Left arm. IMH has traumatized me

**Volunteer:** Hear that you have an unpleasant visit to IMH. I am worried for your safety <<CLIENT>>, is your wound still bleeding?

**Client:** No is just dry Now

**Volunteer:** Thank you for taking this step in writing to us this morning, keeping yourself safe. Are there any sharp objects around you now?

**Client:** Nope..

**Volunteer:** I hope to lend you a listening ear and some support at this moment. You are not alone, [Name of Client]. Promise that you will continue to keep safe during our conversation alright?

**Client:** Ok..

After a few exchanges, the client begins sharing their concern after assuring the volunteer that they are safe.

**Volunteer:** Thank you for the assurance [Name of Client]. If I may ask, what happened?

**Client:** Is a thing where I blocked my best friend...

Overall, volunteers used EVA to express concern for clients and to remind them that they are not alone in their struggles, which is especially important considering the service platform. Unlike on a phone call, volunteers cannot as easily express themselves using tone of voice, pauses, or interjections like “hmm” when communicating through text messages (Walter, Loh, and Granka, 2005). A study by Gould et al. (2022) on a crisis text messaging service in the US found that the client’s perception of the volunteer’s concern is significant and was linked to lower odds of being more depressed, overwhelmed, or suicidal at the end of the chat.

### Deviations

Lastly, there were instances when the volunteer and client were not aligned which led to negative turning points in the conversation.

### Misalignment in Understanding

Although volunteers are trained to be non-judgmental, their ability to withhold judgment is based on their understanding of the situation; thus, if the volunteer does not comprehend what the client is referring to then miscommunication can ensue. A client shared with a volunteer that she was having flashbacks from her childhood and that she thinks she was “SAd.” “SAd” is an abbreviated form of sexually assaulted. The volunteer’s response does not seem to consider the severity of the traumatic assault: “Seems like you have unpleasant experience in the past can be quite scary to have flashback again.” The volunteer then proceeds to assess the client’s safety since the client mentioned holding a penknife and having active suicidal ideation. The client goes on to describe how they felt after the assault and the volunteer replies with a response that confuses the client:

**Volunteer:** Can hear how terrifying it is for you, having to try and stop thinking but at the same it repeats itself. Mind me asking, what has happened as you spoke about this incident that happened years ago?

**Client:** huh wdym ? I no understand wym—

**Volunteer:** Sounded like there was an incident happened years ago, and wonder, what might it be that makes you feeling upset about yourself?

**Client:** sexual assault.

Later in the conversation, the volunteer tries another empathetic response: “Sense that you’ve been blaming yourself for what has happened while knowing you did not want it at all...” which does not seem to help facilitate conversation as the client stops responding and the volunteer closes the chat after several minutes of no response (see below for the excerpt).

**Volunteer [11:17PM]:** Sounded like your tutor has been supportive of you, and you’ve find comfort when speaking to her. Wonder, as you mentioned about a 5yo alter, during our conversation has that alter came in at any time?

**Volunteer [11:31PM]:** Haven’t heard from you for a while now, wondering if you are still around and would like to continue talking?

**Volunteer [12:01AM]:** I am going to close this chat now. Do write back when you need to. Alternatively, you can call us at 24-hr hotline: 1-767 / email to [pat@sos.org.sg](mailto:pat@sos.org.sg) anytime you need a listening ear. Take care, okay?

### Going Off Script

There are also instances when the volunteers go off script. SAMs are trained to give standardized responses and tend to avoid starting their sentences with “I know,” “I’m sorry,” or “I think. The intention is to ensure volunteers are not seen by clients as asking a leading question, giving personal opinions, or appearing to force resources on a client. Furthermore, volunteers are deliberate in their questioning to avoid yes/no questions as they may seem to be forcing the client to agree with the volunteer. In one chat, a client shared that they were worried about burdening their friends when sharing their problems. The volunteer goes “off script” by asking a Yes/No question which seems to be leading the client in a certain direction.

**Volunteer:** It sounds like there’s a part of you that feels guilty for ‘burdening’ your friends, but there’s another part that feels relief to be able to share, and also to experience care and closeness with your friends.

**Volunteer:** How do you feel when your friends share their problems with you?

**Volunteer:** Do you feel burdened?

The client does not reply with a yes or no but repeats themselves and shares that “But when I share I do feel like a burden to my family and friends my grandparents and parents don’t understand why I’m this way sometimes like why I’m sad most of the time they find it scary I

think I don't want it to be that way tho." This instance of a volunteer going "off script" by asking a leading question is significant because it is an example of a deviation from training. In the later section, we will discuss how these deviations could be addressed in the modified training curriculum.

### Rushed Endings

There were some chats where the volunteer seemed to push the chat to an end. The volunteer's suggestion to end the chat could be interpreted as abrupt because it disrupts the flow of the conversation. One client was chatting with a volunteer for almost three hours when suddenly the volunteer sent two messages at once to initiate the end of the chat.

**Volunteer:** Seems like it has something that has been happening regularly then, am I right? That must be so hard on you.

**Volunteer:** [Name of client], we have been chatting for some time now. I wonder how are you feeling right now?

**Volunteer:** If I could trouble you to help rate your current emotional distress on a scale of 0 to 5, [0 = no thoughts of self-harm/suicide; 5 = imminent risk of self-harm/suicide], this would help me to understand where you are emotionally.

**Client:** 5...

**Volunteer:** Sounds like you are still feeling highly suicidal, am I right? Wonder how you feel about giving us a call at 1767 so we can better connect with you?

**Client:** but im afriad of calling...

**Volunteer:** [Name of client], I would need to close this chat in 10 minutes. I wonder if you could promise me to keep safe when we do end this chat?

**Volunteer:** You are so brave and strong, [Name of client]. Sounds like you value your own life and want to keep safe too.

CLIENT has ended the conversation.

It is recommended that volunteers conclude their conversations within an hour if the client's distress has reduced, and safety has been contracted. And the client has moved on to talking about other topics not related to their suicidal ideation or distress. It should be noted that our Hotline and CareText services are crisis interventions that focus on reducing immediate crises and distress. As a result, the sessions are not intended to go beyond an hour. However,



there may be occasions when the client's suicide risk has not abated, and the chat continues for more than an hour. The client's expectations of the potential outcomes of the chat must be made clear at the beginning. We will discuss this mismatch in expectations later in the paper.

In conclusion, volunteers fared better in "successful" chats on CareText when they let the client's needs guide the conversation; otherwise, volunteers run the risk of disengaging clients who may not want to follow the volunteer's direction. For example, if a volunteer tries to apply the PADI model linearly then the client may disengage if they are not ready to move on to the next sequence of PADI. The below chat is an example of a volunteer being too rigid and sticking to the PADI model by asking probing questions to encourage the client to brainstorm on their own. However, the client replies with short responses and eventually leaves the chat. It is possible that the client may not have felt satisfied with the P (Problem Identification) of PADI and did not feel ready to think of solutions.

**Volunteer:** Hear that you've shared with your father and your counsellor. How did you feel after sharing with them ?

**Client:** I dont know. I dont think sharing help a lot. Hello?

**Volunteer:** Hear that you're unsure that sharing with them was helpful for you. Wondering how did they respond when you confided in them on what you're going through?

**Client:** I dont remember

**Volunteer:** Sense how lost and alone you're feeling all this while enduring the loneliness and turmoil you're facing within isn't it?

**Client:** Yes

**Volunteer:** It has not been an easy for you all this while being on your own. Wondering what are your thoughts of reaching out to your friends to do things together?

**Client:** All friends dont talk to me at all so i dont feel like reaching out. I dont know if i should consider them as friends

**Volunteer:** Sense the hurt and disappointments you're feeling as your friends don't talk to you and you're feeling unsure if they could be your friends is that right?

**Client:** Yes

**Volunteer:** What do you think they would respond if you were to reach out to them ?

**Client:** I don't know

**Volunteer:** If there's a way to improve your current situation, that's something you definitely would do. But at the moment you're feeling discouraged as the things you've tried don't seem to work so far, am I right? Mind sharing what you've tried so far?

**Client:** I cannot remember

Volunteer: We have been chatting for a while now and would like to let you know this chat will be closing in 10 minutes. How would you like us to support you in?

**Client:** I dont know, i dont feel like this has helped much

<<CLIENT>> has ended the conversation.

<<VOLUNTEER>> has left the conversation.

## Why do young people call or text in?

In FY20/21, the most common issues reported by distressed clients across age groups were psychological problems (37%), relationship problems (29%), and social problems (20%). This pattern is also reflected in the Hotline call data, which showed that youths (aged 29 and below) often report problems with relationships, with family, and a general inability to cope with a current crisis. **In this study, the three main themes were: (1) Quality of Social Connection, (2) Intrapersonal Issues, and (3) Life Stage Issues.**

### Quality of Social Connection

#### *Relationship Problems*

Findings from this qualitative study yielded similar patterns: 74% of the 50 clients mentioned relationship problems as one of the reasons why they sought out CareText. The most common relationship problem referred to family issues (n=32). When asked about potential support from their parents, some clients refused for reasons such as not wanting to further burden their family ("I don't want my brother to be pissed bcs he already hates my mental

health”), family violence (“My dad can get violent but he talks for a really long time”), fear of getting kicked out (“I had a fight with my parents again but this time they broke as in the get out of my house type”) or toxic relationships with parents (“I don’t want my mom finding my body. I hate her and I won’t let her touch me.”)

Friendship problems were brought up in 13 chat sessions and the reasons varied from bullying to blocking. One client shared that their trust had been broken after a group of friends had made a separate group chat to talk about them. Another client was worried because his friend had blocked him on messaging and social media apps after a supposedly harmless prank. A few clients mentioned that their friends had moved away or attended a different school so they could no longer depend on them:

Again, the point is how lonely and depressing it feels when you have to leave your social group, your friends don’t really have time for you and they can’t relate to you because they already start a new chapter, while you are left behind.

Some clients described relationship problems with their romantic partners (n=8) as well as other peers (n=5). Romantic relationship issues comprised of break-ups, long-distance relationships, and rejection by their crushes.

### *Social Isolation and Loneliness*

Furthermore, 62% of all clients reported feeling disconnected and not cared for. As one client put it, “I just felt extremely lonely today although I’m mostly a loner and isolated from everything and everyone...I just had no one or nowhere to go.”

Quality of social relationships has long been established as a social determinant of health and is linked to mortality and morbidity (House, Landis, and Umberson, 1988; Holt-Lunstad et al., 2015; Steptoe et al., 2013). Holt-Lunstad et al. conducted a meta-review in 2015 and found that social isolation, loneliness, and living alone have a corresponding average of 29%, 26%, and 32% increased likelihood of mortality. Another meta-review conducted in 2010 by Holt-Lunstad, Smith, and Layton found that the influence of actual *and* perceived social isolation is comparable to other well-established risk factors for mortality. The difference

between actual social isolation and perceived social isolation is significant because it became a problem during the coding process as well. The two coders often disagreed on whether a client could be considered isolated if they had mentioned the occasional social support of friends and family. This coding problem was raised by the trainers of CareText who agreed that it is difficult at times to differentiate between actual or perceived social isolation. This consideration has practice implications because it raises the question: How can volunteers be sufficiently trained to differentiate between actual or perceived isolation?

Perhaps the key is not to differentiate, but to accept both as different types of social isolation. Cornwell and Waite (2009) posit that social isolation is varied. There is social disconnectedness, which is “marked by a lack of social relationships and low levels of participation in social activities.”

For our young clients, their lives revolve around school, friends, and family; thus, when there aren't other social activities to fill in the gaps then they are left feeling disconnected. One client described her afternoons as being alone: “whenever i come home from school or finish school, no one's home so I feel lonely. my mother will never ask me how school was or if I'm okay. it makes me feel as though she doesn't care.” Some clients plainly state that they are alone, have no friends, and that “sometimes, the feeling is just like u r drowning, and no [one] else is there to help or understand”, which Cornwell and Waite (2009) describe as perceived isolation, or “defined by loneliness and a perceived lack of social support.” Thus, our priority as researchers coding these chat conversations was to accept descriptions of social isolation, whether actual or perceived, at face value.

## Intrapersonal Issues

### *Mental Health Issues*

Clients were transparent about their mental health in the chat conversations with volunteers. A client with OCD explained that they hadn't “gone to school for a long time and have been staying at home” which added to the existing feeling “like a burden because my family has to have higher expenses and I feel like I am causing my family unnecessary stress.”

Another client was worried about having developed an “ed” (eating disorder) when prompted by the volunteer to share what had brought them to CareText. When asked about switching to the Hotline for immediate help instead of CareText, the client replied that they “dont feel like calling anyone...my anxiety probably wouldnt even let me open up.” Clients’ self-disclosure of their mental health conditions and medications stands in contrast to research findings that adolescents often experience stigma (Kranke et al., 2010) and may feel socially rejected because of their mental health problems (Ferrie, Miller, and Hunter, 2020). However, their self-disclosure aligns with the experience of other anonymous resources like crisis hotlines (Rosenbaum and Calhoun, 1977), text lines (Evans, Davidson, and Sicafuse, 2013), and online forums (Gilat and Shahar, 2007).

### *Concerns about Seeking Help*

The anonymity offered by CareText is especially significant because since the clients are aware they are not speaking with an adult known to them like their parents, teachers, psychiatrists, counsellors, or social workers, they feel comfortable sharing “I hate my psychiatrists they’re so [censored] useless I’m having such mania and depressive episodes and they don’t [censored] care they don’t even give me my meds” or “as much as I tried to tell them I need my meds they don’t listen.” Approximately half of the total chat sessions mentioned varying issues with help-seeking. Clients refused volunteers’ suggestions of professional, psychiatric care because according to them “[IMH] always ask me to go home instead” or they may be subjected to traumatic events like “[stripping] down to check for wounds because they knew I self harm.” A few clients were concerned that volunteers would disclose the client’s personal information without consent and be reported: “This wont be reported [to IMH] right?”

### *Issues with Self*

Like the coding issue of social isolation and loneliness, the two coders were unsure how to categorize instances like the following: “i dont even think i deserve to be alive...im so worthless” or “im just a pathetic loser.” These themes of shame, self-loathing, and

overwhelming despair (“I have nothing now”) were grouped under Issues with Self, but perhaps a more fitting label is psych-ache which Shneidman (1993) conceptualized as “hurt, anguish, soreness, aching, psychological pain in the psyche, the mind.” These negative emotions of psych-ache comprise despair with life, yearning for connection, hopelessness, and suffering (Talseth, Gilje, and Norberg, 2003; Everall, Bostik, and Paulson, 2006; Lakeman and Fitzgerald, 2008). When a client was asked about how they cope with suicide ideation, they replied that although they played video games, watched shows, and listened to music, they “feel empty” doing these things on their own but know it occupies their time. They concluded that they “envy the happiness [they] see when other people have fun.” This client feels not only lonely but without happiness too. Their supposed issues with self are important to acknowledge as psych-ache because suicide research has established that psych-ache is a statistical predictor of suicide ideation (Berlim et al, 2003; DeLisle and Holden, 2009; Troister and Holden, 2010). Therefore, these clients are not simply sad and lonely because of a bad day, but they are experiencing emotional anguish daily. Their distress is chronic rather than acute which has implications for appropriate care and treatment.

### Life Stage Issues

Some clients write into CareText because of life-stage issues. The age range of clients for this sample is 10-19 years old which is considered the adolescent development stage (Petersen, 1988). During this stage of their life, adolescents are making discoveries at every turn. A few discoveries of many that they will have is to have more interest in romantic relationships and sexuality; show independence from parents as they spend more time with friends; develop self-identity; and start thinking about their future (Christie and Viner, 2005). Thus, life stage issues for this particular age group vary from school (n=22) to other issues like bullying (n=6), financial issues (n=6), sexual assault (n=2), and teenage pregnancy (n=1). Overall, young clients’ lives largely revolve around school, they describe feeling lost and “like [they] just threw away 17 years of [their] life” because their studies are going poorly.

I feel like I have ruined my chances of getting a favourable future for myself. My grades have been getting horrible. Attendance and punctuality in school as well. My

attendance and punctuality in school have always been very good up until this year. Because of my poor time management, I didn't do my homework fast enough before bed time, so I attempted to pull all-nighters but kept failing at 2-3am which made me start skipping school since I couldn't get enough sleep and couldn't get work done...I lost all sense of control and I feel extremely lethargic when I take my homework out of my bag.

It is apparent for this client that they feel as if they've "lost all sense of control" and consequently, the possibility of a "favourable future" is small. This client's life stage issue is highlighted because one of the strengths of CareText is our intention to validate clients' emotions and thoughts, especially for clients who feel invalidated.

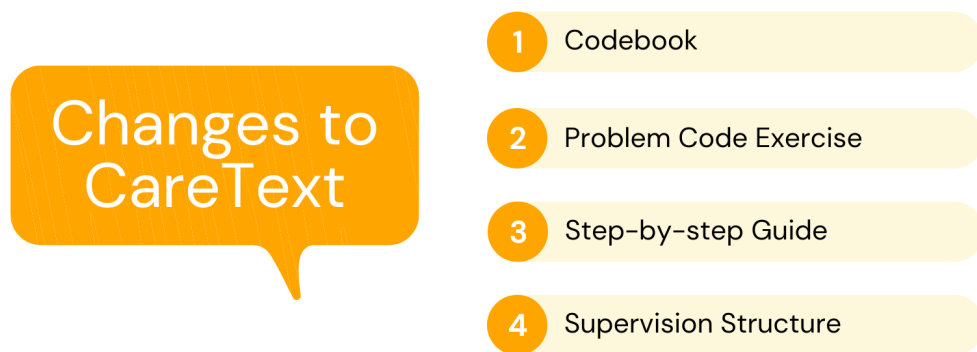
[My father] doesn't see that I would get stressed out too, and maybe if I were to complain about being stressed as an excuse as to why I'm not working hard, he would tell me "Am I not stressed too? I work hard to feed you."

Parents' invalidation of their child's emotions can be harmful and potentially teach children that their emotions are unacceptable and will not be tolerated (Jones et al., 2002). Furthermore, parental invalidation may be associated with children's internalizing (e.g., depression, anxiety) and externalizing (e.g., physical aggression, cheating) problems. Therefore, the validation offered by CareText volunteers is crucial to establishing trust and rapport with clients, especially young clients whose problems may seem "trivial" compared to other life-stage issues of older adults like divorce, bankruptcy, and terminal illness.

Overall, the problems that brought clients to CareText varied. The identified themes are, however, supported by local research. A recent case-control study on Singaporean suicide attempters (Wong et al., 2022) found that suicide attempters reported stress from home life, peer pressure, and romantic relationships. Furthermore, in comparison to the control group, the adolescents with suicide attempts were more likely to exhibit behaviours of eating disorders, mood, anxiety, symptoms of schizophrenia, and experience disturbing events (Wong et al., 2022). The number of issues overwhelming young, distressed people is

concerning especially as multiple risk factors may increase suicide risk (Brent, 1995; Beautrais, 2000). Therefore, it is imperative that in CareText reporting practices, the volunteers accurately capture the client’s various concerns. Currently, volunteers assign “problem codes” or keywords to each chat log. The aggregated data of the problem codes are later extracted and analyzed to better understand the most common problems. Thanks to the findings of this study, the existing problem codes (which have been in place for over 15 years) were revisited. The details of the problem code exercise are discussed in detail in the next section.

## Implications



Overall, CareText volunteers seem to be doing what they were trained to do; however, it is apparent that there are blind spots that need to be addressed by changes to the curriculum, practice, and even the platform itself.

### 1 Codebook

The first output was the codebook, which can be found in the appendix. This codebook can be used for future qualitative studies, problem code exercises, or as practice text for a machine learning corpus. Additionally, the process of creating the codebook shed light on the difficulty of categorizing the multi-layered issues of each client. As for future changes to the platform, we envision innovative changes using AI. First, CareText training would be





improved so that there are more chat simulation practice sessions and volunteers can experience the breadth of client interactions. Second, there would be a traffic light system that uses sentiment analysis to indicate real-time suicide risk fluctuations per chat would benefit volunteers who are expected to manage up to three chats at once. And lastly, the codebook created in this qualitative study would serve as the foundation for a future corpus of practice examples. Enhancements to CareText

would include prompts or reminders to volunteers to check on safety if the client expresses suicidality or to affirm the client if the client's mood seems low.

For example, in the sample chat (image on left) the client first mentioned the argument with her mother and then as she shared more, we could see that there were other factors at play. In other words, there are many different problems to address, and each client's complexity differs.

## 2 Problem Code Exercise

In our findings, the average number of problems mentioned being 10, and nearly all clients mentioned relationship problems. Thus, it is observed that each client has multiple issues that need to be identified to understand the multiple factors affecting the client's distress. Currently, the volunteers use "problem codes" when generating reports at the end of a chat. These reports are meant to summarize the chats. The "problem codes" are like keywords or tags that are attached to each chat. Charmaine, the example client, would have the problem

code “family conflict” tagged to her report. The codebook for the second research question about young people’s problems contained different problems from the existing list of problem codes which prompted the crisis support team to conduct a review.

It has been years since a proper review of the problem codes so it was exciting to see what changes could be made. Some changes were simple. We renamed the most popular problem code, ‘boy-girl relationships’ to ‘romantic relationships.’ The intention was to expand the category to fit more situations. We also got rid of irrelevant problem codes like ‘COVID’ which was added in 2020 but has now decreased in usage. Furthermore, we added newer ones that are becoming more relevant such as hacking or love scams. Overall, the study's findings demonstrate the importance of regularly reviewing and refining problem codes to ensure they accurately reflect the issues as cultural and social norms change over time and new problems arise.

In addition to a review of the problem codes, the overall training for Caretext was reviewed once more due to our findings. In our study, we found that both PADI and CPR are implemented at different rates. For the PADI model, we found that the P and I which are problem identification and intervention are the most used components. When I shared this with the CareText supervisors, they were not surprised actually and shared their insight working directly with clients which is that they tend to focus on problem-solving and advice-giving. Thus, we can infer that within successful chats, volunteers will need to focus on what the client wants to ensure the client is still engaged. Otherwise, they run the risk of disengaging the client who may leave the chat too early. Furthermore, we also found deviations. We observed three different types of deviations: a) the client and volunteer do not seem to understand each other; b) the volunteer may do something that is "off script" and c) sometimes volunteers wrap up conversations before the client has indicated that they are ready to wrap up. The last deviation, however, is a delicate matter because we are time bound and clients may not know that it isn't feasible to talk to them for many hours. It is also important to understand that the point of bringing up these incidents is to work backwards and to pinpoint how training can prevent such things from happening.

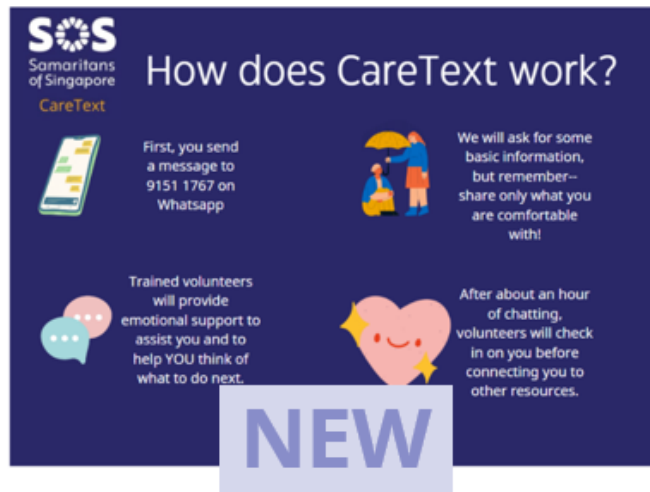
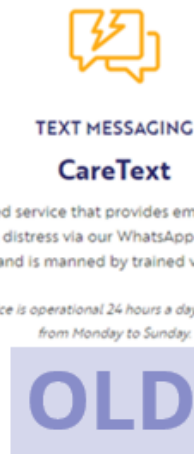


In the example chat on the left, which is adapted from a real chat, the green bubbles represent the volunteer. For context, the client has just shared how they feel like a burden to their friends because they are always sharing their problems. Thus, the volunteer tries to get them to see it from a different perspective. However, the client does not seem to feel better and repeats how they feel. In this small excerpt, we

can start to see the disengagement of the client because even though the volunteer is trying to do PADI by looking at desired outcomes, the client just wants to sit in their feelings and is not ready to talk about other possibilities. Thus, these deviations coupled with the different rates of PADI and CPR led us to conclude that the ideal volunteer needs to be adaptable. However, their skills need to be robust or else it might feel chaotic rather than flexible. Thus, there were two changes proposed.

## 3

## Step-by-Step Guide



Currently, the SOS website has limited information on the CareText service (see the image on the left). There are no step-by-step instructions on what happens once a chat is initiated. Thus, the proposed solution was to include a walkthrough for first-time clients who may feel anxious about seeking help from an anonymous helpline. The image on the right is an example of how the SOS website will be updated so that clients interested in CareText have a better understanding of the service. Clients will have a visual understanding of what happens throughout the chat so that they are not surprised when volunteers may need to wrap up chats. The image on the left is an example of how the SOS website could be updated so that clients interested in CareText have a better understanding of the service. Clients' expectations of what can happen, emotional support, and what does not happen, and advice-giving, will be clearer.

# 4

## Supervision Structure – Old

Regarding training, the entire supervision structure was revamped due to multiple incidents involving volunteers deviating from standards set in training. For example, volunteers asking yes/no questions is one of the first few lessons in training, thus, it was surprising to see volunteers making such mistakes. Previously, there were 6 supervision sessions which consisted of simulated chats with trainers acting as distressed clients. Each chat session would cover multiple skills.



The supervision structure has now been changed so that each session focuses on one skill instead. During the trial run of the new supervision structure, trainers noticed volunteers struggling to establish competency with one skill. Thus, they added additional sessions to each level so that there are 12 overall sessions or simulated chats for volunteers to practice their skills. Unlike in real-life chats, volunteers can focus on improving one skill in a controlled setting with a trainer who adjusts the difficulty based on the volunteer's responses. Thus, volunteers can focus on being adaptable in the field but in practice with supervisors, they will hone their skills.



## Implications for External Practitioners

Besides changes to internal processes, the findings may be helpful to other agencies doing similar work with crisis lines and/or direct work with young people. For example, the codebooks could be used as starting points to understand what to look for when training and supervising volunteers or staff on best practices for crisis lines. SOS uses the CPR model to assess for suicide. Another commonly used assessment tool is the Columbia-Suicide Severity Rating Scale (C-SSRS). However, agencies who are starting to use C-SSRS may need real-life examples of what clients say when asked about their suicide plan or rehearsal. Furthermore, the codebook of problems faced by young people provides an overview and possibly new perspectives to professionals who do direct work with at-risk youth. For example, the average number of problems per client was 10, which suggests the client may need to be connected to multiple resources depending on the type of concern.

## Conclusion

This qualitative study is the first in-depth look at CareText since it was launched in 2020. Fifty transcripts from fifty unique clients were read, analysed, and discussed for weeks on end by four coders. Some conversations seemed straightforward in the sense that the client was disappointed with their exam results while other clients had more deeply rooted issues that required additional emotional processing time, even for the coders. All clients wanted to die by suicide and their reasons for dying seemed to outweigh their reasons for living.

However, the CareText volunteers tried their best to listen actively. They assessed for safety, created safety contracts, affirmed the client's will to live, de-escalated immediate crisis, explored the client's history of self-harm, encouraged the clients to think of their next steps, and most importantly, empathized with the client. Each chat posed a unique challenge to each volunteer as they manoeuvred problems such as the end of friendships, parental abuse, bullying at school, assault, failed exams, hopelessness, loneliness, and mental health issues. While addressing the multiple problems shared by the clients, the volunteers had to simultaneously digest the sharing of traumatic events, rebuff the client's refusal to keep

themselves safe and accept the uncertainty of whether the client would be all right after the chat ended. The volunteers managed a balancing act for each chat and client to ensure individual needs were met while also implementing their skills learned from training.

Although this study has its limitations in sample size and lack of statistical significance, the findings led to significant changes in the supervision structure, reporting processes, and even the user interface which highlights the importance of research in identifying areas of improvement. We hope to utilize the codebook in our future machine-learning innovations so that the client's needs are heard and taken into consideration. Hopefully with these changes to training and potentially new innovative changes with the help of AI, we can soon witness an improved version of CareText that has grown in quality alongside its young users.

## References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- Beautrais, A. L. (2000). Risk factors for suicide and attempted suicide among young people. *Australian & New Zealand Journal of Psychiatry*, 34(3), 420-436.
- Berlim, M. T., Mattevi, B. S., Pavanello, D. P., Caldieraro, M. A., Fleck, M. P., Wingate, L. R., & Joiner Jr, T. E. (2003). Psychache and suicidality in adult mood disordered outpatients in Brazil. *Suicide and Life-Threatening Behavior*, 33(3), 242-248.
- Brent, D. A. (1995). Risk factors for adolescent suicide and suicidal behaviour: mental and substance abuse disorders, family environmental factors, and life stress. *Suicide and Life-Threatening Behavior*, 25, 52-63.
- Christie, D., & Viner, R. (2005). Adolescent development. *Bmj*, 330(7486), 301-304.
- Cleveland Clinic (2022, July 26). *When Venting Turns Toxic: What Is Trauma Dumping?* Retrieved February 15, 2023, from <https://health.clevelandclinic.org/what-is-trauma-dumping/#:~:text=%E2%80%9CTrauma%20dumping%20refers%20to%20the,with%20others%20during%20inappropriate%20times.%E2%80%9D>
- Cornwell, E. Y., & Waite, L. J. (2009). Social disconnectedness, perceived isolation, and health among older adults. *Journal of Health and social behavior*, 50(1), 31-48.
- Durkheim, E. (2005). *Suicide: A study in sociology*. Routledge.
- House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*, 241(4865), 540-545.
- Evans, W. P., Davidson, L., & Sicafuse, L. (2013). Someone to listen: Increasing youth help-seeking behavior through a text-based crisis line for youth. *Journal of Community Psychology*, 41(4), 471-487.



- Everall, R. D., Bostik, K. E., & Paulson, B. L. (2006). Being in the safety zone: Emotional experiences of suicidal adolescents and emerging adults. *Journal of adolescent research, 21*(4), 370-392.
- Ferrie, J., Miller, H., & Hunter, S. C. (2020). Psychosocial outcomes of mental illness stigma in children and adolescents: A mixed-methods systematic review. *Children and Youth Services Review, 113*, 104961.
- Gilat, I., & Shahar, G. (2007). Emotional first aid for a suicide crisis: comparison between Telephonic hotline and internet. *Psychiatry: Interpersonal and Biological Processes, 70*(1), 12-18.
- Gould, M., Chowdhury, S., Lake, A., Galfalvy, H., Kleinman, M., Kuchuk, M., & McKeon, R. (2021). National Suicide Prevention Lifeline crisis chat interventions: Evaluation of chatters' perceptions of effectiveness. *Suicide And Life-Threatening Behavior, 51*(6), 1126-1137. <https://doi.org/10.1111/sltb.12795>
- Gould, M. S., Pisani, A., Gallo, C., Ertefaie, A., Harrington, D., Kelberman, C., & Green, S. (2022). Crisis text-line interventions: Evaluation of texters' perceptions of effectiveness. *Suicide and Life-Threatening Behavior, 52*(3), 583-595.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspectives on psychological science, 10*(2), 227-237.
- House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science, 241*(4865), 540-545.
- Ingram, S., Ringle, J. L., Hallstrom, K., Schill, D. E., Gohr, V. M., & Thompson, R. W. (2008). Coping with crisis across the lifespan: The role of a telephone hotline. *Journal of Child and Family Studies, 17*, 663-674.

- Jones, S., Eisenberg, N., Fabes, R. A., & MacKinnon, D. P. (2002). Parents' reactions to elementary school children's negative emotions: Relations to social and emotional functioning at school. *Merrill-Palmer Quarterly* (1982-), 133-159.
- Kranke, D., Floersch, J., Townsend, L., & Munson, M. (2010). Stigma experience among adolescents taking psychiatric medication. *Children and Youth Services Review*, 32(4), 496-505.
- LaFrance, M. N. (2007). A bitter pill: A discursive analysis of women's medicalized accounts of depression. *Journal of health psychology*, 12(1), 127-140.
- Lakeman, R., & FitzGerald, M. (2008). How people live with or get over being suicidal: A review of qualitative studies. *Journal of Advanced Nursing*, 64(2), 114-126.
- Lewis, S. P., & Santor, D. A. (2010). Self-harm reasons, goal achievement, and prediction of future self-harm intent. *The Journal of nervous and mental disease*, 198(5), 362-369.
- Moore, S. L. (1997). A phenomenological study of meaning in life in suicidal older adults. *Archives of Psychiatric Nursing*, 11(1), 29-36.
- Petersen, A. C. (1988). Adolescent development. *Annual review of psychology*, 39(1), 583-607.
- Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., ... & Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American journal of psychiatry*, 168(12), 1266-1277.
- Predmore, Z., Ramchand, R., Ayer, L., Kotzias, V., Engel, C., & Ebener, P. et al. (2017). Expanding Suicide Crisis Services to Text and Chat. *Crisis*, 38(4), 255-260.  
<https://doi.org/10.1027/0227-5910/a000460>
- Rosenbaum, A., & Calhoun, J. F. (1977). The use of the telephone hotline in crisis intervention: A review. *Journal of Community Psychology*, 5(4), 325-339.

- Shneidman, E. S. (1993). Commentary: Suicide as psychache. *Journal of Nervous and Mental Disease*.
- Stephens, A., Shankar, A., Demakakos, P., & Wardle, J. (2013). Social isolation, loneliness, and all-cause mortality in older men and women. *Proceedings of the National Academy of Sciences*, 110(15), 5797-5801.
- Suicide. WHO. (2021). Retrieved 5 September 2022, from <https://www.who.int/news-room/fact-sheets/detail/suicide>.
- Suicide Facts and Figures | Samaritans of Singapore (SOS). Sos.org.sg. Retrieved 5 September 2022, from <https://www.sos.org.sg/learn-about-suicide/quick-facts>.
- Trout, D. L. (1980). The role of social isolation in suicide. *Suicide and Life-Threatening Behavior*, 10(1), 10-23.
- Trout, D. L. (1980). The role of social isolation in suicide. *Suicide and Life-Threatening Behavior*, 10(1), 10-23.
- Talseth, A. G., Gilje, F., & Norberg, A. (2003). Struggling to become ready for consolation: experiences of suicidal patients. *Nursing ethics*, 10(6), 614-623.
- Troister, T., & Holden, R. R. (2010). Comparing psychache, depression, and hopelessness in their associations with suicidality: A test of Shneidman's theory of suicide. *Personality and Individual Differences*, 49(7), 689-693.
- Walker, D., & Myrick, F. (2006). Grounded theory: An exploration of process and procedure. *Qualitative health research*, 16(4), 547-559.
- Walther, J. B., Loh, T., & Granka, L. (2005). Let me count the ways: The interchange of verbal and nonverbal cues in computer-mediated and face-to-face affinity. *Journal of language and social psychology*, 24(1), 36-65.
- Wong, J. C. M., Chang, C. L., Shen, L., Nyein, N., Loh, A., Yap, N. H., ... & Tan, C. H. (2022). Temperament, parenting, mental disorders, life stressors and help-seeking behavior

of Asian adolescent suicide attempters: A case-control study. *Frontiers in psychiatry*, 2232.

Yeo, A. (1993). *Counseling: A problem-solving approach*. Armour Pub.

