



**Texting for help
counselling processes and impact at a child helpline SMS service**

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PhD Thesis · Trine Natasja Sindahl

Texting for help

Counselling processes and impact at a child helpline SMS service

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TRINE NATASJA SINDAHL

Texting for help. Counselling processes and impact at a child helpline SMS service



PhD Thesis

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Texting for help

Counselling processes and impact at a child helpline SMS service

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List of original papers

This thesis is based on the following original papers:

Paper I

Manuscript title: SMS Counselling at a Child Helpline: Counsellor Strategies, Children's Stressors and Well-being

Authors: Sindahl¹, Trine Natasja, Fukkink², Ruben G. and Helles, Rasmus³.

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Paper II

Manuscript title: Texting at a Child Helpline: How Structural Characteristics of Text-Message Counseling Influence Counseling Impact

Authors: Sindahl¹, Trine Natasja and van Dolen, Willemijn⁴.

Status: *Submitted*. Mobile Media and Communication, 26 August 2018

Paper III

Manuscript title: Children's experiences texting with a child helpline

Authors⁵: Jensen¹, Torben Bechmann; Sindahl¹, Trine Natasja and Wistoft¹, Jasmin.

Status: *Published*. British Journal of Guidance & Counselling, 7 September 2018

Paper IV

Manuscript title: Texting for Help: Processes and Impact of Text Counselling with Children and Youth with Suicidal Ideation

Authors: Sindahl¹, Trine Natasja; Côte⁶, Louis-Phillippe; Dargis⁶, Luc; Mishara⁶, Brian L. and Jensen⁶, Torben Bechmann.

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This research began at the Danish child helpline, *BørneTelefonen*, which I have had the pleasure to be part of for more than ten years. The research is the product of an industrial PhD project and stems from real challenges raised by the helpline's staff and volunteers, as well as those indicated by children using the service, in connection with the establishment of a text-message service in 2012.

First, I would like to thank the courageous children who reach out for help and at the same time find the resources to provide feedback to the service by filling out end-session and follow-up questionnaires. It is constantly amazing to experience so many young people taking initiatives and actions to better their lives.

While many attempts to reach the helpline unfortunately go unanswered, many *are* answered by the hundreds of volunteers who are professionals themselves. Some of these volunteers work a full day in elementary schools or child care settings and then go on to respond to children in need in their spare time. Even though some of the findings in this thesis are occasionally critical of their work, this does not change the fact that they are doing their very best during every shift and from a good place—and we can expect nothing more.

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My hope is that this research will contribute to the development of child-centred helpline counselling both nationally and internationally, and help these agencies embrace the possibilities that new technologies offer to empower children throughout the world.

English summary

Background. In 2016, child helplines all over the world responded to more than 24 million contacts from children and young people. An increasing number of these contacts are mediated through texting. Texting in the context of helplines is a relative new technology and knowledge about how to help children and young people best through this technology is limited. Despite the fact that helplines have a long history—beginning with letter and telephone counselling—research in the field is still relatively scarce due to practical and ethical challenges. New technologies in counselling have created new opportunities to conduct research in this field, and the following study is an extension of this development.

Purpose. The thesis explores which helpful strategies counsellors use in text-message-based conversations with children and youth about difficult issues in their lives.

Methods. The current research is a naturalistic study of in-session processes and their impact in the SMS service at the Danish child helpline, *BørneTelefonen*. Over the course of a year, more than 6,000 SMS conversations between children and counsellors have been logged and made available for quantitative content analysis. During the same period, children and young people using the service were presented with a short questionnaire immediately after the counselling session as well as another two weeks later. The approach is exploratory and the research field is new, so the results must be understood in this context.

The dataset is the basis for four sub-studies, which together make up the body of this thesis.

The first article investigates a random sample of 448 sessions and explores at two overall counselling strategies (*child-centred counsellor behaviour* and *problem-centred counsellor behaviour*) in relation to session impact and with the child's stressor (problem) as a conditional factor. The second article studies the structural characteristics of the counselling sessions. Their effects on counselling impact are explored through 603 sessions where complete data was available. In the third article, children express in their own words how they experienced participating in SMS counselling, based on a qualitative analysis of 724 responses to open-ended questions in the two questionnaires that followed the session. The last article focuses on a more homogeneous group of children and young people who used the service during the data-collection period—namely, children and young people with suicidal ideations. In this last article, the outset is primarily 102 sessions with children and young people that concerned suicide, where counsellor behaviour was connected to impact, as the children themselves experienced it.

Results. Overall positive effects of SMS counselling were documented for the main part of the children using the service ($n = 512$). However, a significant sample of the children ended up documenting a negative effect ($n = 80$). In addition, it was established that the child's immediate evaluation of the session impact was a strong predictor for how the child would evaluate the effect two weeks after texting with the child helpline.

The analysis of helpful counsellor behaviour showed—across all four articles—that even mediated through SMS technology, it is essential that productive counselling be based on a child-centred viewpoint. At the same time, a certain amount of problem solving is needed for the child to experience taking something useful from the session. This counselling approach was supported by counsellors' attempts to write more full messages with more words in each message, while keeping the complete session within only a few messages. This being said, the study has also pointed to the fact that the medium of texting seems to promote a counsellor behaviour, which appears to be the least productive—that is, an approach characterised by a high level of problem focus and the use of short messages.

In addition, the study points to the asynchronous characteristics of SMS dialogue as having a productive influence on the session impact. Sessions characterised by the child going back and forth, presumably doing other things while talking to the counsellor, was related to better session impact than those that were more similar to synchronous telephone or chat sessions, which are characterised by fast exchanges without breaks. These positive effects, however, are only present when the breaks are created by the child.

Conclusion. What is the best approach in anonymous text-message counselling with children and young people? This is still a difficult question to answer unambiguously for a field characterised by great diversity. Sessions at a child helpline can in one moment concern everyday problems and in the next moment demand action because of an acute, life-threatening situation. Children and young people contact the helpline concerning multiple problems, in multiple situations, with a huge variety of individual needs and preferences. Despite this, the current study reveals that sessions distinguished by a high degree of empathetic listening and a lesser degree of problem solving tend to be more helpful. Furthermore, children and young people using the service seem to profit from the asynchronous communication form, which distinguishes texting from other, synchronous communication formats.

Dansk resumé

Baggrund. Børnetelefoner verden over besvarede i 2016 mere end 24 millioner henvendelser fra børn og unge. En stigende andel af disse henvendelser er medieret gennem SMS teknologi – også kaldet *texting*. Texting er i kontekst af rådgivning en relativ ny teknologi, og der findes kun begrænset viden om hvordan rådgivningerne bedst hjælper børn og unge via denne teknologi. Trods anonym medieret rådgivnings lange historie, begyndende med brev- og telefonrådgivning, er forskningen i feltet stadig relativt sparsom grundet praktiske og etiske udfordringer. Ny teknologier i rådgivning har dog skabt bedre muligheder for at bedrive forskning i feltet, og følgende studie kan ses i forlængelse af dette.

Formål. I afhandlingen undersøges hvilke hjælpsomme strategier rådgiver benytter sig af i SMS samtaler med børn og unge om det der er svært.

Metoder. Nærværende undersøgelse er et naturalistisk studie af in-session processer og effekter på den danske børnetelefons SMS tjeneste. Over et år er mere end 6.000 SMS samtaler mellem børn og rådgivere blevet logget og gjort til genstand for kvantitativ indholdsanalyse. Sideløbende hermed er de børn og unge, der har benyttet rådgivningen, blevet præsenteret for et kort spørgeskema umiddelbart efter samtalen, samt 14 dage senere. Tilgangen er undersøgende og forskningsfeltet er nyt, så resultaterne må forstås i denne sammenhæng. Datasættet er anvendt på forskellig vis i fire delundersøgelser, der udgør det samlede studie.

I den første artikel undersøges, med udgangspunkt i et tilfældigt sample på 448 samtaler, to overordnede rådgivningsstrategier (*person centreret rådgivning* og *problem centreret rådgivning*) i forhold til samtaleeffekten og med inddragelse af særligt barnets problemstilling som betingende faktor. Samtalens strukturelle karakteristikas betydning for samtaleeffekten undersøges i den anden artikel, baseret på 603 samtaler, hvor der er opnået komplet data. I den tredje artikel får børnene mulighed for med deres egne ord, at fortælle om deres oplevelser med at indgå i SMS rådgivning, baseret på en kvalitativ analyse af 724 besvarelser af åbne spørgsmål i de to spørgeskemaer efterfølgende rådgivningssamtalerne. I den sidste artikel ses nærmere på en mere homogent gruppe af børn og unge som benyttede SMS rådgivningen i perioden – nemlig børn og unge med selvmordstanker. I sidstnævnte artikel tages primært afsæt i 102 samtaler med børn og unge om selvmord, hvor rådgiveradfærd identificeres og sammenholdes med effekterne af samtalerne, som de opleves af børnene selv.

Resultater. Helt overordnet sås positive umiddelbare effekter af SMS rådgivning, for hovedparten af de børn der benyttede den ($n = 512$), men samtidigt sås også et ikke uvæsentligt antal sessioner, hvor barnets umiddelbare oplevelse var negativ ($n = 80$). Endvidere konstateredes det at barnets umiddelbare oplevelse af effekten af rådgivningssamtalen var en stærk prædikator for hvordan barnet vurderede effekten 14 dage efter samtalen med BørneTelefonen.

Analysen af virksom rådgiveradfærd pegede, på tværs af de fire artikler, på at selv medieret gennem SMS teknologi er det en grundforudsætning for effektiv rådgivning, at den gives på et grundlag af empatisk lytning fra et person centreret ståsted. Samtidig synes en vis grad af problemløsning også at være en forudsætning for at barnet oplevede at tage noget med sig fra samtalen. Denne tilgang til rådgivning blev understøttet af rådgivers bestræbelser på at skrive fyldige beskeder med flere ord og samtidigt holde samtalen kondenseret inden for et relativ begrænset samlet antal beskeder. Samtidig har undersøgelsen også peget på at mediet kan fremme en rådgiveradfærd, som ifølge denne undersøgelse synes mindre produktiv. Næmlig en tilgang præget af høj grad af problem fokus og kortere tekst beskeder.

Yderligere pegede undersøgelsen på at SMS samtals asynkrone karakter kan have en produktiv rådgivningseffekt. Samtaler præget af at barnet går til og fra samtalen var relateret til bedre effekter end SMS samtaler der nærmere havde telefon- eller chatsamtals karakter med hurtige udvekslinger uden pauser. De positive effekter ses dog kun hvor pauserne blev produceret af barnet.

Konklusion. Hvad der er den bedste tilgang i anonym SMS rådgivning med børn og unge er stadig vanskeligt at besvare entydigt for et felt præget af enorm diversitet. Samtaler på en børnetelefon kan det ene øjeblik handle om hverdagens almene problemstillinger og det næste øjeblik kræve handling pga. akut livsfare. Børn og unge henvender sig med multiple problemer, i multiple situationer, med multiple behov og præferencer. Dette til trods ses i undersøgelsen en tendens til at samtaler præget af en højere grad af empatisk lytning og mindre grad af problemløsning er mest hjælpsomme. Det ses også at børn og unge tilsyneladende kan profitere af den asynkrone kommunikationsform, som kan præge en SMS dialog, til forskel fra andre mere synkrone kommunikationsformer.

1. Introduction

1989—the year the United Nations adopted the Convention on the Rights of the Child and opened it for signature to all nations (UNCRC; The United Nations, 1989). The Convention emphasises a significant change in the view on children, their rights, and their relations to adults and society around them. Today, the majority of countries in the world has ratified the UNCRC.

1994—the year after which any child born in the western world can safely be called a “digital native” (Schultz-Hansen, 2011). Children born hereafter will live their entire lives surrounded by digital technology (Dingli & Seychell, 2015). With the advent of Web 2.0 a few years later, the internet were not just an information channel—it became a technology that connects and supports human relations. In the same period, the mobile phone became a household item (Schultz-Hansen, 2011).

Over the course of the 80s and 90s, and within the intersection of these two significant changes that re-contextualised childhood, child helplines began to spring up throughout the world. (For a summary of global child helplines, see Child Helpline International¹). In these helplines, children and young people have easy access to help and support—typically under anonymous or confidential conditions (Fukkink, Bruns, & Ligtvoet, 2016). Traditionally, helpline services are offered via phone, but they began to be distributed through other technologies, of which SMS and synchronous chat became the most popular (Child Helpline International, 2016b). Children who contact these services do so of their own volition. They are resourceful agents trying to change their lives for the better.

A new childhood paradigm

The adoption of the UNCRC symbolised a sea-change in the view on children—a view which has evolved since the 1960s (Summer, 2003). Here children are viewed as competent co-citizens with fundamental rights and whose perspectives and attitudes should be heard and taken seriously (Jones & Welch, 2010; Summer, 2010; Warming, 2011). Prior to this, the rights of children were primarily concerned with physical protection (welfare rights) (Cunningham, 2005). The UNCRC strengthens the voice of children and their right to active participation (liberty rights) and thereby attempts to equalise the power differences between adults and children, who by this are now positioned more as equals (Cunningham, 2005).

¹ www.childhelplineinternational.org

This modern childhood paradigm should not be regarded as universal or as having completely substituted or excluded previous views on children (Warming, 2011). It is more of a movement; one that is juxtaposed against other perspectives in a continuous debate or just co-exist with other perspectives and with great national and cultural differences depending on social class and gender (Cunningham, 2005). Efforts to establish an “old” and a “modern” view on children is a construct, but served as analytical models, the two categories can help establish the context in which a service such as a child helpline makes sense.

Table 1
Rights, children and adults

<p>View of the child Someone who is:</p> <ul style="list-style-type: none"> • a passive recipient of adult protection and provision. • lacking adult competences of rationality and agency. • dependent of adults. • in need of control. 	<p>View of the child Someone who is:</p> <ul style="list-style-type: none"> • an active participant in their family and immediate community. • developing but resilient with many strengths. • economically dependent on others but also contributes to the family and community.
<p>View of the adult Someone who is:</p> <ul style="list-style-type: none"> • strong and capable and knows what is best. • able to make rational decisions and take responsibility. • independent. 	<p>View of the adult Someone who is:</p> <ul style="list-style-type: none"> • an active participant in their family and immediate community. • able to make rational decisions and take responsibility but also makes mistakes and has a lot to learn. • economically independent but is also dependent on others socially and emotionally.
<p>Child-adult relationship</p> <ul style="list-style-type: none"> • Unequal power relationship. • Adult are protector, provider and decision maker for the child. • Child responds positively to adult control. • Where the child does not respond positively to adult control the relationship becomes one of challenge and conflict. 	<p>Child-adult relationship</p> <ul style="list-style-type: none"> • A mutual respectful relationship with an appreciation of the strengths and weaknesses of each other. • Adult is sensitive to the growing capabilities of the child and supports and involves them in making decisions. • Children are encouraged to contribute and take responsibility within the family and community.
<p>Implications for rights Emphasis on welfare rights but not liberty rights.</p>	<p>Implications for rights Welfare and liberty rights.</p>

Cited from the publication of Jones & Welch (2010). *Rethinking Children's Rights*, p. 50)

The UN recognises child helplines as essential for the protection of a child's right to be heard: "*States should establish safe, well-publicised, confidential and accessible mechanisms for children, their representatives and others to report violence against children. All children, including those in care and justice institutions, should be aware of the existence of mechanisms of complaint. Mechanisms such as telephone helplines—through which children can report abuse, speak to a trained counsellor in confidence and ask for support and advice—should be established, and the creation of other ways of reporting violence through new technologies should be considered.*" (Cited in: Child Helpline International, 2014, p. 9).

Hence, we see a clear connection between the UNCRC, the establishment of child helplines, and a late-modern view on children, where the relationship between children and adults is radically changed.

The Danish Child Helpline

Currently, child helplines are established in 146 of the world's countries (Child Helpline International, 2016a). In 2016, these combined helplines responded to more than 24 million contacts from children all over the world (Child Helpline International, 2017b).

This thesis is based on data retrieved from the Danish child helpline *BørneTelefonen* (est. 1987). *BørneTelefonen* is managed by a national NGO (*Børns Vilkår*), which works to end child negligence and to ensure the right of all children to a safe childhood². The organisation's work is based on an explicit view of children, which is described on their home page (see *Table 2*), and is an illustrative example of one child helpline's connection to a late-modern view of children.

² www.bornsvilkar.dk

Table 2

Børns Vilkår's view on children

Children are human beings with equal rights

- We strive to understand children from their own experience and their understanding of themselves
- We never see children as a problem
- We meet children in their individual contexts and we inform them of their rights

Children are dependent on adults

- We are aware of the dependency and power relationships between children and adults
- We believe that it is the responsibility of adults to help children thrive

Children have the resources to take action and to re-create their own lives—to varying degrees, depending on robustness and competencies

- We support children to be independent agents in their lives. Children are experts in their own lives

Children develop in social relationships

- We do our best to understand children and to put ourselves with the contexts in which they are involved. We know:
 - that children are involved in different social relations in different areas of their lives
 - that children will act and understand differently in varying contexts
 - that children act and react depending on the contexts in which they find themselves
-

Note: Translated from: <https://bornsvilkar.dk/om-boerns-vilkaar/vaerdier/boernesyn/> (2018, September 9)

Children and texting

As mentioned above, the emergence of child helplines can be understood in the intersection between a late-modern view of children and the technological developments which created a modern framework for children's lives that is incomparable to that of previous generations: "*Both childhood and the media environment are changing and co-determining each other.*" (Mascheroni & Ólafsson, 2014, p. 5). Through these technologies, children are able to reach child helplines, and through these technologies, helplines make their services available for children. The meeting between child and child helpline is mediated through technology.

In this thesis, the focus will be specifically on communication between children and child helplines through text messages—specifically SMS technology. In this context, the mobile phone becomes a critical technology.

There are more mobile subscriptions in the world than there are people (International Telecommunication Union (ITU), 2017). According to a trans-European study, Danish children have the most widespread and unlimited access to digital media (Stald, 2017). On average, children in Denmark will get their first mobile phone when they are nine years old (Telia Company, 2017). This will often be a smartphone and will be given to the child in order to provide the child access to his or her parents (and parents access to their child), when they

are not together (Telia Company, 2017). This fits well within a typical Danish family context, which is characterised by two working parents (not uncommonly divorced) who hold independence as one of the cornerstone values of their children's upbringing. At the same time, this smartphone provides the child with early, unmonitored access to the internet, social media, and to a wide variety of smartphone applications—among those, child helplines.

While children's access to these technologies regularly worries adults (who nevertheless are the same ones who provide the children with access), child helplines consider these technologies tools of empowerment that can give children access to help when the need arises and when they may not have the necessary resources in their immediate networks. In Child Helpline International³'s vision, they hope to see: *“A world where technology allows children to be heard, one by one, and through their voices shape the world and realize their rights”* (Child Helpline International, 2017a, p. 6).

Research indicates that vulnerable children and young people seem to have a particular preference for written communication. Research has identified that young people who have tried committing suicide have significantly fewer face-to-face contacts compared with their peers (Zöllner, Rask, Konieczna, & Centre for Suicide Research, 2013), that young people who are not thriving and showing self-harming behaviour have preference for SMS and chat communications (Hawton, Rodham, Evans, 2006; Mitchell & Ybarra, 2007), and that young people with psycho-social problems (especially loneliness) have a preference for online relationships rather than offline (Caplan, 2003).

The mobile phone or smartphone is characterised by being portable and private. It is highly personal and affective (evoking emotional attachment) (Mascheroni & Ólafsson, 2014). It enables the user to communicate across contexts (providing “trans-situational agentivity” Helles, 2011): *“...the central affordance of mobile phones is not the mobility of the device per se, but rather the fact that the user becomes a mobile terminus for mediated communicative interaction across the various contexts of daily life”* (Helles, 2013, p. 14). The mobile phone also sets the expectation that the user will be constantly accessible (Lauersen, 2006; Schultz-Hansen, 2011) and challenge the idea that presence is determined by physical space (Gergen, 2002).

Texting as a form of communication is characterised as being based on writing, asynchronous (Thurlow & Brown, 2003), and communicating point-to-point (Ling, 2010). Different forms of instant messaging (i.e. Facebook Messenger, WhatsApp, iMessage, and Viber) are increasing in common usage, but SMS technology has the added benefit of not requiring

³ A global network of child helplines (www.childhelplineinternational.org)

internet access—which can be an advantage for the youngest segment of the population. Currently, very few child helplines are using the Instant Message (IM) technology for individual counselling of children, and today among members of the Child Helpline International, SMS counselling is the second most popular counselling technology (Child Helpline International, 2016b). Using third party services such as Facebook Messenger or WhatsApp makes it difficult to ensure anonymity (of the child) and may bring into question the legality of the content rights.

Texting is used by people of all ages—however, it is associated first and foremost with the life phase of young people (Helles, 2011; Ling, 2010; Lyddy, Farina, Hanney, Farrell, & Kelly O'Neill, 2014). For most adults, texting is used for instrumental purposes (Ling, 2010) and appreciated for being asynchronous—freeing the user to answer whenever it's convenient for them (Helles, 2011; Shultz-Hanse, 2011). For teenagers, texting often serves a more expressive purpose (Ling, 2010). For young people texting serves as an important tool for continuous contact with friends, thus enhancing and supporting peer relationships (Thurlow & Brown, 2003). Through smartphones, teenagers are constantly accessible and continuously able to stay in touch with their friends. Much of the dialogue is at the level of phatic communication (Jakobson, 1960). Many SMS conversations begin with a “What’s up?” and serve the purpose of killing time while connecting with peers at a distance (Schultz-Hansen, 2011).

Text counselling

In *BørneTelefonen*, conversations are never initiated with a “What’s up?” They can start with a sad emoji or a small “hello,” but just as often, they begin with a longer description of the issues that bring the child to the helpline. If it is not already obvious that this is a different conversational form than interactions with friends, then it will be when the child receives an autoreply that tells them that they have texted *BørneTelefonen*, that there may be a wait, but the child can leave the queue by typing "STOP". As for the conversations the child or young person have with their peers it is still the same technology, but it is clearly something quite different.

Texting with a child helpline has been a growing preference. At the same time, children and young people’s dialogues with peers have gravitated toward a preference for written communications. Technologies such as SMS and IM can offer the characteristics of a verbal



Figure 1 Reconstructed and translated text message received by *BørneTelefonen*.

conversation (Soffer, 2010). Texting is not to “write” but to “speak through text” (Soffer, 2010).

In *BørneTelefonen*, there has been a clear movement away from verbal counselling (telephone counselling) and towards written formats (SMS, synchronous chat, and online advice columns). In 2001, 91.4% of the exchanges on *BørneTelefonen* were through telephone; by 2017, this figure was only 32.8% (see *Figure 2*).

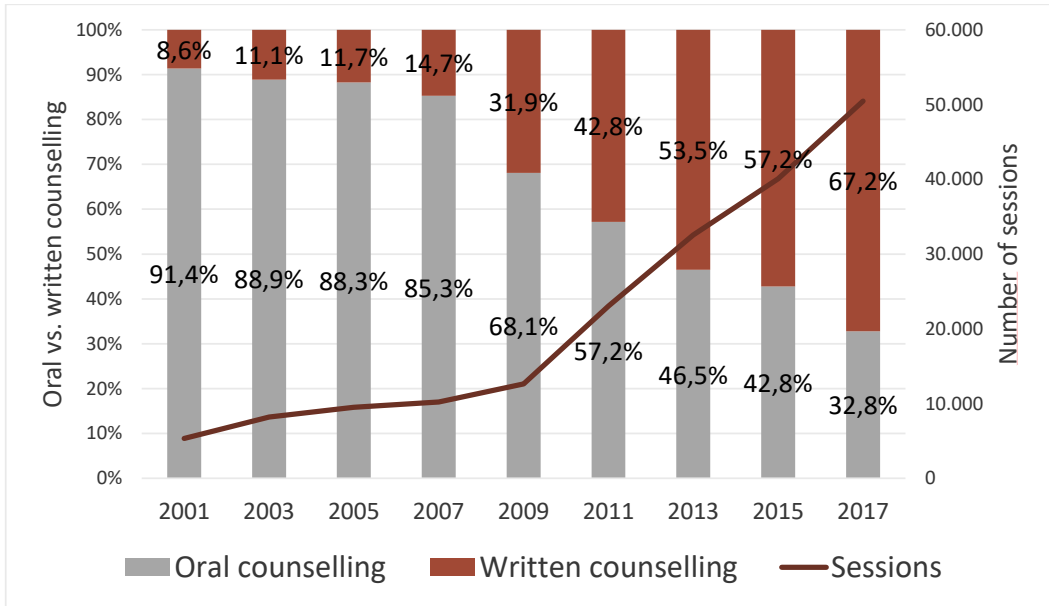


Figure 2. Counselling preferences 2001 until 2017, *BørneTelefonen*.

Characteristics of anonymous, mediated counselling

Text counselling has a number of characteristics in common with other forms of anonymous, mediated counselling:

Accessible

They are highly accessible and promise the possibility of contact with a counsellor whenever needed, convenient and from a variety of locations (Gibson & Cartwright, 2014; Haas, Benedict, Kobos, & Deleon, 1996; Nissen & Winkel, 1998; Rosenfield, 1997).

Familiar

For children and young people, SMS is a familiar way of communicating (Gibson & Cartwright, 2014). This familiarity offers the opportunity to receive counselling in a self-selected and (possibly) safe environment (Mallen, Vogel, Rochlen, & Day, 2005; Nissen & Winkel, 1998; Rosenfield, 1997; Sindahl, 2013).

Private and emancipating

Anonymous counselling contributes to a feeling of privacy for young people. It can be emancipating because it makes it possible for children to seek help without the involvement of adults (Brenes et al., 2011; Gibson & Cartwright, 2014; Haas et al., 1996).

Provides a feeling of control

Text counselling provides a feeling of control in several areas (Haas et al., 1996; Valaitis & Flicker, 2005), which helps to equalize the power balance between child and counsellor. (Bambling, King, Reid, & Wegner, 2008):

- The child is the initiator of the conversation (Nissen & Winkel, 1998).
- The child can easily end the conversation at any time (Gibson & Cartwright, 2014; Nissen & Winkel, 1998; Rawson & Maidment, 2011; Rosenfield, 1997).
- The child is invisible, which can reduce feelings of judgment or stigmatisation (Barak, 2007; Gibson & Cartwright, 2014; Haas et al., 1996)
- Anonymity gives the child greater control over their own self-representation (Mallen et al., 2005). This can be supportive when the conversation relates to issues that are personal, sensitive, and possibly embarrassing. (Nissen & Winkel, 1998; Sindahl, 2008b).

Characteristics of text-based counselling

Broadly viewed, text counselling shares some obvious features in common with written counselling in general:

Silent

It is silent. There are no sounds or visual cues to compliment the text. It is voiceless, faceless, and placeless (Fukkink & Hermann, 2007). For some researchers, this has been perceived as a limitation of text-based communication (a reduction of cues), but for others it is perceived an advantage because the dialogue partners are less disturbed by irrelevant information (Lohr, Rose Wing, Gammon, & Johnsen, 2002; King et al., 2006a; Powell & Roberts, 2017; Rawson & Maid believed, 2011). Some of these left-out-cues being traditional power markers, which can establish a more balanced power relationship between the communicating parties (Shultz-Hansen, 2011; Gannets, 2004).

Slow

It is slow. Even for a young person with excellent thumb typing skills, it takes longer to write a text than to talk (Mallen et al., 2005; Tidwell & Walther, 2002). Long-windedness in texting can create opportunities for reflection-time and the possibility of editing the text before it is dispatched (Rawson & Maid, 2011; Sindahl, 2013).

Anonymous

Text-based counselling grants the user a greater experience of anonymity (Rawson & Maid believed, 2011) and a protection against direct confrontation with the conversation partner's response (Suler, 2004). The slowness creates a need to "get to the point" quickly and together with the increased feeling of anonymity, this creates what the literature refers to

as *online disinhibition* (Gannets, 2004; Suler, 2004) or *accelerated intimacy* (Tidwell & Walther, 2002)—a tendency to speak more freely and openly. This phenomenon is one of the most common explanations of why we see the effects of online counselling and therapy on par with their offline counterparts (Brenes et al., 2011; Richards & Vigano, 2013).

Externalising

Some believe that the process of writing can contribute to the externalisation of client problems (Bolton, Howlett, Lago, & Wright, 2004; Rawson & Maidment, 2011; Sindahl, 2013). Dialogue-based, written counselling is a case of co-authoring a client's story, where counsellor and client both contribute to the problem narrative and create a certain distance to it (Sindahl, 2013).

Characteristics of the text message / SMS counselling

Finally, text-message counselling also carries characteristics that are unique to this particular form of service:

Asynchronous

SMS is an *asynchronous* medium in the sense that it does not require the partners in the dialogue to be present at the same time (Hutchby & Tenna, 2008; Suler, 2004). This asynchronicity affords greater control over when and how to respond to messages, leaving reflection time and a greater face management (Gibson & Cartwright, 2014; Thurlow & Brown, 2003). However, texting often has conversation-like characteristics, which come with the expectation of quick replies (Soffer, 2010). In the context of counselling, the asynchronous characteristic of texting offer both counsellor and child reflection time, editing time, but also time to do other things between responses. Children can write a text to the helpline in recess and then review the counsellor's answer during lunch, and maybe not reply before the end of the day. The counsellor is allowed more time to reflect, discuss options with supervisors or colleagues, and look up information during the sessions (Sindahl, 2008a). Because of this, text counselling not only creates a space-distance (as for mediated counselling in general), but also (occasionally) a time-distance between the two parties in the dialogue (Frehner, 2008; Hutchby & Tenna, 2008; Rettie, 2009).

Ambiguous

The markers that indicate when a conversation is initiated and completed are ambiguous. A telephone conversation is initiated by a reply and ends when one party hang up. A synchronous chat conversation is initiated when both parties have entered the digital *chatroom* and ends when one of them logs off. An SMS dialogue can move from almost-synchronous to completely asynchronous. At times, the end of the conversation will only be apparent because the conversation partner simply never returns—and can therefore only be understood retrospectively.

Saved

The text will be saved on the child's phone. Unlike telephone or synchronous chat,⁴ a text is documented on the child's phone. After a text-counselling session, the child can go back and reread the session and possibly feel further supported. The child can show the session to someone else (i.e. a parent or schoolteacher) when it is helpful or necessary to do so (Børns Vilkår, 2015).

Challenges

Negative concerns include technical problems (Barak, 2007; Gibson & Cartwright, 2014; Mallen et al., 2005) and waiting times (Fukkink & Hermanns, 2007; Gibson & Cartwright, 2014; King et al., 2006a). Some users of text counselling mention a feeling of "coldness" in the communication from the counsellor (Gibson & Cartwright, 2014). Concerns about the possibility of doing sufficient risk assessments have also been raised (Brenes et al., 2011; Haas et al., 1996).

The thesis do not focus on the particularities of *text-speak* with the use of emojis, acronyms, symbols, pictograms, etc. Many studies have focused on this, and they largely agree that the language used in texting is informal and similar to the spoken language in its spontaneity, immediacy, and interactivity (Borochofsky-Bar-Aba & Kedmi, 2010; Kasesniemi & Rautiainen, 2002; Lyddy, Farina, Hanney, Farrell, & Kelly O'Neill, 2014; Soffer, 2010), but that the use of unique nonstandard forms is somewhat exaggerated (Lauersen, 2006; Thurlow & Brown, 2003) – "*...after all, the texter will want to ensure that they are understood*" (Lyddy et al., 2014, p. 547). While the use of text-speak was considered part of the analysis in the current thesis, it proved to be used so infrequently in the SMS sessions that it was decided not to include it as a variable. The immediate impression was that children adapt their texting style to the context, thereby communicating in ways that were immediately comprehensible.

The thesis also disregard the issue of character limitations. Texting is generally believed to require short messages. For many years, there was a limit of 160 characters to an SMS, and before auto-correct and qwerty-keyboards, writing on a phone could be a tedious task. Today the character limit only has practical influence on charging (Walsh & Brinker, 2016).

⁴ The child will of course have the opportunity to record a telephone session or saving a chat session after copying it to a document, but this will seldom be an automated process (Sindahl, 2013).

To sum up

In feedback given to *BørneTelefonen*, a young girl with suicidal thoughts beautifully summarised what text-based counselling meant to her: “*Yeah, well sometimes it is nice just to talk to another human being while not being in the same room. This way you can better use the time to think and yes, it’s easier to express in wrtng [sic]. And I can cry while I write.*”

Research question

BørneTelefonen established its SMS counselling service by the end of 2012. At that time, the organisation already had many years of experience with telephone counselling, chat counselling, and other forms of online-based counselling.

The SMS counselling service was designed after a corresponding service from an Irish (www.childline.ie) and a New Zealand child helpline (www.youthline.co.nz) but adjusted for *BørneTelefonen*’s principles. In particular, the system needed a function to end a conversation, due to the acknowledged importance that a counselling conversation happen between an established beginning and end. This function was crucial to the development of this research project and will be addressed further in the *Methods* chapter. All three of these SMS-counselling services are dialogue-based, with multiple exchanges between child and counsellor. The exchange is therefore characterised as a conversation. It is of further importance that the service is operated by humans and not a “machine,” which separates these services from a wide range of other SMS-based services that offers automatic text message services helping the subscriber in a certain direction (persuasive technologies): smoking cessation (Brendryen, Power, & Schaalma, 2010), better substance- and alcohol-use habits (Laursen, 2010; Mason, Benotsch, Way, Kim, & Snipes, 2014), weight loss (Patrick et al., 2009), better class attendance (Bicard, Lott, Mills, Bicard, Baylot-Casey, 2012), or support in the search for “real” counselling (Joyce & Weibelzahl, 2011).

The Danish SMS counselling service quickly gained popularity and, like the other services of *BørneTelefonen*, struggled with a low response rate because demand far exceeded capacity. In 2017, the counselling service completed 10,519 counselling sessions via SMS; 45.7% of requests for SMS counselling were answered (Børns Vilkår, 2018).

Despite thorough preparatory work and mentoring from the two sister organisations, the SMS counselling service was challenged in a number of ways, which subsequently helped create the framework for this research project. In particular, the asynchronous quality of the communication form challenged perceptions of how a counselling conversation should be framed. The helpline’s phone and chat counselling service works within a framework where the sessions should not exceed one hour. However, just as it does not make sense to require that an e-mail correspondence should be phased out after one hour, so there was no reason to impose a time frame on SMS sessions. Conversely, SMS counselling had—unlike e-mail correspondence—strong characteristics of a conversation. This left the organisation uncertain about which guidelines the counsellors should receive.

Furthermore, other structural features of the sessions were challenged. Should messages be short or long? Was it beneficial to follow the child over a period of time or should it be brief, etc.?

The SMS service came with a new technical system that made it possible to gather data, which had not been available previously. This made it possible to seek answers to questions not only concerning SMS counselling, but also of a more general interest. In light of this, the following research question was formulated:

RQ: Which helper behaviours and intervention styles are related to better short-term and medium-term outcomes in dialogue-based SMS counselling for children and youth?

The starting point of the method design of this thesis is the following broad, conceptual model:

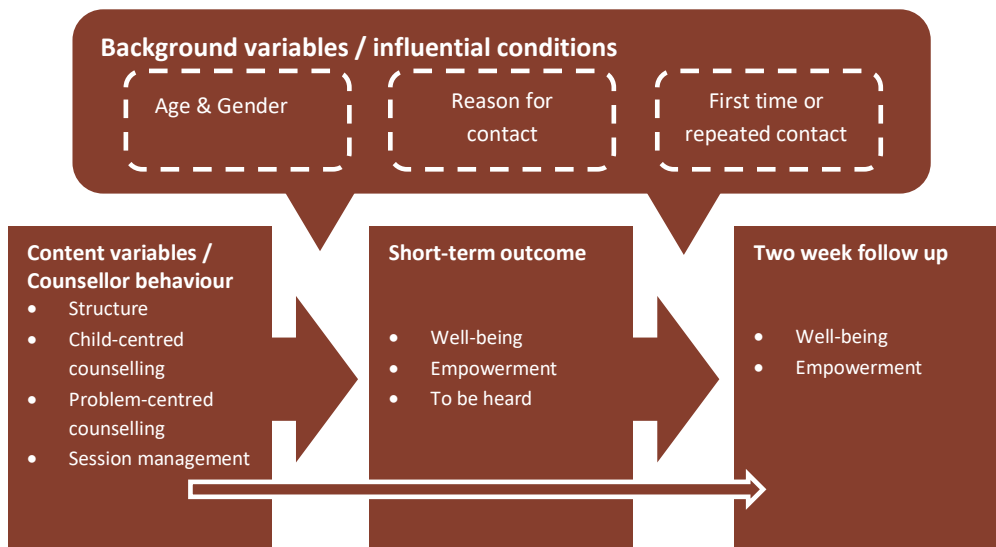


Figure 3. Conceptual model.

Fundamentally, this model illustrates that specific counsellor behaviours (on both a structural and a content level) affect the counselling-seeking child in relation to the child’s well-being, feeling of empowerment, and feeling of being heard. At the same time, the model indicates that conditional factors will influence the fundamental causal model. The conditions highlighted in the model are: the child’s gender, their age, the nature of their problem, and whether the child is an experienced user or new to the service.

This thesis contains four papers. *Paper I* examines two main counsellor strategies—Child-Centred Counselling and Problem-Centred Counselling—in relation to session impact and with the child’s stressor as a conditional factor (Sindahl, Fukkink, & Helles, 2018). The text session’s structural characteristics and its impact on session impact are examined in *Paper II* (Sindahl & van Dolen, 2018), while *Paper III* gives children the opportunity to describe, in their own words, their experiences using SMS counselling (Bechmann-Jensen, Sindahl,

& Wistoft, 2018). *Paper IV* examines a more homogeneous segment of children—a group, which constituted a particular challenge for the counselling service: children and young people with suicidal ideations (Sindahl, Côte, Dargis, Mishara, & Jensen, 2018).

The research question is explored primarily through quantitative content analysis (Eskjaer & E, 2015; Krippendorff, 2012; Neuendorf, 2002) combined with impact measures, which will be examined in the *Methods* chapter. By using this method, this thesis is included in a larger research field where anonymous, mediated counselling is studied to identify helpful counselling strategies. The introduction ends with an examination of the main studies, of which this thesis is an extension.

Content analysis studies of helpline services

A final literature search was conducted on September 11, 2018 using the *ProQuest* database, which searched through 22 databases. It returned 207 peer-reviewed publications using the simple search string: “‘content analysis’ AND helpline.” A basic search using *Scopus*, *PsycInfo*, *Medline*, and *PsycARTICLES* revealed an additional four studies. Finally, nine studies were identified through less systematic research strategies.

After reviewing abstracts from the 220 publications, 177 were excluded because they did not include helplines as a focus of their work. Fifteen studies were excluded because the content analysis was not performed on session conversations. Moreover, four studies were excluded because they were not written in English. This left 24 studies for a more thorough review.

After a full-text review, an additional 13 studies were excluded—three on the basis that they did not concern helplines, eight because that they did not analyse session conversations, and two because they did not address counsellor behaviour. The remaining 11 studies are reported in *Table 3*.

Table 3
Content analysis of helpline interactions

Study	Helpline and media	Use of outcome measures	Coding of counsellor behaviour	Sample size and sample description	Summary of results
Barak & Bloch (2006)	Emotional support for suicidal and highly distressed people, Israel. Chat.	Sub study 1: Clients spontaneous expressing that the session was helpful during the session. Sub study 2: <i>The Session Helpfulness Rating Scale</i> . Rated by counsellor.	<i>Stiles' four-factor session impact model</i> . Coded by experts. + Textual variables (number of words etc.)	Sub study 1: 80 sessions. Sub study 2: 60 sessions. Clients: male and female, 13 to 55 years of age. Only sessions longer than 45 minutes were included.	Deep, smooth conversations that yield positive responses and arouse clients' emotions were more helpful than the opposite. Longer writing from both client and counsellor was rated positive in sub study 2 only.
Daigle & Mishara (1995)	Two Canadian suicide prevention centres (Suicide-Action and Carrefour Intervention Suicide). Telephone.	None.	<i>20-item Helper's Response List</i> . Coded by experts.	617 calls. 110 volunteer helpers / 263 suicidal callers 17 to 70 years old, male and female. 25% were considered long-time frequent callers. 71% had past suicide attempts.	Cluster analysis determined that the intervention profiles could match one of two styles: nondirective "Rogerian" (391 calls) or directive (226 calls). Further analyses indicated that the particular style of intervention was related more to the characteristics of the callers themselves than to characteristics of volunteers.
Fukkink (2011)	Peer chat-counselling service (Share in Trust). Chat.	Seven quality items. Rated by experts.	<i>The Social Support Behaviour Code</i> (SSBC) + seven conversation skill items. Coded by experts.	78 chat sessions. 10 volunteer counsellors age 16 to 23, no information on the young service users.	The variety of types of social support appeared a stronger predictor of the quality ratings than the length of the conversation or the quantity (instead of variety) of social support.
Fukkink & Hermans (2009b)	The Dutch child helpline (De Kinderdelfoon). Chat and telephone.	Well-being and perceived burden of problem, pre- and post-session. Post-session items on feeling supported, having an idea about what to do, being taken seriously and made to feel at ease. Rated by child and by experts.	Six quality items to see if counsellor adhered to the policy of the helpline. Coded by experts.	53 chat sessions and 42 telephone sessions. Clients: children age 9 to 17, male and female.	Correlation between experts and child ratings were present but modest. Both experts and children indicated that the quality of chat sessions was better than that of telephone sessions. Both the chat and telephone service succeeded in improving well-being and decreasing the perceived burden of the problems.

Study	Helpline and media	Use of outcome measures	Coding of counsellor behaviour	Sample size and sample description	Summary of results
Mishara & Daigle (1997)	Two Canadian suicide-prevention centres (Suicide Action and Carrefour Intervention Suicide). Telephone.	<i>Braslington Depression Scale</i> . Rated by experts. <i>Suicide Urgency Scale</i> . Rated by volunteer at beginning and end of call. If the caller upheld contract about reconnecting with the helpline. Coded by experts.	<i>20-item Helper's Response List</i> . Coded by experts.	617 calls. 110 volunteer helpers, 263 suicidal callers 17 to 70 years old, both male and female. 25% were considered long-time frequent callers. 71% had past suicide attempts.	Decrease in depressive mood from the beginning to the end in 14% of calls. Decreased suicidal urgency in 27% of the calls. Within the context of relatively directive interventions, a greater proportion of "Rogerian" nondirective responses was related to significantly more decrease in depression.
Mishara et al. (2007a, 2007b)	14 helplines, part of the U.S. 1-800-SUICIDE Network. Telephone.	Clients' emotional state from beginning to end on <i>Crisis Call Outcome Rating Scale</i> (CCORS). Rated by expert.	26-items measuring supportive approach, active listening, collaborative problem solving and negative style. Coded by experts.	1,431 calls. 782 crisis intervention workers, clients: ≥ 18 years of age. Only calls concerning crisis situations were included.	Empathy and respect, supportive approach and good contact, and collaborative problem-solving were significantly related to positive outcomes, but not active listening.
Mokkenstorm et al. (2017)	Suicide helpline (113Online). Chat.	<i>Crisis Call Outcome Rating Scale</i> (CCORS). Rated by experts.	Same as Mishara et al., 2007a and b. Coded by experts.	526 chat sessions. 78 volunteer counsellors. Included only chatters in crisis and sessions 20 minutes or longer.	The findings support a positive effect of the chat service, an apparent lack of focus on the central issue of suicidality during chats. Low levels of empathy and respect were associated with lower impact. Support, collaborative problem solving and active listening were associated with positive impact.

Study	Helpline and media	Use of outcome measures	Coding of counsellor behaviour	Sample size and sample description	Summary of results
Nieuwboer, Fukkink, & Hermanns (2014)	Across different services offering parental advice. Single session e-mail.	Match in parental need and response. Coded by expert.	Expert-oriented, parent-oriented or context-oriented perspective. Coded by experts.	129 e-mails and responses. 40 practitioners, 129 parents (≥ 18 years of age).	The parent-oriented type was the dominant paradigm in requesting and providing email consultations. Most consultations showed a mixed perspective. Correlations between the practitioner's approach and parental expectations were weak.
Nieuwboer, Fukkink, & Hermanns (2015)	Across different services offering parental advice. Single session e-mail.	Adapted version of <i>The Family Empowerment Scale</i> + satisfaction score. Rated by service user.	10 techniques from the <i>Guiding the Empowerment Process</i> (GEP) model. Coded by experts.	96 e-mails and responses. 40 practitioners / 96 parents (≥ 18 years of age).	No relation was found between the use of GEP techniques in advice responses and the changes in parental self-report on empowerment.
van Dolen & Weinberg (2017)	The Dutch child helpline (De Kindertelefoon). Chat.	Well-being and perceived service quality. Rated by service user.	<i>The Social Support Behavior Code</i> (SSBC) condensed into action-facilitating support and nurturant support + labelling of emotions. Coded by experts.	662 chat sessions. Clients: children 8 to 18 years old.	For children chatting about controllable issues, nurturant support and negative emotional reflections negatively influence the immediate well-being. Positive emotional reflections positively influence immediate well-being. For children chatting about uncontrollable issues, nurturant support and negative emotional responses positively influence the perceived service quality.
Williams, Bampling, King, & Abbott (2009)	The Australian child helpline (Kids Helpline). Chat.	Experts applying the <i>Kids Help Line Counselling Transcript Coding Instrument</i> (KHLCTCI) rated effects of the counsellor behaviour on the children.	<i>Kids Help Line Counselling Transcript Coding Instrument</i> (KHLCTCI). Including two subscales (rapport-building and task-accomplishment items). Coded by experts.	85 sessions. Clients: age 12 to 18. 81 sessions with females and 4 with males.	Counsellor behaviour focusing on accomplishing tasks and rapport-building behaviour both had a moderately strong positive effect on young people. Sample statistics revealed that, on average, rapport-building processes were used more consistently across cases.

The earliest studies are carried out by Professor Brian Mishara and his team of Canadian researchers. Beginning at the end of the 90s, they studied telephone-counselling services for suicide prevention to identify effective counsellor strategies. Early on, they discovered a distinction between counselling strategies characterised as “non-directive” or “Rogerian” on the one hand and “directive counselling” (Daigle & Mishara, 1995). Later, when connecting these strategies to outcome measures, they noted that in a context of rather directive counselling practise, a non-directive, listening approach is more efficient (Mishara & Daigle 1997). When, a decade later, Mishara and his team conducted the largest study identified in the literature search above—an investigation of the U.S. 1-800-SUICIDE Network—their findings became more nuanced. They discovered that counsellor behaviour best predicting positive outcome was (1) validation of emotions, (2) giving moral support, (3) good contact, (4), reframing (5) counsellor talking about their own experiences, and (6) offering call-back (Mishara et al., 2007a; Mishara et al., 2007b). Furthermore, they found that behaviour associated with collaborative problem-solving was associated with positive outcome, while “active listening” was not (Mishara et al., 2007a; Mishara et al., 2007b). Counselling is a complex beast altogether.

Mokkenstorm et al. (2017) later reproduced Mishara’s study on a Dutch chat-counselling service for suicidal help-seekers. Similar results were found, however, the researchers also found active listening as a positive predictor of outcome (Mokkenstorm et al., 2017).

In Australia, a number of researchers have published multiple studies regarding the Australian child helpline: Kids Help Line (Bambling et al., 2008; King, Bambling, Reid, & Thomas, 2006b; King, Nurcombe, Bickman, Hides, & Reid, 2003). A critical 2009 study was designed as content analysis (Williams, Bambling, King, & Abbott, 2009). This study made a clear distinction between counsellor behaviours that focus on building rapport and counsellor behaviours that focus on task accomplishment (Williams et al., 2009)—a separation not wholly dissimilar to what Mishara’s team discovered. The Australian study found that an effective counselling session needs both elements, but in particular the counsellor needs to put particular emphasis on building rapport with the help-seeking child (Williams et al., 2009).

Finally, the work of Dr. Ruben Fukkink must be mentioned. He has contributed to four studies in the literature search results. His 2009 study is well known in the child helpline circles as one of the first and biggest impact studies within that field, which was based on children’s own perceived impact (Fukkink & Hermanns, 2009b). However, in this study the researchers did not connect counsellor behaviour directly to outcomes. This was done in a later in a study by Dr. Fukkink (2011) of a Dutch peer-to-peer counselling service, where helper behaviour was coded according to the *Social Support Behavior Code* (SSBC) (Cutrona & Suhr, 1992). The study concluded that the variety of types of social support appeared a stronger predictor of session quality as rated by experts (Fukkink, 2011).

Based on this literature review, the current study is the first that focuses on SMS as a service platform, and it is one of the few that assumes impact from a first-person point of view.

In closing, I should mention that the field also contains a number of qualitative studies. Honourable mentions should be given to research from Loughborough University, UK, where the Helpline Research Unit specialises in conversation analysis, based on transcripts of helpline sessions. The group consists of researchers such as Carly Butler, Susan Danby, Jonathan Potter, and Alexa Hepburn. Their research has contributed extensive information that helped form the basis of this thesis (Baker, Emmison, & Firth, 2005; Butler, Potter, Danby, Emmison, & Hepburn, 2010; Danby, Butler, & Emmison, 2009; Emmison & Danby, 2007; Harris, Danby, Butler, & Emmison, 2012).

2. Methods

Quantitative content analysis is central for the current thesis. This type of analysis has its origins in communication research and was originally developed to analyse mass-media communications. Eskjær and Helles define it as follows: *”En videnskabelig metode til kodning, kvantificering og systematisk analyse af såvel manifest som latent indhold i et tekst-korpus med henblik på at drage slutninger om budskaber, kontekst og kommunikationsprocesser ved hjælp af statistiske metoder”* (2015, per 11-12)⁵. The method has parallels to qualitative methods used for the analysis of messages—narrative analysis, discourse analysis, and conversation analysis, to name a few (Neuendorf, 2002). Common for these types of studies is the use of authentic, unstructured data generated without the direct involvement of the researcher—also referred to as “naturally-occurring” data (Fielding, Lee, & Blank, 2017). The focus is on speech-actions—what the person (counsellor) *does*, rather than what they report doing, for instance in an interview-based investigation. Hence, we see a hint of ethnomethodological roots.

The basic data for these types of studies are naturally occurring data of a qualitative nature—typically conversations or media content—which is then quantified. This is a blending of qualitative and quantitative method—a “quali-quantitative” method (Pierre De Boissieu & Latour, 2010).

⁵ Translation: *“A scientific method for encoding, quantification, and systematic analysis of both manifest and latent content in a text body with a view the purpose of drawing conclusions about the messages, context, and communication processes by means of statistical methods”*

This thesis combines data from content analysis (counselling sessions) with survey data (children’s experienced effects), which are linked with the content analysis at a first-order level, thereby lifting the analysis over the purely descriptive level (Neuendorf, 2002).

Five main data sources were employed for this study: (1) End Session Questionnaires (EQ) to measure immediate outcomes of SMS counselling. (2) Counselling transcripts. (3) System-generated data on session structure. (4) Counselling data—background data that looked at characteristics of the counselling-seeking child. (5) Follow-Up Questionnaires (FQ) (see *Figure 4*).

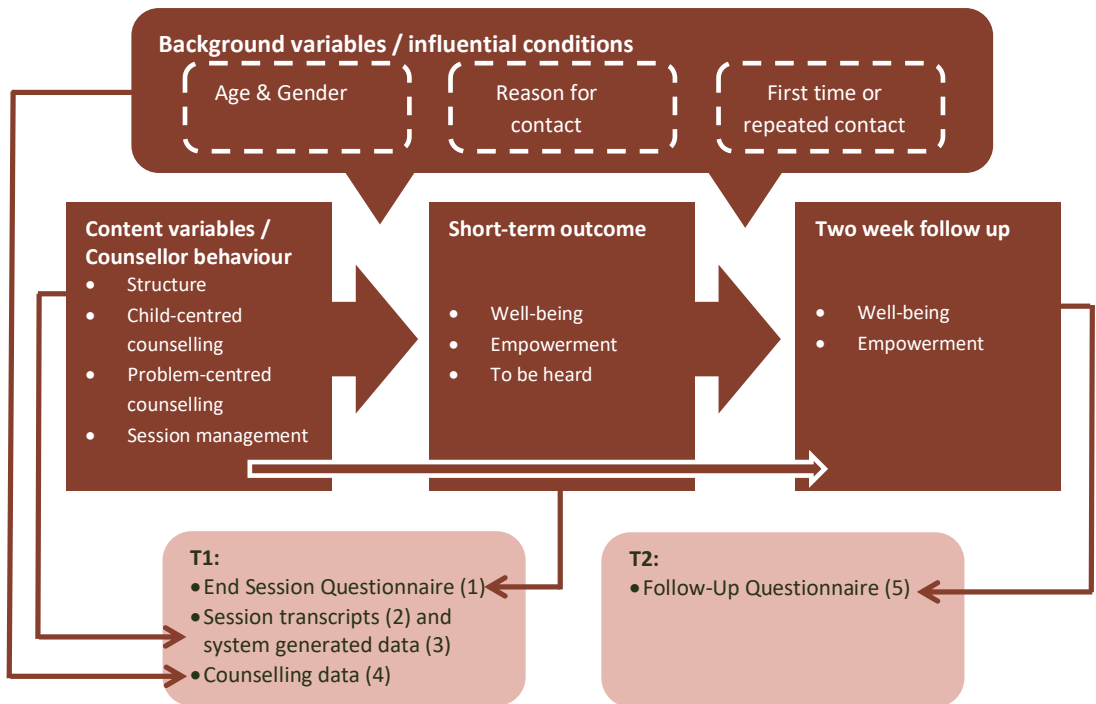


Figure 4. Data sources.

The data strings consist of counselling sessions. Given that the agency works as a confidential, anonymous, on-demand, single-session service with children as their primary target group, the possibilities for collecting data are limited. However, the technology for SMS counselling has opened up ways of distributing questionnaires while still acknowledging the service user’s need for informed consent and anonymity. This makes this dataset especially unique.

All data was gathered through *BørneTelefonen*, which will be introduced here so that the presentation of the individual data sources can be grasped in their context.

Case

Børns Vilkår offers on-demand, single session counselling support via SMS for any issue or concern for children and youth up to 23 years of age. Confidentiality and anonymity are regarded as key factors to this low threshold service. Contacting *BørneTelefonen* through any media is free of charge and calls to and texts sent to the common European child helpline number: 116 111 will not appear on the child's telephone bill, thus making it safe for children to contact the helpline without their parents' knowledge.

The service is open 365 days a year from 11 am to 2 am, and is primarily staffed by approximately 450 volunteers. Counsellors provide empathetic listening, give factual information and guidance, and if relevant, will offer a referral. The helpline believes that every child who contacts them in any way and for any reason should have a positive experience with the agency, thus increasing the chance that the child will contact the service again if needed. Most often, the counsellor will try to help the child get a better overview of available resources and the possible actions the child can take on their own. They will help strengthen the child in utilising these resources. Children who are suffering any forms of neglect can choose to give up their anonymity and accept further help from the agency staff, who will inform the local authorities about the child's situation and, if necessary, provide the child with a support person who will assist the child at meetings with authorities.

All sessions are handled from the Copenhagen office. A paid supervisor is present in the room during business hours to support the counsellors and provide quality control.

In 2017, the helpline conducted 10,519 counselling sessions through the SMS service, making SMS counselling 20.8% of all counselling sessions with children at the helpline (Børns Vilkår, 2018). The majority of children using this service are girls, and most of them are between the ages of 13 and 15. However, the service is used by both genders and by children from 9 to 23 years old (the official upper age limit for the service). Children contact the SMS service for all kinds of issues: love, friendships, family, suicidal thoughts, self-harm, sexual abuse, etc. (Børns Vilkår, 2018).

Sample

Data were collected between June 14, 2015, and June 14, 2016. During this period, all children using the SMS service were presented with an automated text with a link to an online

questionnaire. We excluded from the dataset (1) session that were not ended by a counselor⁶, (2) sessions with clients older than 23 (since they were outside the helpline's target group), (3) non-counselling seeking contacts (i.e. children seeking information for school papers or pranking) and third party contacts (i.e. clients seeking help for a friend or a family member). This left a dataset of 6,060 SMS-counselling sessions with children and young people. Selected samples from this pool were used in the four papers that constitute the basis for this thesis. The different samples are documented in *Figure 5*. Despite being low, the response rate for this study is among the absolute highest in the corresponding studies (Andersson & Osvaldsson, 2012; Fukkink & Hermann, 2009b; Kalafat, Gould, Munfakh, & Kleinman, 2007).

⁶ In a substantial number of sessions, the child simply stops responding without the session having come to an end (see also *Characteristics of the text message / SMS counselling*, page 25). Since “ending” is necessary in order to distribute an End Session Questionnaire, it was not possible to include these sessions in the study.

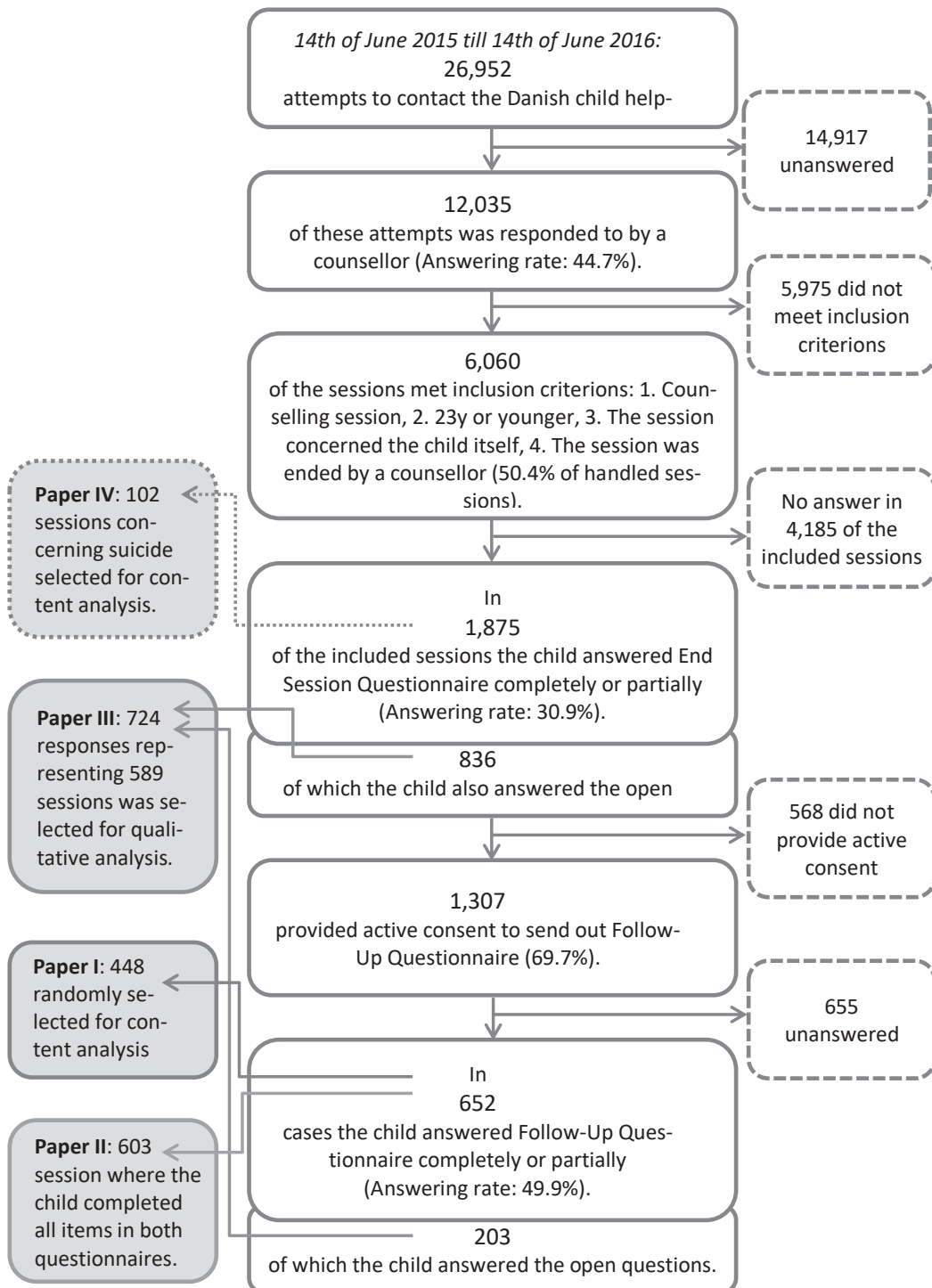


Figure 5. Consort Diagram.

Participants

The Counsellors

All counsellors at *BørneTelefonen* have a professional and practical background working with children. Often, they are teachers, pedagogues, psychologists, social workers, nurses, doctors, or students of these professions. At the helpline, they are trained in counselling skills in the area of Rogerian active listening, narrative, systemic- and solution-focused techniques. Techniques and guidelines are suggestions; in practice, the individual counsellor are free to use the approaches they consider appropriate in the specific situation.

The Children

Any child can contact the helpline for any reason. This means that children will use the helpline for purposes that fall outside the standard of counselling. Some children conduct pranks (and thereby examine what it is like to contact a child helpline), while others have questions in connection with school reports on bullying or the helpline itself. This thesis includes only those sessions where a child contacted the helpline with a problem for which he or she needs help (counselling sessions).

Due to the anonymity of the children, and the type of service provided, it is not possible to control the data for recurring clients. It is important to stress that the analytical unit in this study refers to individual *sessions*, not to individual children.

All children who received SMS counselling in the data collection period, and who met the inclusion criteria, were given the opportunity to participate in the study. If we use as a basis the 1.875 sessions where a child replied to questions in the EQ, the youngest included participant was 7 years old and the oldest 23 ($M = 13.4$ years). 89.9% of participants were girls. The largest group contacted the helpline with peer-related problems (34.5% of sessions), then psychosocial mental health issues (19.3% of sessions), and family issues (13.0%). 6.0% of the sessions concerned abuse and violence ($n = 113$ sessions). According to the children's own reporting, 47.2% were first-time contacts, while 9.0% had used SMS counselling more than ten times before.

Because the individual papers are using different samples, it is difficult to summarise a single, overall conclusion from them. The individual papers take into account the representativeness/response biases of the individual samples. It may be noted that there is a general bias towards younger service users having an increased tendency to respond to the questionnaires, while the older group was more reticent. We also find gender bias, as girls have a higher response tendency. Since girls already dominated the user group of the helpline, this left a relatively small sample of boys ($n = 188$). Children and young people who contacted the service with themes around body development, sex and sexuality had a lower tendency to respond to the questionnaires, while children and young people with problems related to

family issues trended higher. Lastly, in *Paper IV* (Sindahl et al., 2018) we document a positive response bias showing that children who indicated a positive effect in the first questionnaire (EQ) had a greater tendency to answer the second questionnaire (FQ) than children who indicated that the immediate effect was negative. It is not possible to examine whether the same trend is true for the EQ, but it seems reasonable to assume that it is. This subject has been discussed and criticised in the literature in relation to the use of user evaluations to measure the impact of anonymous mediated counselling services (Mokkenstorm et al., 2017; Mishara et al., 2007b).

Measurements

As mentioned above, a number of data sources was merged in this study (see *Figure 4*), which will be reviewed below.

System-Generated Data

In connection with the research project, a number of technical additions to the system, that the helpline uses to administer SMS counselling, have been established (an overview can be found in *Appendix 3*). Prior to the study, the system had already saved a wide range of data about the number of sessions, missed contacts, etc. In connection to the research project the following additions to the system were made, and later made permanent:

- Before contact with a counsellor, the child would receive an automated message that stated that the session would be saved. The message would include a link to the research protocol facilitated in a child friendly manner (see *Appendix 4*). The message also stated that the child could terminate the session at any time by writing "STOP".
- A backend to the system was established that only the researchers and a few trusted employees would have access to. The backend included a log of every SMS session ended by a counsellor. The log would include the session's ID number and a number of structural variables around the session. An overview of the relevant variables can be viewed in *Table 2* in *Paper II* (Sindahl & van Dolen, 2018, see page 67).
- From the log, it was also possible to gain access to the full message exchange between child and helpline.
- From the log, it was possible to specify the date and time for when a new automated message would be sent to the child with a link to the FQ. This procedure was manual so that messages were only sent to children who had given active consent to receive the second automated message.

Counsellor Registration Form

At the helpline, it is standard procedure that, following a session, the counsellor records the session in relation to demographic data on the child and the session's thematic background (overview in *Appendix 5*). Since the system backend contained all sessions that met inclusion criteria, it was possible to identify sessions that were not recorded by the counsellor

(which could be due to omissions or errors in manual procedures). In these cases, the researcher recorded the lack of information based on the session's content. Thus, it was possible to get a complete data set from this data source.

End Session and Follow-up Questionnaire

Traditionally, *BørneTelefonen* has systematically collected user evaluations after counselling sessions on their chat and SMS services. They have done this continuously since 2008. Thus, there was an already-established End Session Survey available at the beginning of the research project.

Assessing impact based on the service user's own subjective assessment is not without limitation. Mishara et al. (2007b) writes that response rate is poor for these types of "satisfaction studies" and that there is a positive selection bias, since those who are satisfied are more likely to respond. This hypothesis is explored in *Paper IV* (Sindahl et al., 2018) and is supported. Conversely, there appears to be evidence that the client's assessment of the work relationship in therapeutic contexts is a better predictor of outcomes than the therapist's assessment or external observers' assessment of the same (Horvath, Symonds, & Harmon, 1991). In a study of the Dutch child helpline Kindertelefoon, they reported only a modest correlation between children's own assessments and the evaluations carried out by independent raters (Fukkink & Hermann, 2007; Fukkink & Hermann, 2009b). An analysis of children's evaluations of *BørneTelefonen*'s chat-counselling service did not find significant correlations between children's ratings and counsellors' (Sindahl, 2015).

In addition to the scientifically substantiated arguments for the use of children's own evaluations, there are also epistemological and moral arguments. These are related to the modern childhood paradigm, which was examined in the *Introduction*. Morally, valuing the perspective of the child, and the position that children should be heard and taken seriously. Epistemologically, acknowledging that children have a unique access to knowledge of their own lives, which cannot be directly accessed by anyone other than the child herself (Danmarks Evalueringsinstitut, 2009). At the same time, in the modern view children are viewed as competent, which is also a necessary prerequisite to seeing the relevance of an intervention modality like a child helpline (Haxell, 2015). Based on that, for this project it was decided to use the children's own subjective assessments as a measure of effectiveness.

Since *BørneTelefonen* is regarded as a low-threshold service also available for children with an acute need for help, it was decided that a pre-test could not be a part of the design and the Follow-Up survey could only be sent to children who had actively given consent and with the option to opt out. Instead, it was decided to continue the use of a post-test survey with a scale that asks the child about the experienced difference from immediately before the counselling session took place to the time of the evaluation (immediately after and by Follow-Up 14 days later).

In accordance with recommendations for surveying children, a smiley scale was chosen, with a frowning smiley at '1', a neutral smiley at '3' and a smiling smiley at '5' (de Leeuw, 2011). The *Child Session Rating Scale* developed in connection with *Feedback Informed Treatment* (Duncan, Miller, & Sparks, 2004) inspired the method. At the time of the research project's initiation, part of the questionnaire had already been used at *BørneTelefonen* for six years (Sindahl, 2009) and had thus already proven its worth. It was assessed as a good starting point for further development.

The development of the questionnaires was carried out in close collaboration with the helpline. It began by identifying and defining outcomes, review of already existing scales—partly from similar studies done on other child helplines (Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2007; King et al., 2006b), and partly from a national summary of relevant scales (Socialstyrelsens, 2013), Trillingsgaard and Damms overview (2012), as well as a search in the Ontario Centre of Excellence for Child and Youth Mental Health's measures database. A summary of the impact measures, individual items, and their relation to previous studies and/or validated scales can be found in *Table 4*. We also worked on the questionnaires' designs and functional expressions so that they would be more attractive to the target group (see *Appendix 1*).

A larger sample of items was tested qualitatively on three girls and two boys aged 11 to 17, using a "think aloud technique" known from cognitive interviewing (Beatty & Willis, 2007). The participating children and young people generally found that the questionnaires were meaningful and at time even fun to complete. They were able to see the relevance of all of the questions, and they found them easy to comprehend. We did make minor linguistic changes, and we reversed the scale to make it easier to understand, based on feedback from these children.

Two versions of the questionnaires were pilot-tested at the helpline in April and May 2015, looking at dropouts (to estimate the number of items possible and appeal text in the automated texts asking the children to complete the evaluation), internal consistency, and dispersion. The FQ was sent out at two different times during the pilot tests: 4:30 p.m. and 7:30 p.m. It received the highest answer rate at the latter time. Different phrasing of the open-ended questions was tested, showing a higher answer rate, with fuller and more relevant answers, when the questions were more instructive. The final scale questions are listed in *Table 4*. The open-ended questions are reported in *Paper III* (Bechmann-Jensen et al., 2018, see page 69), and a graphic version of the questionnaires is shown in *Appendix 2*.

Table 4

List of outcome variables

Outcome	Items	Adapted from...
Well-being <i>After contact with the child helpline, the child experiences improved well-being.</i>	EQ1 and FQ2: <i>Did it help talking to BørneTelefonen? (Not at all / A lot)</i>	Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2007.
	EQ2 and FU1: <i>After / Since talking to BørneTelefonen I feel ... (much worse / much better)</i>	Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2007.
Empowerment <i>Through contact with the child helpline, the child is enabled to—alone or with others—enact change in life terms and conditions.</i>	EQ4: <i>After talking to BørneTelefonen I have ... (no / an idea about what to do)</i>	Session Impact Scale - SIS-BC (Elliott & Wexler, 1994); The Youth Counseling Impact Scale - YCIS (Riemer & Kearns, 2010); Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2007; King, Bambling, Reid & Thomas (2006b).
	EQ5 and FQ4: <i>After /Since talking to BørneTelefonen, the problem is ... (much worse / solved)</i>	SDQ P11-17 Follow Up, Strengths and Difficulties Questionnaire (Goodman, <i>n.d.</i>).
	EQ7 and FQ5: <i>After talking to BørneTelefonen I have more trust in myself (disagree / agree)</i>	Andersson & Osvaldsson, 2012.
	FQ3: <i>Have you tried any of the things you discussed with BørneTelefonen? (None / All of it)</i>	The Youth Counseling Impact Scale - YCIS (Riemer & Kearns, 2010).
	FQ7: <i>Would you contact BørneTelefonen again if you needed help? (No, never / Yes, absolutely)</i>	Unique for this study.
	EQ3: <i>In the session with BørneTelefonen we ... did / didn't talk about what I wanted</i>	Unique for this study.
	EQ6: <i>When talking to BørneTelefonen I ... (wasn't / was taken seriously)</i>	Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2007.
To be heard <i>The child experiences being able to talk freely and being taken seriously by the child helpline.</i>		

Content Analysis, Coding Manual, and Coding Form

The content analysis was developed with guidelines from Eskjær and Helles (2015), Krippendorff (2012) and Neuendorf (2002). Identifying the variables for counsellor behaviours was based on a combination of a deductive processes, identifying past research within the field, and a more inductive process where counselling staff and research assistants identified important variables to be included (Neuendorf, 2002).

While a number of relevant content-analysis coding instruments were reviewed (Bedi & Mallinckrodt, 2006; Bippus, 2001; Burleson, 1984; Burleson, 1985; Burleson & Goldsmith, 1998; Burleson & Samter, 1985; Caplan & Turner, 2007; Cutrona & Suhr, 1992; Duff & Bedi, 2010; Fukkink, 2011; Fukkink & Hermanns, 2009a; Jones & Burleson, 1997; Mishara et al., 2007a; Mishara et al., 2007b; Mishara & Daigle, 1997; Nieuwboer, Fukkink & Hermanns, 2014; Williams et al., 2009), the final coding scheme was mainly derived from two sources, both previously applied to content analysis of helplines:

- *The Kids Help Line Counselling Transcript Coding Instrument* (KHLCTCI) which measures in-session behaviour including two sub-scales focusing on Rapport-Building (3 items) and Task-Accomplishment (5 items) (Williams et al., 2009).
- *The Social Support Behaviour Code* (SSBC), which measure two sub-scales: Nurturant Support Behaviour (three subscales for *esteem support*, *network support*, and *emotional support*) and Action-Facilitating Support Behaviour (two subscales for *information support* and *tangible assistance*) (Cutrona & Suhr, 1992). This scale was not originally developed for measuring mediated counselling behaviour; however, the scale has been applied for this purpose by Ruben Fukkink (2011) and van Dolen and Weinberg (2017) with a few adaptations. This version of the scale is summarised in *Table 5*.

Table 5

Current coding scheme compared with the SSBC and the KHLCTCI

SSBC	KHLCTCI	Current study
<u>Nurturant support</u>	<u>Rapport-building</u>	<u>Child-Centred</u>
1. <i>Esteem support</i>		
1a (compliments, validation, relief of blame)	1. Encouragement	1. Complimenting 2. Normalising
2. <i>Network support</i>		
2a (presence)		3. Showing presence
3. <i>Emotional support</i>		
3a Confidentiality		
3b Sympathy	2. Paraphrasing	4. Paraphrasing
3c Empathy	3. Empathy	5. Empathetic statements or exploring emotions
3d Encouragements		6. Inviting to reconnect
<u>Action-facilitating support</u>	<u>Task-accomplishments</u>	<u>Problem-Centred</u>
1. <i>Information support</i>		
1a Advice	1. Discussion of solutions	1. Directive counselling 2. Collaborative problem solving 3. Referral to other professionals 4. Providing factual information 5. Exploring the problem
1b Referral		
1c Situation appraisal/teaching	2. Information-seeking questions	
2. <i>Tangible assistance</i>		
2a Perform indirect tasks		6. Tangible help
2b Expressing willingness	3. Follow-up appointments 4. Confronting language 5. Feeling-orientated questions	
Added variables to the current study		
1. Asking for child's point of view (letting the child regulate the session)		
2. Transparency		
3. Setting boundaries (counsellor regulating the session)		
4. Encouraging to talk to someone (else) about the problem		

The four added variables were a result of open coding of counselling transcripts (Corbin & Strauss, 2008) done by research assistants and counselling staff, as well as a discussion of productive counsellor behaviour and how it can be identified in a counselling transcript by counselling staff.

Coding procedure and reliability testing

Three master's degree students and two counselling employees were trained by the author to rate the session transcripts (522 sessions/7,657 messages). A data unit was identified as a full-text message from a counsellor. Each message was rated on the behavioural variables — “1” if the behaviour was present, “0” if the behaviour was absent in the message unit— with the exception of five variables, which were only applied to sessions concerning suicide. Here a small scale was used (see *Coding Manual* in *Appendix 6* for details). Training of research assistants and development of the coding manual was performed on session transcripts not included in the study.

Session transcripts were randomly allocated to each of the research assistants. 15.7% of the sessions were also rated by the thesis author. Inter-rater reliability was calculated on a message-by-message basis (see *Table 6*). In case of discrepancies, the rating was discussed by the two raters until consensus was reached. Raters were blind to the impact scores. For the suicide sample investigated in *Paper IV* (Sindahl et al., 2018), an additional five variables were included that looked at suicide risk assessment and suicide risk level. These were coded on a session-by-session basis, and inter-rater reliability was calculated for 37.3% of the sessions.

For statistical reliability indices, Cohen's kappa was employed and measured rater agreement above chance level (Neuendorf, 2002). Results are summarised in *Table 6* based on the largest sample (including the suicide sample).

Table 6
Inter-rater reliability

Variable	% agree- ment	Cohen's kappa	Reliability value ^a
All sessions ^b			
Encouraging to talk to someone (else) about the issue	88.9	.707	Substantial
Exploring the problem	87.2	.724	Substantial
Directive counselling	90.5	.662	Substantial
Collaborative problem solving	86.0	.674	Substantial
Providing factual information	94.3	.727	Substantial
Referral to other professionals	94.2	.744	Substantial
Empathetic statements or exploring emotions	90.6	.680	Substantial
Complimenting	96.9	.820	Outstanding
Normalising	98.5	.822	Outstanding
Showing presence	97.7	.861	Outstanding
Inviting to reconnect	99.2	.901	Outstanding
Paraphrasing	82.6	.619	Substantial
Setting boundaries (counsellor regulating the session)	96.7	.598	Moderate
Transparency	89.7	.578	Moderate
Asking for child's point of view (child regulate session)	86.1	.646	Substantial
Suicide sessions only ^c			
Risk level	97.4	.766	Substantial
Assessment of suicidal thoughts	92.1	.843	Outstanding
Assessment of previous suicide attempts	81.6	.639	Substantial
Assessment of suicide plans	86.8	.710	Substantial
Assessment of acute risk	78.9	.616	Substantial

^a McHugh, 2012.

^b Calculated for 1,066 messages from 82 sessions

^c Calculated for 37 sessions

Connecting the data

Data were merged using a unique ID for each session. When the child connected to the counselling service, the session was automatically issued a unique ID. The counsellor manually transferred this ID to the *Counsellor Registrations Form*. When the counsellor ended the session, the child received an automated SMS with a link to the EQ, which included the ID. When the child completed the EQ and the FQ, the ID was automatically saved together with the data. The ID was visible on the session log and in the system-generated data. For merging, IBM SPSS Version 23 was used.

Ethics

The study used anonymised data that were routinely collected at the helpline in agreement with the national Danish Data Protection Agency (ref. 2012-42-0291), which also include permission to share the data for research purposes, as long as it cannot be traced back to any specific child. This study was conducted in accordance with the mission of the helpline to provide children with a voice and to listen to their opinions on matters that concern them.

Children who contact the child helpline are anonymous. Throughout this study, they retained this status. Whenever children text the helpline, they receive an automated message informing them that the dialogue will be saved for the purpose of improving the service. During the data collection period this text message also provided a link with additional information about the research project (a child-friendly version of the research protocol, see *Appendix 4*). As soon as the counsellor ended a session, an automated text with a link to the EQ was sent to the child. Children who gave active consent in the EQ received an automated message two weeks later with a link to the FQ. The children were informed that this automated text message would be sent on a weekday at 7.30 pm and that at any time they could withdraw from the study by writing the text 'Nej Tak' ('No thanks'), in which case they would not receive any texts.

The counsellors were continuously informed about the research project. Occasionally, the counselling transcript revealed concerning counselling. In these cases, the researcher would report those concerns to the helpline staff and hand over a copy of the transcript. The researcher was not involved further in those cases.

3. Summary of results

The current study began with a desire to identify effective counselling strategies in the context of SMS counselling of children and young people. The thesis' four papers tackled the research focus from different angles, using different methods, looking at various aspects of counsellor behaviour, and examined particular segments of clients. Together they present a total, cohesive narrative of effective counselling strategies in the SMS-supported, anonymous counselling of children and young people. The approach is exploratory and the research field is new, so the results must be understood in this context.

Impact

Overall, the research showed positive effects of SMS counselling for most of the children who used it. As reported in *Paper II*, 84.9% ($n = 512$) of the included sessions were rated as having an immediate positive effect on the counselling-seeking child (indicated by an average score above three on a possible score of 1 to 5). It should also be noted that a not insignificant number of sessions resulted in a negative rating. 13.3% of the sessions ($n = 80$) received an average negative rating (below three) immediately after the session. In other words, the child felt that following the session they were worse off than at the time they initiated the contact. At the follow-up 14 days after counselling, we found that the children were better off than before they reached out to the helpline in 62.9% of the sessions ($n = 379$), while more than every fourth child (28.9%; $n = 174$) indicated that they were worse off than before they contacted the helpline. Despite a reduction in the proportion of children

and young people indicating a positive impact two weeks later, we did find immediate impact to be a strong predictor of impact two weeks later (*Paper II*).

The proportion of sessions where the child indicated feeling worse off two weeks later was greater when we looked at a particularly vulnerable group: children with suicidal ideations. In *Paper IV* we found that for this group of children, 37.0% indicated that they were feeling worse two weeks after the session ($n = 17$). In the paper, we discuss that this can be seen as an indicator that texting in some cases is insufficient help, and must be supplemented by further, sustainable help.

Effective counsellor behaviour

The analysis points to aspects of what the counsellor can do to ensure that the child will benefit from the intervention. Overall, we have looked at counsellor behaviour that can be described as respectively child-centred or problem-centred (see *Content Analysis, Coding Manual, and Coding Form*, page 39). This as an extension of a number of studies on helper behaviour looking at (1) behaviour that focuses on problem solving and removal of the stressors and (2) helper behaviour that focuses on building alliances and giving emotional support to the help-seeker (Burlinson & Goldsmith, 1998; Cutrona, 1990; Cutrona & Suhr, 1992; Fukkink, 2011; Horowitz et al., 2001; Jones & Burlinson, 1997; Mishara et al., 2007a; van Dolen & Weinberg, 2017; Williams et al., 2009).

The analysis has pointed out that, even when mediated through SMS technology, it is a basic prerequisite for effective counselling, that it is provided on the grounds of empathetic child-centring. *Paper I* showed that sessions had a greater impact when the counsellor applied a high density of child-centred behaviour. *Paper IV* showed that particularly sessions characterised by a high degree of empathetic statements on the counsellor's part were associated with positive impact. In *Paper III* we heard from the children themselves, who described how important it was for them to meet a counsellor who came across as friendly and kind, who seemed committed to help, and who would give them the time they needed. This is in keeping with past research that has shown that building rapport is no less important in mediated counselling than it is in off-line (Gibson & Cartwright, 2014; Chardon, Bagraith, & King, 2011; Williams et al., 2009).

It should however be emphasised that in general, we did not find the sessions which were dominated by a child-centred approach to be preferable (they also only made up a minor percentage of the sample (8.3% of the session)). In *Paper I*, we concluded that the density of child-centred counsellor behaviour was consistently, positively related to impact. However, the data suggest that a balanced approach with a high (but not dominant) child-centred focus in combination with a focused problem-centred strategy is the most effective for counselling children in an SMS context. This finding is confirmed in the qualitative study (*Paper III*), where we found that while some children seemed to prefer a supportive, listening approach—using the service to vent more than to explore solutions—many others appeared to have strong desires to find ways out of their problems and were looking to the texting service

to assist them to find it. Studying the comments showed that providing advice and a caring atmosphere seemed to be in a circular dependency rather than a question of either/or.

Accordingly, it should be mentioned that 44.2% of the sessions were labelled problem-centred dominant (*Paper I*), which, according to the results, should be perceived as the least productive counselling strategy. In general, problem-centred counselling behaviour was more common than child-centred behaviour and we hypothesise that the medium (SMS) might incline counsellor behaviour toward more cognitive and factual strategies biased towards informational support and problem solving—strategies which, from this research, actually seem less productive.

Paper II looked at structural elements of the counselling sessions, such as how much the counsellor wrote, how many messages they sent, how long the sessions lasted, waiting time between messages, etc. As a metaphor, we can understand this as *the body language of texting*. We found that sessions which were characterised by greater text volume from the counsellor in each message, but with fewer messages from beginning to end, were more effective than sessions that did not have these characteristics. Further, session duration had a positive impact, while counsellor response latency did not. These findings indicate that the child might benefit from the asynchronous aspect of texting, as long as the counsellor responds fast and with denser messages.

4. Concluding discussion

Each of the four articles in this thesis concludes with a discussion. In the following part, the focus will turn to themes that run throughout the four papers.

First, a discussion of the purpose of the intervention in focus (child helpline) and how this might not be so clear—and perhaps not meaningful to define rigidly. However, this lack of clear focus leaves the counsellor role somewhat fuzzy.

The second discussion regards how the basic practices of counselling do not change radically just because the session is mediated through SMS technology. Empathetic listening is still the cornerstone of counselling – but how does one listen in an SMS?

Thirdly, it is discussed how the technology still does appear to make a difference. The process of writing is re-visited, the productive aspects of asynchronous communication are addressed as well as the dilemma that the medium seems to promote less productive counsellor behaviour.

Helpline, hotline, or warm line?

In the anthology *Calling for help*, Pudlinski (2005) distinguish between three types of mediated counselling services: helplines, hotlines, and warm lines. *Hotlines* target people in acute crisis where help is urgently needed. *Warm lines* are pre-crisis services, which focus on listening and on supporting clients in need of a sympathetic ear. *Helplines*, according to Pudlinski, have advising and referring as their main objective. In the current study, we have referred to the counselling services in focus as a *helpline*—primarily because this is what the organisation calls the intervention.

The distinction Pudlinski presents is an academic one. In practice, the child helpline in this study is all of the above. Even though we find that the counsellors—perhaps stimulated by the technology—mainly act as helpline advisors focusing on problem solving, we also find that sessions perhaps better characterised as “warm line sessions” seem to fit the clients best—on average, at least. We also find that the helpline is contacted frequently by children and young people in need of acute help. We can argue that they would be better helped by contacting another (offline) professional service—but they have not (perhaps because their access to such services is limited). They contact the helpline—sometimes through SMS—and the volunteer staff needs to find ways to help them as well as possible. Nothing in the data indicates that rejecting these clients is helpful.

In Pudlinski’s study of warm lines (2005), he also found that the distinction between helplines, hotlines, and warm lines was called into question, since advice-giving was a common practice also within the context of warm lines. The same issue was addressed in an article based on session data from the Australian child helpline which looked at “Advice-Implicative Interrogatives:” “*Counseling is a kind of hybrid form of service encounter in that standard practice maintains a focus on the ‘teller and their experiences,’ even though much counseling involves clients talking about a ‘problem and its properties.’*” (Butler et al., 2010, p. 281).

Perhaps we can understand this dilemma of the child helpline counsellor by pointing back to the introductory reflections on the modern childhood paradigm. Counsellors at the child helpline must cover the full spectrum from hotline to helpline to warm line: on the one hand, they must acknowledge the child as a competent co-citizen whose views should be heard and taken seriously. They must pay respect to the child’s autonomy and choice (liberty rights). At the same time, they must recognise that sometimes guidance, advice-giving, and even directives are required when helping children and young people dealing with significant problems, acknowledging the child’s right to protection (welfare rights).

In the papers, we suggest that counsellors should stay in the “warm line corner” by providing empathy and support, which would be in line with the ontological foundation of the helpline (see page 14). However, in *Paper IV* we also suggest that in some cases texting is insufficient help and must be supplemented by further, sustainable help, which demands a more helpline- or hotline-oriented approach.

Anonymous, mediated counselling can be a springboard or a catalyst for actions that in time can lead to an improvement in the child's situation, but many factors play a role in this transformation. Change is not always implemented within the counselling sessions; rather it is something the child performs after the session has ended. In *Paper II*, we found that at least 63.7% of the children and young people indicated that they had been able to perform some of the tasks discussed with the counsellor (which we labelled "agency"). However, in *Paper IV*, which dealt with a particularly vulnerable group (children and youth with suicidal ideations), we found that these actions were not always successful, and that the professional or personal network around the child did not always rise to the challenge when children reached out to them by recommendations from the helpline. This leaves these children with the experience of reaching out for help and not getting it.

Answering texts, calls, and chats at a child helpline is a challenging task that requires the counsellor to be extremely flexible and sensitive. Providing clear definitions of helpline frameworks might not be what is needed. "Helpline" is a standard (Nissen, 2016)—a shoe that does not quite fit the diversity of conversations actually going on.

Traditional counselling in a progressive medium

Research on comforting messages, helper behaviour, and social support confirms repeatedly that there are some essential aspects to any supportive conversation with another human being about difficult things. We need to be (actively) listened to in a genuine, open, and non-judgemental way (Bordin, 1979; Burleson, 1994; Caplan & Turner, 2007; Rogers, 1951; Siewert, Antoniow, Kubiak, & Weber, 2011). To be met by an authentic other who genuinely wishes you the best and who validates you by showing that you are ok as you are and that the problems you are facing are understandable and important (Burleson, 1985; Burleson, 1994; Caplan & Turner, 2007; Rogers, 1951).

Empathetic listening is central to counselling (Burleson, 1994; Caplan & Turner, 2007; Cutrona, Cohen, & Igram, 1990; Cutrona & Suhr, 1992; Danby et al., 2009; Rosenfield, 1997) and the research conducted here shows that it is no different for counselling mediated through SMS technology. Technology does not change the fact that help apparently cannot exist if the child or young person does not first feel welcomed, heard, taken seriously by the counsellor, and free to talk about the issues of concern. Hereafter, the child should be met with a maximum of empathy, understanding, and a sensitivity to where the child is right here and now—and then introduce a suitable dose of problem solving. It might not be sufficient, but it certainly is necessary for the counsellor to continuously express empathy, warmth, and positive regard when texting the children. In this regard, the current studies underline the importance of person-centeredness when helping others—equally in the context of SMS counselling— as previous studies have documented using other counselling technologies (Caplan & Turner, 2007; Chardon et al., 2011; Danby et al., 2015; Gibson & Cartwright, 2014; Mishara et al., 2007b; Williams et al., 2009).

Different modalities set different conditions for the counsellor to perform listening (Danby et al., 2009). When texting, the counsellor is silent, invisible and—because of the asynchronicity of this format—also absent. Hence, listening in asynchronous, text-based communication needs to be *active* (Danby et al., 2009), and this requires words. The only way the counsellor can show the child or young person that he or she is listening is through text. As a 13-year-old girl puts it in *Paper III*: “*The longer your messages are, the more serious you seem.*” Our data suggest that counsellors need to be expressive and elaborate in their writing. The asynchronous format of texting allows for taking the time to bring more depth to messages (Lapadat, 2002). (By way of illustration, see *Figure 6*.)

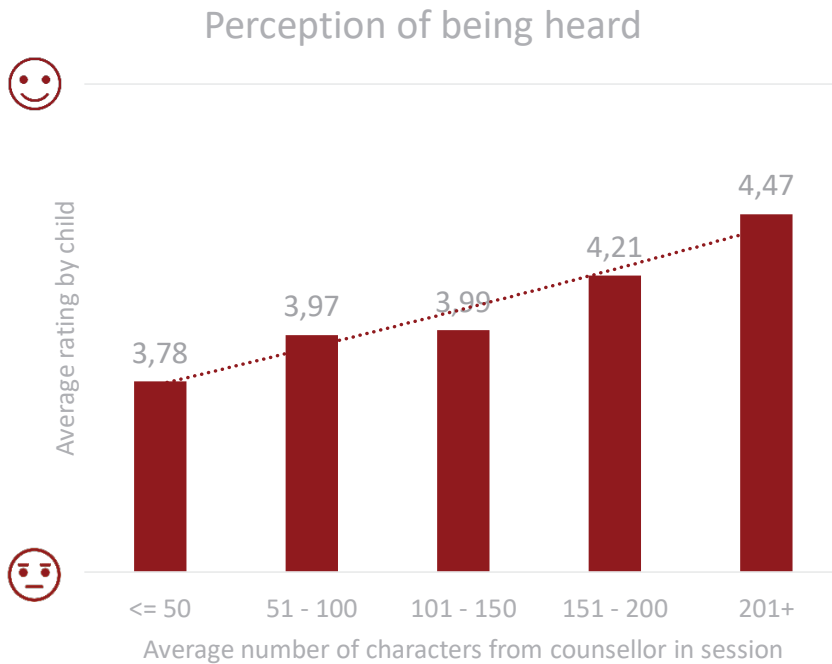


Figure 6. Relationship between number of characters in average message from counsellor and the child’s perception of being heard (*Paper II*).

Giving children a channel to speak out and be heard is a core ideal of child helplines, who believe this is an important practice in terms of improving children’s lives (Child Helpline International, 2016b). Article 12 in the United Nations Convention on the Rights of the Child (The United Nations, 1989) states that the child has a right to be heard. This is such a cornerstone for the work of child helplines that further impact is really not required in order to document the effects of the services: “*Helplines play a major role in children expressing their views freely and they are trusted and well used because they are confidential, accessible and build on children’s own capacities*” (Willow, 2010, p. 138).

Does the medium matter?

Earlier theories of online or mediated communication held the opinion that these technologies did not allow sufficiently empathetic expression, and thus dialogue had to remain more impersonal and factual than if two people were sitting across from each other (Kraut et al., 1998; Walther & Parks, 2002). Later theories indicated that people in mediated communication compensated for the lack of physical presence by being more open towards each other and that it was possible to develop just as much intimacy (perhaps even more) online as offline (Caplan & Turner, 2007; Suler, 2004; Tidwell & Walter, 2002; Walther & Burgoon, 1992). This was addressed in the *Introduction* with reference to the *online disinhibition effect* (Suler, 2004). These theories imply that it is not a limitation in itself that the conversation is based on writing and on a distance, but that there are factors that both promote and limit how empathetic conversation can take place online as well as offline (Gilat & Reshef, 2014).

So, is it the same as face-to-face counselling? Clearly not.

First, the communication between child and counsellor is mediated through writing. In *Paper III*, this was one of the few technical aspects of the counselling sessions spontaneously mentioned by the service users themselves. Research indicates that the process of writing matches young people's communication preferences (Gibson & Cartwright, 2014; Ling, 2010; Lyddy et al., 2014) and can have a therapeutic effect in itself (Bolton et al., 2004; Gibson & Cartwright, 2014; Sindahl, 2013; Slatcher & Pennebaker, 2006). According to Pennebaker (1997), writing down personal experiences *without time pressure* can be therapeutic.

The asynchronicity of texting contributes to a removal of this time pressure in counselling and is the second technical feature of text counselling to be addressed. In *Paper II* we found evidence that session duration and session length are indeed quite different features in relation to text message counselling (Castelnuovo, Gaggioli, Mantovani, & Riva, 2003; Frehner, 2008; Helles, 2009; Goumi, Volckaert-Legrier, Bert-Erboul, & Bernicot, 2011). Sessions can be long in time but short in number of messages and vice versa. We found that *session duration*—measured as time from beginning to end of session—was positively associated with session impact, while *session length*—measured as number of messages from counsellor from beginning to end of session—was in fact negatively related to session impact. A long duration with few messages will indicate that the correspondence is quite asynchronous and, based on these study results, this asynchronicity does not seem to be a limitation but perhaps is even a strength of text-message counselling. Perhaps the asynchronicity affords greater control over when and how to respond to messages, leaving reflection time and greater face management for the service user (Gibson & Cartwright, 2014; Suler, 2000; Thurlow & Brown, 2003). However, our results also show that response latency on the counsellors' side had a negative effect on counselling impact. Latency may be effective for the person producing a response, but not for the one waiting for it (Suler, 2000; Seo, Kim, & Yang, 2016).

What was perhaps particularly interesting was that we found evidence that productive counsellor approaches were somewhat opposite of the affordance of the medium. A common assumption is that texting needs to be brief with emphasis on *short* in Short Message Service (SMS). However, *Paper II* made it clear that sessions characterised by dense messages, with more text in each message from counsellor, were positively related to session impact. Moreover, although a problem-centred counselling style was more common than a child-centred one, we found in *Paper I* and *Paper IV* that the opposite would actually be more productive. Perhaps because a number of phatic and relation cues are absent by default in the SMS communication (Jakobson, 1960) they need to be deliberately inserted into the discourse.

However, while the medium does seem to matter—sometimes supporting, sometimes challenging the counselling relationship and its impact—we also found in *Paper III* that only a few children’s comments concerned *the medium* itself. This indicates that the sense of psychological closeness can move the technology to the background and place it outside of one’s awareness. Instead, the children focused primarily on the counselling content and their relationship with the counsellor (who was anonymous to them, and at times would be switched out once or more during a session). Perhaps the practise of texting comes so naturally for the young population seeking help this way that it does not require much reflection, while it certainly does for the counsellors who struggle to conduct a professional service through this technology.

Implications for practice

The research results indicate that it can be helpful for children and young people to seek help at a helpline through SMS. It can assist those who prefer communicating through writing (or “talking through text”). Its asynchronous nature can help the child or young person, giving them the space to reflect and perhaps go back and forth between the counselling session and other activities. It is helpful when the counsellor responds quickly with dense content expressing empathy and in a child-centred framework.

So, can we turn this into a recipe? Is there now a template we can use for counselling children and young people through SMS? A logarithm perhaps? Probably not.

The basic methodology for this research was quantitative content analysis and scaled impact measurements. The results are numbers, which create an apparent objectivity, making it easy to think that we have now found the upshot.

In the provision of child helplines and social work, we find an increased focus on child participation and development of child-centred methodologies on the one hand, and at the same time an increased focus on specification of programme theories and consistency in the delivery of interventions (Iversen, 2014). The current research can be seen as a continuation of these trends. However, within these two trends there is an inherent conflict. As Iversen (2014) puts it: “*The focus on model consistency may limit children’s ability to participate in decisions about the intervention.*” (p.275) If the child should be regarded as a competent

and active participant, he or she should have influence on the counselling process—for this, the use of “templates” could be considered counterproductive. In a study of the Australian child helpline Danby et al. concludes: “*If the counsellor were constrained by service guidelines that require following a template or stepped procedures on how to respond to the client, then no template could ever fully consider the multiplicities of possibilities that the client might want to talk about, or the unfolding of the counselling session.*” (2015, p. 593).

More realistically, we must regard these research findings as prototypical concepts (Nissen, 2009) which need to be transformed or recreated in the concrete meeting between a specific child and a specific counsellor. However, there can be a liberating effect in standardisations. They can allow the practitioner to lean back, knowing what often or usually works best, and allow them to focus their attention on being sensitive to and tuning in to the variations.

Study limitations

The current research combines impact measures and quantitative content analysis. Each of these methods entails limitations, and combining them is not without limitations either.

Helpline data is essentially difficult to gather in a qualitative way. Volunteers often staff the services, the service users are anonymous and self-referred and the intervention consists of one session only. While many helplines spend resources collecting and handling data, these data are seldom published except in annual reports. However, when this information is not published—perhaps due to methodological rigour—then the helplines risk becoming closed archives of people’s struggles and innovative provisions of help risk not being adopted (Zuckerman, Sharfstein, & Wise, 2000). The costs and logistic requirements of thorough evaluations will often be outside the reach of the services themselves (Zuckerman et al., 2000). For both ethical and practical reasons, randomised, controlled trials are hardly a feasible way to go, and there is a need to develop cost-efficient, easily applicable methods for evaluating helpline services that are acceptable for funders and academia. The current study is an attempt to do so.

Measuring impact in anonymous, mediated counselling services for children

Measuring the impact of helpline services is a struggle shared by more and more organisations as the demand for evidence-based practices and documentation of effectiveness increases. Asking helpline clients to fill out questionnaires are by some considered unethical (Barak & Bloch, 2006). This was not the case for the helpline in the current study (who, based on the contemporary view of children, consider it as an ethical choice to allow these clients to voice their opinion of the service). However, ethical considerations did prohibit us from including pre-intervention, baseline measures. Because of this, we had to rely on the service users’ retrospective recall. Further ethical issues have already been discussed in the *Methods* chapter (see *Ethics* page 42).

Unsuccessful attempts were made to find standardised scales suitable for measuring helpline impact. Questions were harvested from previous studies of child helplines (Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2007; King et al., 2006b) and single items were taken from standardised scales (Elliott & Wexler, 1994; Goodman, *n.d.*; Riemer & Kearns, 2010). Not using a validated scale is certainly one limitation of the study. On the other hand, the questionnaires used match the intervention's purpose and context and was well accepted by the young clients.

As mentioned in *Paper IV*, the use of self-rated impact scales has been criticised for having low response rates and a response bias leaning towards more positive ratings (Mokkenstorm et al., 2017; Mishara et al., 2007b). That being said, studies have shown that *perceived* support is a stronger predictor of changes in mental health than *received* support (Mokkenstorm et al., 2017) and that clients' ratings are stronger predictors of outcome than those of therapists or external raters (Horvath et al., 1991). The response rates in the current study are certainly in the low range when compared to other types of intervention studies. Compared to studies of anonymous helplines, however, the current study has one of the highest response rates published.

Representability of the participating sample was estimated based on data of non-participants. Bias was documented, which included a confirmation of the hypothesis that there would be a positive response bias. In *Paper IV*, we document that more satisfied clients will be more inclined to participate in the study.

Impact was measured by use of a few Likert scales and open-ended questions. It would have been a nice addition to the study if it were possible to ask in-depth questions and to explore the children's experiences in a more qualitative manner. A systematic triangulation—obtaining and comparing data from multiple sources—would be warranted in future research.

Quantifying counsellor behaviour

In order to quantify counsellor behaviour and to make the data accessible for quantitative analysis, a reduction of complexity is necessary. The variables used for the current study certainly do not cover everything the counsellor is doing in the sessions. Moreover, it was decided to include data only on the counsellor's behaviour, and to some extent ignore what the child was proactively or reactively doing in the session.

Further, when rating counsellor behaviours we focused on the quantity, but not the quality, of counsellor behaviours; for example, providing factual information was rated as present, no matter if the information was correct or not.

Qualitative conversation analysis would be a great extension of the research in the current thesis.

Combining quantitative content analysis and impact measures

This was a correlational study representing associations between SMS content and child impact—not causal effects. While there are attempts to conclude that specific counsellor behaviours lead to specific impacts, causal interpretations must be undertaken with caution. Negative counsellor behaviour might be an indication that the counsellor is having a poor contact with the child in the first place—hence, reversing the causality. A counselling session is a two-way interaction and we only looked at one side of it.

As mentioned earlier, not having a control group is also a limitation. This is a real-life study and confounding factors may influence the results.

Generalisability of the results

Data was collected at a single helpline and should be regarded as a case study. Text-message, or SMS, counselling can be conducted in many ways. It can be a one-text-one-answer type of service or even a service based on automated texts without any counsellor involvement. The results of the current study are relevant for services offering dialogue-based, human-handled, text counselling. Even within this field, one will find important differences in the technology, which affect the structural aspects of the counselling session. National, cultural, and local differences are likely to be influential.

References

- Andersson, K., & Osvaldsson, K. (2012). Utvärdering av BRIS Internetbaserade stödkontakter [Evaluation of BRIS Internet-based support contacts]. *Research Report on childhood and the study of children*. University of Linköping, Sweden.
- Baker, C., Emmison, M., & Firth, A. (2005). *Calling for help, language and social interaction in telephone helplines* (Pragmatics & beyond New series 143). Amsterdam: John Benjamins Pub.
- Bambling, M., King, R., Reid, W., & Wegner, K. (2008). Online counselling: The experience of counsellors providing synchronous single-session counselling to young people. *Counselling and Psychotherapy Research, 8*(2), 110 -116. doi: 10.1080/14733140802055011.
- Barak, A. (2007). Emotional support and suicide prevention through the Internet: A field project report. *Computers in Human Behavior, 23*(2), 971-984. doi: 10.1016/j.chb.2005.08.001
- Barak, A., & Bloch, N. (2006). Factors Related to Perceived Helpfulness in Supporting Highly Distressed Individuals through an Online Support Chat. *CyberPsychology & Behavior, 9*(1), 6-68. doi: 10.1089/cpb.2006.9.60
- Bechmann Jensen, T., Sindahl, T., & Wistoft, J. (2018). Children's experiences texting with a child helpline. *British Journal of Guidance & Counselling, 1-12*. doi: 10.1080/03069885.2018.1519182
- Beatty, P., & Willis, G. (2007). Research Synthesis: The Practice of Cognitive Interviewing. *Public Opinion Quarterly, 71*(2), 287-311. doi: 10.1093/poq/nfm006
- Bedi, R., & Mallinckrodt, B. (2006). Concept Mapping the Client's Perspective on Counselling Alliance Formation. *Journal of Counselling Psychology, 53*(1), 26-35. doi: 10.1037/0022-0167.53.1.26
- Bicard, D.F., Lott, V., Mills, J., Bicard, S. & Baylot-Casey, L. (2012). Effects of text messaged self-monitoring on class attendance and punctuality of at-risk college student athletes. *Journal of Applied Behavior Analysis, 45*(1), 205-210. doi: 10.1901/jaba.2012.45-205
- Bippus, A. M. (2001). Recipients' Criteria for Evaluating the Skillfulness of Comforting Communication and the Outcomes of Comforting Interactions. *Communication Monographs, 68*(3), 301-13. doi: 10.1080/03637750128064
- Bolton, G., Howlett, S., Lago, C. & Wright, J.K. (Eds.) (2004). *Writing cures, an introductory handbook of writing in counselling and psychotherapy*. Hove, East Sussex New York, NY: Brunner-Routledge.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy, Theory, Research and Practice, 16*(3), 252-260.
- Borochofsky-Bar-Aba, E., & Kedmi, Y. (2010). The nature of SMS discourse: The case of Hebrew. *Folia Linguistica, 44*(1), 1-30. doi: 10.1515/flin.2010.001
- Brendryen, H., Kraft, P. & Schaalma, H. (2010). Looking inside the black box: Using intervention mapping to describe the development of the automated smoking cessation intervention 'happy ending'. *Journal of Smoking Cessation, 5*(1), 29-56. doi: 10.1375/jsc.5.1.29
- Brenes, G., Ingram, C., Danhauer, S., Roberts, M. C., Barnett, J. E., & Kelly, J. F. (2011). Benefits and Challenges of Conducting Psychotherapy by Telephone. *Professional Psychology: Research and Practice, 42*(6), 543-549. doi: 10.1037/a0026135

- Burleson, B. (1984). Age, Social-Cognitive Development, and the Use of Comforting Strategies. *Communication Monographs*, 51(2), 140-153. doi: 10.1080/03637758409390190
- Burleson, B. (1985). The Production of Comforting Messages: Social-Cognitive Foundations. *Journal of Language and Social Psychology*, 4(3-4), 253-273. doi: 10.1177/0261927X8543006
- Burleson, B. R. (1994). Comforting messages: features, functions, and outcomes. In J. A. Daly & J. M. Wiemann (Eds.). *Personality and interpersonal communication* (pp. 305–349). Newbury Park, CA: Sage Publications.
- Burleson, B. R., & Goldsmith, D.J. (1998). How the comforting process work: Alleviating emotional distress through conversationally induced reappraisals. In: P. Andersen, & L. K. Guerrero. *Handbook of Communication and Emotion; Research, Theory, Applications, and Contexts* (pp. 245-280). San Diego, CA: Academic Press.
- Burleson, B., & Samter, W. (1985). Consistencies in theoretical and naive evaluations of comforting messages. *Communication Monographs*, 52(2), 103-123. doi: 10.1080/03637758509376099
- Butler, C., Potter, J., Danby, S., Emmison, M., & Hepburn, A. (2010). Advice-implicative Interrogatives: Building “Client-centered” Support in a Children’s Helpline. *Social Psychology Quarterly*, 73(3), 265-287. doi: 10.1177/0190272510379838
- Børns Vilkår. (2015). *SMS Arbejdshæfte og Quickguide* [SMS workbook and quick guide]. Unpublished internal document. Valby: Børns Vilkår.
- Børns Vilkår (2018). *Dokumentationsrapport 2017 – Børns Vilkårs Rådgivning* [Documentation report 2017 – Børns Vilkår’s counselling service]. Valby, Denmark: Børns Vilkår. Internal Report: Unpublished.
- Caplan, S. E. (2003). Preference for online social interaction: A theory of problematic Internet use and psychosocial well-being. *Communication Research*, 30(6), 625-648. doi: 10.1177/0093650203257842
- Caplan, S. E., & Turner, J. S. (2007). Bringing theory to research on computer-mediated comforting communication. *Computers in Human Behaviour*, 23(2), 985-998. doi: 10.1016/j.chb.2005.08.003
- Castelnuovo, G., Gaggioli, A., Mantovani, F., & Riva, G. (2003). From psychotherapy to e-therapy: The integration of traditional techniques and new communication tools in clinical settings. *Cyberpsychology & Behavior*, 6(4), 375-82. doi: 10.1089/109493103322278754
- Chardon, L., Bagraith, K., & King, R. (2011). Counseling activity in single-session online counseling with adolescents: An adherence study. *Psychotherapy Research*, 21(5), 583–592. doi:10.1080/10503307.2011.592550
- Child Helpline International (2014): *Child Helpline International and the Committee on the Rights of the Child - Reviewing 10 years of CRC recommendations on the Right to be Heard*. Retrieved from: <http://orgchi-tukhnakal.savviihq.com/wp-content/uploads/2017/05/CHI-and-CRC-English.pdf>
- Child Helpline International. (2016a). *Annual Report 2015*. Retrieved from http://www.childhelplineinternational.org/media/166985/child_helpline_international-annual-report-2015.pdf
- Child Helpline International (2016b). *Metadata 2015*. Amsterdam, the Netherlands. Unpublished.

- Child Helpline International (2017a). *Making it work! Our story on active youth participation*. Retrieved from: https://www.childhelplineinternational.org/wp-content/uploads/2017/07/MANUAL-YAC_final-version.pdf
- Child Helpline International (2017b). *We Listen to the Voices of Children and Young People*. Retrieved from: <https://www.childhelplineinternational.org/wp-content/uploads/2017/11/WeListen.pdf>
- Corbin, J., & Strauss, A. L. (2008). *Basics of qualitative research, techniques and procedures for developing grounded theory* (3e [ed.], Juliet Corbin, Anselm Strauss ed.). Los Angeles, Calif. London: SAGE.
- Cunningham, H. (2005). *Children and childhood in Western society since 1500* (2.nd ed., Studies in modern history). Harlow: Pearson Longman.
- Cutrona, C. (1990). Stress and Social Support – in search of Optimal Matching. *Journal of Social and Clinical Psychology*, 9(1), 3-14. doi: 10.1521/jscp.1990.9.1.3
- Cutrona, C., Cohen, B., & Igram, S. (1990). Contextual determinants of the perceived supportiveness of helping behaviors. *Journal of Social and Personal Relationships*, 7(90), 553-562. doi: 10.1177/0265407590074011
- Cutrona, C., & Suhr, J. (1992). Controllability of Stressful Events and Satisfaction with Spouse Support Behaviours. *Communication Research*, 19(2), 154-174. doi: 10.1177/009365092019002002
- Daigle, M., & Mishara, B. (1995). Intervention Styles with Suicidal Callers at Two Suicide Prevention Centers. *Suicide and Life-Threatening Behavior*, 25(2), 261-275.
- Danby, S., Butler, C., & Emmison, M. (2009). When ‘listeners can’t talk’: Comparing active listening in opening sequences of telephone and online counseling. *Australian Journal of Communication*, 36(2), 1–23.
- Danby, S., Cromdal, J., Rendle-Short, J., Butler, C., Osvaldsson Cromdal, K., & Emmison, M. (2015). Parentification: Counselling talk on a helpline for children and young people. In: J. Lester & M. O'Reilly. *The Palgrave Handbook of Child Mental Health* (pp. 578-596). London: Palgrave Macmillan UK.
- Danmarks Evalueringsinstitut (2009). *Børneperspektiver* [Children’s perspectives]. Denmark: Danmarks Evalueringsinstitut.
- Dingli, A., & Seychell, D. (2015). *The new digital natives, cutting the chord*. Heidelberg: Springer.
- Duff, C., & Bedi, R. (2010). Counsellor behaviours that predict therapeutic alliance: From the client's perspective. *Counselling Psychology Quarterly*, 23(1), 91-110. doi: 10.1080/09515071003688165
- Duncan, B., Miller, S. D, & Sparks, J. A. (2004). *The heroic client, a revolutionary way to improve effectiveness through client-directed, outcome-informed therapy*. San Francisco, Calif: Jossey Bass Wiley.
- Elliott, R., & Wexler, M. M. (1994). Measuring the Impact of Sessions in Process-Experiential Therapy of Depression: The Session Impacts Scale. *Journal of Counseling Psychology*, 41(2), 166-74. doi: 10.1037/0022-0167.41.2.166
- Emmison, M., & Danby, S. (2007). Troubles announcements and reasons for calling: Initial actions in opening sequences in calls to a national children's helpline. *Research on Language & Social Interaction*, 40(1), 63-87. doi: 10.1080/08351810701331273

- Eskjær, M., & Helles, R. (2015). *Kvantitativ indholdsanalyse* [Quantitative Content Analysis]. Frederiksberg, Denmark: Samfundslitteratur.
- Fielding, N., Lee, R. M., & Blank, G. (2017). *The SAGE handbook of online research methods*. London: SAGE Publications.
- Frehner, C. (2008). *Email, SMS, MMS, the linguistic creativity of asynchronous discourse in the new media age (Linguistic insights 58)*. Bern New York: Peter Lang.
- Fukkink, R. (2011). Peer counselling in an online chat service: A content analysis of social support. *Cyberpsychology, Behaviour and Social Networking*, 14(4), 247-251. doi: 10.1089/cyber.2010.0163
- Fukkink, R., Bruns, S., & Ligtoet, R. (2016). Voices of Children from Around the Globe; An International Analysis of Children's Issues at Child Helplines. *Children & Society*, 30(6), 510-519. doi: 10.1111/chso.12150
- Fukkink, R. & Hermanns, J. (2007): *Children's Experiences with the Kindertelefoon; Telephone Support Compared to Chat Support*. Amsterdam: SCO-Kohnstamm Instituut.
- Fukkink, R., & Hermanns, J. (2009a). Children's experiences with chat support and telephone support. *Journal of Child Psychology and Psychiatry*, 50(6), 759-766. doi: 10.1111/j.1469-7610.2008.02024.x
- Fukkink, R., & Hermanns, J. (2009b). Counseling children at a helpline: Chatting or calling? *Journal of Community Psychology*, 37(8), 939-948. doi: 10.1002/jcop.20340
- Gergen, K. (2003). Self and community in the new floating worlds. In: K. Nyíri. *Mobile democracy, essays on society, self and politics* (Communications in the 21st century) (pp. 103-114). Vienna: Passagen Verlag.
- Gibson, K., & Cartwright, C. (2014). Young people's experiences of mobile phone text counselling: Balancing connection and control. *Children and Youth Services Review*, 43, 96-104. doi: 10.1016/j.childyouth.2014.05.010
- Gilat, I., & Reshef, E. (2014). The perceived helpfulness of rendering emotional first aid via email. *British Journal of Guidance & Counselling*, 43(1), 1-11. doi: 10.1080/03069885.2014.909006
- Goodman, R. (n.d.). SDQ-S11-17 FOLLOW UP. Retrieved from: <http://www.sdqinfo.org/py/sdqinfo/b3.py?language=Danish>
- Goumi, A., Volckaert-Legrier, O., Bert-Erboul, A., & Bernicot, J. (2011). SMS length and function: A comparative study of 13- to 18-year-old girls and boys.(Report). *Revue Europeenne De Psychologie Appliquee*, 61(4), 175. doi: 10.1016/j.erap.2011.07.001
- Haas, L., Benedict, J., Kobos, J., & Deleon, P. H. (1996). Psychotherapy by Telephone: Risks and Benefits for Psychologists and Consumers. *Professional Psychology: Research and Practice*, 27(2), 154-160. doi: 10.1037/0735-7028.27.2.154
- Harris, J., Danby, S., Butler, C. W., & Emmison, M. (2012). Extending Client-Centered Support: Counselors' Proposals to Shift from E-Mail to Telephone Counseling. *Text & Talk*, 32(1), 21-37. doi: 10.1515/text-2012-0002
- Hawton, K., Rodham, K., & Evans, E.. (2006). *By their own young hand, deliberate self-harm and suicidal ideas in adolescents*. London: Jessica Kingsley.

- Haxell, A. (2015). On becoming textually active at Youthline, New Zealand. *British Journal of Guidance & Counselling*, 43(1), 1-12. doi: 10.1080/03069885.2014.922163
- Helles, R. (2009). *Personlige medier i hverdagslivet* [Personal Medias in Everyday Life]. Copenhagen, Denmark: Faculty of Humanities, University of Copenhagen.
- Helles, R. (2011). Hverdagslivets nye medier [New media in everyday life]. *Dansk Sociologi*, 21(3), 49-63-63. doi: 10.22439/dansoc.v21i3.3360
- Helles, R. (2013). Mobile communication and intermediality. *Mobile Media & Communication*, 1(1), 14-19. doi: 10.1177/2050157912459496
- Horowitz, L. M., Krasnoperova, E. N., Tatar, D. G., Hansen, M. B., Person, E. A., Galvin, K. L., & Nelson, K. L. (2001). The way to console may depend on the goal: Experimental studies of social support. *Journal of Experimental Social Psychology*, 37(1), 49-61. doi: 10.1006/jesp.2000.1435
- Horvath, A., Symonds, B., & Harmon, L.W. (1991). Relation Between Working Alliance and Outcome in Psychotherapy: A Meta-Analysis. *Journal of Counseling Psychology*, 38(2), 139-149. doi: 10.1037/0022-0167.38.2.139
- Hutchby, I., & Tanna, V. (2008). Aspects of sequential organization in text message exchange. *Discourse & Communication*, 2(2), 143-164. doi: 10.1177/1750481307088481
- International Telecommunication Union (ITU) (2017). *Time series of ICT data for the world, by geographic regions and by level of development* [Data set]. Retrieved from: <https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>
- Iversen, C. (2014). Predetermined participation: Social workers evaluating children's agency in domestic violence interventions. *Childhood*, 21(2), 274-289.
- Jakobson, R. (1960). Closing statement: Linguistics and poetics. In: T. A. Sebeok. *Style in language* (pp. 350-449). Cambridge, MA: MIT Press.
- Jones, P. & Welch, S. (2010). *Rethinking Children's Rights: - Attitudes in Contemporary Society*. New Childhood Series; London: Continuum International Publishing Group.
- Jones, S. M., & Burleson, B. R. (1997). The Impact of Situational Variables on Helpers' Perceptions of Comforting Messages: An Attributional Analysis. *Communication Research*, 24(5), 530-55. doi: 10.1177/009365097024005004
- Joyce, D. & Weibelzahl, S. (2011). Student counseling services: Using text messaging to lower barriers to help seeking. *Innovations in Education and Teaching International*. 48(3), 287-299. doi: 10.1080/14703297.2011.593705
- Kalafat, J., Gould, M., Munfakh, J., & Kleinman, M. (2007). An Evaluation of Crisis Hotline Outcomes Part 1: Nonsuicidal Crisis Callers. *Suicide and Life-Threatening Behavior*, 37(3), 322-337. doi: 10.1521/suli.2007.37.3.322
- Kasesniemi, E. L. & Rautiainen, P. (2002). Mobile culture of children and teenagers in Finland. In: J. Katz (Eds.). *Perpetual contact: Mobile communications, private talk, public performance* (pp. 170-192). Cambridge: Cambridge University Press.
- King, R., Bambling, M., Lloyd, C., Gomurra, R., Smith, S., Reid, W., & Wegner, K. (2006a). Online counselling: The motives and experiences of young people who choose the Internet instead of face to face or telephone counselling. *Counselling and Psychotherapy Research*, 6(3), 169-174. doi: 10.1080/14733140600848179

- King, R., Bambling, M., Reid, W., & Thomas, I. (2006b). Telephone and online counselling for young people: A naturalistic comparison of session outcome, session impact and therapeutic alliance. *Counselling and Psychotherapy Research*, 6(3), 175-181. doi: 10.1080/14733140600874084
- King, R., Nurcombe, B., Bickman, L., Hides, L., & Reid, W. (2003). Telephone counselling for adolescent suicide prevention: Changes in suicidality and mental state from beginning to end of a counselling session. *Suicide & Life-threatening Behavior*, 33(4), 400-11. doi: 10.1521/suli.33.4.400.25235
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., Scherlis, W., & Fowler, R. D. (1998). Internet Paradox. *American Psychologist*, 53(9), 1017-1031. doi: 10.1037/0003-066X.53.9.1017
- Krippendorff, K. (2012). *Content analysis: An introduction to its methodology*. Newbury Park, CA: Sage.
- Lapadat, J. (2002). Written Interaction: A Key Component in Online Learning. *Journal of Computer-Mediated Communication*, 7(4), 0. doi: 10.1111/j.1083-6101.2002.tb00158.x
- Lauersen, D. (2006): *Det mobile samtalerum – unges kommunikations- og samværsformer via mobiltelefon* [The Mobile Conversation Room – young people's way of communication and socialising] (Doctoral dissertation). Odense: Institut for Sprog og Kommunikation, Syddansk Universitet.
- Laursen, D. (2010). Counseling young cannabis users by text message. *Journal of Computer-Mediated Communication*. 15(4), 646-665. doi: 10.1111/j.1083-6101.2009.01510.x
- de Leeuw, E.D. (2011). *Improving Data Quality when Surveying Children and Adolescents: Cognitive and Social Development and its Role in Questionnaire Construction and Pretesting*. Utrecht, the Netherlands: Utrecht University. Retrieved from: http://www.aka.fi/globalassets/awanhat/documents/tiedostot/lapset/presentations-of-the-annual-seminar-10-12-may-2011/surveying-children-and-adolescents_de-leeuw.pdf
- Ling, R. (2010). Texting as a life phase medium. *Journal of Computer-Mediated Communication*, 15(2), 277-292. doi: 10.1111/j.1083-6101.2010.01520.x
- Lohr, H., Rosenvinge, J.H., Gammon, D., & Johnsen, J.K. (2002): Kan Internett hjelpe mennesker med alvorlige psykiske lidelser? [Can the Internet help people with serious mental illnesses?] *Tidsskrift for Norsk Psykologforening*, 39, 514-519.
- Lyddy, F., Farina, F., Hanney, J., Farrell, L., & Kelly O'Neill, N. (2014). An Analysis of Language in University Students' Text Messages. *Journal of Computer-Mediated Communication*, 19(3), 546-561. doi: 10.1111/jcc4.12045
- Mallen, M. J., Vogel, D. L., Rochlen, A. B., & Day, S. X. (2005). Online Counseling: Reviewing the Literature from a Counseling Psychology Framework. *Counseling Psychologist*, 33(6), 819-871. doi: 10.1177/0011000005278624
- Mascheroni, G. & Ólafsson, K. (2014): *Net Children Go Mobile: risks and opportunities*. Milano: Ed-ucatt.
- Mason, M., Benotsch, E.G., Way, T., Kim, H. & Snipes, D. (2014). Text messaging to increase readiness to change alcohol use in college students. *The Journal of Primary Prevention*, 35(1), 47-52. doi: 10.1007/s10935-013-0329-9
- McHugh, M. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, 22(3), 276-282.

- Mitchell, K. J., & Ybarra, M. L. (2007). Online behavior of youth who engage in self-harm provides clues for preventive intervention. *Preventive Medicine, 45*(5), 392-396.
- Mishara, B., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I., Bardon, C., Campbell, J. K., & Berman, A. (2007a). Comparing Models of Helper Behaviour to Actual Practice in Telephone Crisis Intervention: A Silent Monitoring Study of Calls to the U.S. 1-800-SUICIDE Network. *Suicide and Life-Threatening Behaviour, 37*(3), 291-307. doi: 10.1521/suli.2007.37.3.291
- Mishara, B., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I., Bardon, C., Campbell, J. K., & Berman, A. (2007b). Which Helper Behaviors and Intervention Styles are Related to Better Short-Term Outcomes in Telephone Crisis Intervention? Results from a Silent Monitoring Study of Calls to the U.S. 1-800-SUICIDE Network. *Suicide and Life-Threatening Behavior, 37*(3), 308-321. doi: 10.1521/suli.2007.37.3.308
- Mishara, B., & Daigle, M. (1997). Effects of Different Telephone Intervention Styles with Suicidal Callers at Two Suicide Prevention Centers: An Empirical Investigation. *American Journal of Community Psychology, 25*(6), 861-885. doi: 10.1023/A:1022269314076
- Mokkenstorm, J., Eikelenboom, M., Huisman, A., Wiebenga, J., Gilissen, R., Kerkhof, A., & Smit, J. (2017). Evaluation of the 113Online Suicide Prevention Crisis Chat Service: Outcomes, Helper Behaviors and Comparison to Telephone Hotlines. *Suicide and Life-Threatening Behavior, 47*(3), 282-296. doi: 10.1111/sltb.12286
- Neuendorf, K. A. (2002). *The Content Analysis Guidebook*. Thousand Oaks, Calif: Sage Publications.
- Nieuwboer, C. C., Fukkink, R. G., & Hermanns, J. M. A. (2014). Practitioner Response to Parental Need in Email Consultation: How Do They Match? A Content Analysis. *Child & Youth Care Forum, 43*(5), 553-567. doi: 10.1007/s10566-014-9253-2
- Nieuwboer, C. C., Fukkink, R. G., & Hermanns, J. M. A. (2015). Single Session Email Consultation for Parents: An Evaluation of Its Effect on Empowerment. *British Journal of Guidance & Counselling, 43*(1), 131-143. doi: 10.1080/03069885.2014.929636
- Nissen, A., & Winkel, A. (1998). *Telefonrådgivning, en anderledes samtale* [Telephone counselling – a different kind of conversation]. Kbh: Munksgaard.
- Nissen, M. (2009). Objectification and Prototype. *Qualitative Research in Psychology, 6*(1-2), 67-87. doi: 10.1080/14780880902900960
- Nissen, M. (2016). Brugerdrevne standarder og pædagogisk ledelse. Skræddersyede teknikker eller prototypiske fortællinger [User driven standards and pedagogical management. Tailored techniques or prototypical stories]. *Nordiske Udkast, 44*(1), 4-26.
- Patrick, K., Raab, F., Adams, M.A., Dillon, L., Zabinski, M., Rock, C.L., Griswold, W.G., Norman, G.J. (2009). A text message-based intervention for weight loss: Randomized controlled trial. *Journal of Medical Internet Research, 11*(1), 12-19. doi: 10.2196/jmir.1100
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science, 8*, 162-166. doi:10.1111/j.1467-9280.1997.tb00403.x
- Powell, P., & Roberts, J. (2017). Situational determinants of cognitive, affective, and compassionate empathy in naturalistic digital interactions. *Computers in Human Behavior, 68*, 137-148. doi: 10.1016/j.chb.2016.11.024

- Pudlinski, C. (2005). The mitigation of advice: Interactional dilemmas of peers on a telephone support service. In: Baker, C., Emmison, M., & Firth, A. (Eds). *Calling for help, language and social interaction in telephone helplines* (Pragmatics & beyond New series 143). Amsterdam: John Benjamins Pub.
- Rawson, S., & Maidment, J. (2011). Email Counselling with Young People in Australia: A research report. *Women in Welfare Education*, (10), 14-28.
- Rettie, R. (2009). Mobile Phone Communication: Extending Goffman to Mediated Interaction. *Sociology*, 43(3), 421-438. doi:10.1177/0038038509103197
- Richards, D., & Vigano, N. (2013). Online counseling: A narrative and critical review of the literature. *Journal of Clinical Psychology*, 69(9), 994–1011. doi: 10.1002/jclp.21974
- Riemer, M., & Kearns, M. A. (2010). Description and psychometric evaluation of the Youth Counseling Impact Scale. *Psychological Assessment*, 22, 259–268. doi: 10.1037/a0018507
- Rogers, C. (1951). *Client-centred Therapy: Its Current Practice, Implications and Theory*. London, UK: Constable.
- Rosenfield, M. (1997). *Counselling by telephone (Professional skills for counsellors)*. London: SAGE.
- Schultz Hansen, S. (2011). *Årgang 2012, socialliv og samvær i en tid med nye medier* [Year 2012, social life and relationships in a time of new media]. Kbh: Information.
- Seo, M., Kim, J., & Yang, H. (2016). Frequent Interaction and Fast Feedback Predict Perceived Social Support: Using Crawled and Self-Reported Data of Facebook Users. *Journal of Computer-Mediated Communication*, 21(4), 282-297. doi: 10.1111/jcc4.12160
- Siewert, K., Antoniow, K., Kubiak, T., & Weber, H. (2011). The more the better? The relationship between mismatches in social support and subjective well-being in daily life. *Journal of Health Psychology*, 16(4), 621-631. doi: 10.1177/1359105310385366
- Sindahl, T.N. (2008a). Anonym online chatrådgivning af børn og unge [Anonymous online counselling of children and youth]. *Pædagogisk Psykologisk Tidsskrift*, (5-6), 440-447.
- Sindahl, T.N. (2008b). Anonym chatrådgivning af børn og unge [Anonymous chat counselling of children and youth]. *Nordisk Sosialt Arbeid*, (03-04), 194-206.
- Sindahl, T.N. (2009). *Hvad synes brugerne om BørneChatten? – En analyse af brugerevalueringer og brugerfeedback på BørneChatten* [How does the service user like BørneChatten – an analysis of user evaluations and user feedback on BørneChatten]. Internal Report: Unpublished.
- Sindahl, T.N. (2013): *Chat Counselling for Children and Youth – a Handbook*. Child Helpline International. Retrieved from: http://www.childhelplineinternational.org/media/75013/chat_counselling_handbook.pdf.
- Sindahl, T.N. (2015, November). *Case study: Measuring Impact at the Danish Child Helpline*. Presentation at the Sixth Regional Consultation and Second Policy Dialogue on Child Helplines in Europe, Strasbourg, France.
- Sindahl, T.N., Côte, L.P., Dargis, L., Mishara, B.L., & Jensen, T.B. (2018). Texting for Help: - Processes and Impact of Text Counseling with Children and Youth with Suicidal Ideation. *Suicide & Life-threatening Behavior*. doi: 10.1111/sltb.12531
- Sindahl, T.N., Fukkink, R.G., & Helles, R. (2018). *SMS Counselling at a Child Helpline: Counsellor Strategies, Children's Stressors and Well-being*. Manuscript submitted for publication.

- Sindahl, T.N. & van Dolen, W. (2018). *Texting at a Child Helpline: How Structural Characteristics of Text-Message Counseling Influence Counseling Impact*. Manuscript submitted for publication.
- Slatcher, R. B., & Pennebaker, J. W. (2006). How do I love thee? Let me count the words: The social effects of expressive writing. *Psychological Science*, 17(8), 660–664. doi:10.1111/j.1468-9280.2006.01762.x
- Socialstyrelsen (2013). *Validerede instrumenter til evalueringer på det sociale område* [Validated instruments for evaluation of social interventions]. Odense: Socialstyrelsen.
- Soffer, O. (2010). “Silent Orality”: Toward a Conceptualization of the Digital Oral Features in CMC and SMS Texts. *Communication Theory*, 20(4), 387-404. doi: 10.1111/j.1468-2885.2010.01368.x
- Sommer, D. (2003). Børnesyn i udviklingspsykologien – Er et børneperspektiv muligt? [Child view in developmental psychology – is a children’s perspective possible?] *Pædagogisk Forskning i Sverige*, 8(1-2), 85-100.
- Sommer, D. (2010). *Børn i senmoderniteten, barndomspsykologiske perspektiver* [Children in late modernity, child psychological perspectives]. København: Hans Reitzel
- Stald, G. (2017): *EU Kids Online – Denmark*. Retrieved from: <http://www.lse.ac.uk/media@lse/research/EUKidsOnline/ParticipatingCountries/denmark.aspx>
- Suler, J. (2004). The Online Disinhibition Effect. *CyberPsychology & Behavior*, 7(3), 321-326. doi: 10.1089/1094931041291295
- Telia Company (2017): *Forældre venter med at give børn deres første mobiltelefon* [Parents wait to give their children their first mobile phone; Press release]. Retrieved from: <https://www.telia.dk/privat/om-telia/nyheder/#/pressreleases/foraeldre-venter-med-at-give-boern-deres-foerste-mobiltelefon-2298725>
- Thurlow, C. & Brown, A. (2003). Generation txt? The sociolinguistics of young people’s text-messaging. *Discourse Analysis Online*. Retrieved from: <http://extra.shu.ac.uk/daol/articles/v1/n1/a3/thurlow2002003-01.html>.
- Tidwell, L. C., & Walther, J. B. (2002). Computer-Mediated Communication Effects on Disclosure, Impressions, and Interpersonal Evaluations: Getting To Know One Another a Bit at a Time. *Human Communication Research*, 28(3), 317-48. doi: 10.1111/j.1468-2958.2002.tb00811.x
- Trillingsgaard, A., & Damm, D. (2012). *Spørgeskemaer i klinisk praksis med børn og unge* [Questionnaires for clinical practise with children and youth]. Kbh.: Dansk Psykologisk Forlag.
- The United Nations. (1989). *Convention on the Rights of the Child*. Treaty Series, 1577, 3.
- Valaitis, R., & Flicker, S. (2005). Computers and the Internet: Tools for Youth Empowerment. *Journal of Medical Internet Research*, 7(5), e51. doi: 10.2196/jmir.7.5.e51
- van Dolen, W., & Weinberg, C. (2017). Child helplines: How social support and controllability influence service quality and well-being. *Journal of Services Marketing*, 31(4/5), 385-396. doi: 10.1108/JSM-07-2016-0254
- Venturini, T. & Latour, B. (2010). *The social fabric: digital traces and quali-quantitative methods*. Retrieved from: https://medialab.sciencespo.fr/publications/Venturini_Latour-The_Social_Fabric.pdf

- Walsh, E., & Brinker, J. (2016). Short and Sweet? Length and Informative Content of Open-Ended Responses Using SMS as a Research Mode. *Journal of Computer-Mediated Communication*, 21(1), 87-100. doi: 10.1111/jcc4.12146
- Walther, J. B., & Burgoon, J. K. (1992). Relational communication in computer-mediated interaction. *Human Communication Research*, 19, 50-88. doi: 10.1111/j.1468-2958.1992.tb00295.x
- Walther, J. B., & Parks, M. R. (2002). Cues filtered out, cues filtered in: Computer-mediated communication and relationships. In: M. L. Knapp & J.A. Daly (Eds.). *Handbook of interpersonal communication* (pp. 529-563). Thousand Oaks, CA: Sage.
- Warming, H. (2011). *Børneperspektiver, børn som ligeværdige medspillere i socialt og pædagogisk arbejde* [Children's perspectives - children as equals in social and pedagogical work]. Kbh.: Akademisk Forlag.
- Williams, R., Bambling, M., King, R., & Abbott, Q. (2009). In-session processes in online counselling with young people: An exploratory approach. *Counselling and Psychotherapy Research*, 9(2), 93-100. doi: 10.1080/14733140802490606
- Willow, C. (2010). *Children's right to be heard and effective child protection - A guide for Governments and children rights advocates on involving children and young people in ending all forms of violence*. Sweden: Save the Children.
- Zuckerman, B., Sharfstein, J., & Wise, P. (2000). Child health initiatives and journal narrow-mindedness. *Lancet*, 356(9242), 1626. doi: 10.1016/S0140-6736(00)03154-8
- Zöllner, L., Rask, L., Konieczna, A., & Centre for Suicide Research (2013). *Selvskadende adfærd blandt unge mellem 13-19 år* [Self-harming behaviour among young people age 13-19]. Odense: Centre for Suicide Research.

Paper I



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SMS counselling at a child helpline: counsellor strategies, children's stressors and well-being

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ABSTRACT

Providing helpline services to children via texting (i.e. Short Message Service or SMS) is being used increasingly. However, little is known about the quality of SMS counselling and its effect on the service users. Through a quantitative content analysis of 448 SMS sessions at the Danish child helpline, we studied counsellor behaviour and session impact. We found higher levels of children's well-being and empowerment after contacting the service. Multiple regression models showed that a positive impact of counselling was related to higher density of child-centred counsellor behaviour and moderate levels of problem-centred counsellor behaviour. These findings were consistent across most stressors with positive effects in the small-to-medium range. SMS counselling shows potential as a tool for counselling children and youth.

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Introduction

Child helplines worldwide have been using technology to reach children in need since the 1960s (Child Helpline International, 2010), providing children with a way to be heard (United Nations, 1989) and to be empowered and protected. The need to develop age-appropriate, confidential and anonymous ways of providing help have made child helplines pioneers in using new technologies as platforms for social support. SMS (Short Message Service) counselling as a dialogue tool within the framework of child helplines is a recent example of this use of technology. In 2016, child helplines provided help via SMS more than half a million times, making this the second most common way for children to receive help (Child Helpline International, 2017). The Danish child helpline, *BørneTelefonen*, introduced SMS in 2012 in an effort to expand their services, and they now conduct more than 10,000 counselling sessions via SMS per year (Børns Vilkår, 2018). In this study, we report the first content analysis of SMS sessions at the Danish child helpline and evaluate the effects of SMS counselling on children's well-being.

SMS counselling offers several features that distinguish this service from other technologically mediated counselling platforms. Similar to telephone counselling (Rosenfield, 1997), SMS counselling can be accessible, anonymous and efficient (Haxell, 2015). As with all written dialogue, however, SMS counselling offers more time for reflection for both the child and the counsellor than oral dialogue (Fukkink & Hermanns, 2009a; Haxell, 2015; Nieuwboer, Fukkink, & Hermanns, 2014; Sindahl, 2013; Suler, 2000). Like email, SMS is an asynchronous communication technology (Jensen & Helles, 2011). Even when used in a near-synchronous mode, social expectations and normal use allows

for intervals in turn-taking that are substantially longer than in synchronous communication (Helles, 2009; Jensen & Helles, 2011; Suler, 2000).

Previous studies have shown positive effects from telephone counselling and chat counselling at child helplines (Fukkink & Hermanns, 2009a; Fukkink & Hermanns, 2009b; King, Bambling, Reid, & Thomas, 2006; King, Nurcombe, Bickman, Hides, & Reid, 2003). While a few articles concern provisions of counselling through SMS technology in the context of child helplines (Gibson & Cartwright, 2014; Haxell, 2015), to the best of our knowledge, no studies have evaluated the impact of different counselling approaches in this context.

Stressor dimensions

Child helplines, as general community services, offer help to children confronted with a variety of stressful events. On a global scale, children and youth contact child helplines to discuss issues related to psychosocial mental health, abuse and violence, family relationships, peer relationships, child-related services and numerous other topics (Child Helpline International, 2017; Fukkink, Bruns, & Ligtoet, 2016).

Cutrona and colleagues distinguish between four basic dimensions of stressful life events: controllability, desirability, life domain affected by the event and duration of consequences (Cutrona, 1990; Cutrona & Russell, 1990; Cutrona & Suhr, 1992; Rains, Peterson, & Wright, 2015). An event is considered *uncontrollable*, when an individual is not able to prevent the event or reduce its consequences, while *controllable events* are events where the individual can influence the stressor and/or its effects (Cutrona & Russell, 1990). *Undesirable* events entail a threat or loss (e.g. divorce or bereavement), whereas *desirable* events involve the potential for gain or growth (e.g. marriage or smoking cessation) (Cutrona & Russell, 1990). In the context of child helplines, most children contact the service regarding undesirable events (e.g. parents arguing, physical abuse and self-harm). However, many children also contact the helpline to discuss issues that could be considered desirable, such as love and friendship. The third dimension, *life domain*, places stressful events in the area of one's life affected by the event. Following the meta-analysis of Rains et al. (2015), we focus on the domain of personal relationships, as this constitutes the relevant domain for this study (Cutrona & Russell, 1990). The *duration of the consequences* of stressful events can be either longer or transient (Cutrona & Russell, 1990).

Recently, Rains and colleagues added the dimension of *stigma*, defined as the risk of "rejection by members of one's existing social network and of making acquiring social support difficult" (Rains et al., 2015, p. 410). Given the young target group of child helplines (perhaps being particularly vulnerable to the judgement of others) and the specific characteristics of anonymous, mediated, text-based counselling, we believe that the concept of stigma is of particular relevance for this study.

Social support in counselling

The counselling literature suggests two basic strategies for social support: the counsellor may help an individual to act to change the problem(s), and/or the counsellor may aim to assist in decreasing the negative emotions generated by these problems (Cutrona, 1990; Cutrona & Russell, 1990; Horvath, 2001; Lazarus & Folkman, 1984; Siewert, Antoniow, Kubiak, & Weber, 2011). Several studies investigating helper behaviour have developed a distinction between (1) behaviour focusing on problem solving and removal of stressors (*problem-centred counsellor behaviour*, PCCB) and (2) helper behaviour focusing on building alliance and giving emotional support to the help-seeker (*client or child-centred counsellor behaviour*, CCCB) (Burlison, & Goldsmith, 1998; Cutrona, 1990; Cutrona & Suhr, 1992; Horowitz et al., 2001; Jones & Burlison, 1997; Mishara et al., 2007) – also in the context of child helplines (Fukkink, 2011; van Dolen & Weinberg, 2017; Williams, Bambling, King, & Abbott, 2009).

The concept of support matching assumes that people dealing with different types of problems (stressors) may benefit from different types of support (Cutrona, 1990; Cutrona & Russell, 1990; Green-Hamann & Sherblom, 2014; Horowitz et al., 2001; Loane & D'Alessandro, 2013; Rains et al., 2015; Rains, Brunner, Akers, Pavlich, & Goktas, 2017; van Dolen & Weinberg, 2017). The theory of Lazarus and Folkman (1984) predicts that an emotional-focused coping approach (also referred to here under CCCB) is more effective in cases of uncontrollable events, whereas individuals impacted by controllable events might benefit more from a problem-centred approach (also referred to here as PCCB), providing instrumental support in the form of facts and advice (Cutrona, 1990; van Dolen & Weinberg, 2017). This *optimal matching hypothesis* has been investigated in a number of studies with some empirical support (Cutrona, 1990; Cutrona & Russell, 1990; Horowitz et al., 2001; Rains et al., 2015; Rains et al., 2017). The dimension of controllability is assumed to be the most influential dimension and is the most studied in the support-matching literature (Cutrona, 1990; Cutrona & Suhr, 1992; Green-Hamann & Sherblom, 2014; Horvath, 2001; Loane & D'Alessandro, 2013; Rains et al., 2017; van Dolen & Weinberg, 2017).

Research questions

This exploratory study evaluates the content and impact of SMS counselling for children and youth. We focused on two central questions: (1) how is counsellor behaviour related to impact in the context of anonymous SMS counselling for children and youth? And (2) how do dimensions of stressors influence the relationship between counsellor behaviour and impact in SMS counselling?

From an optimal matching perspective, we take into account that different issues and, relatedly, different stressor dimensions, may need different types of social support. We explore how counsellor behaviour is related to impact of the sessions on children's well-being, as indicated by the children receiving the service.

Method

Sample

Data were collected at the Danish child helpline from 14 of June 2015 to 14 of June 2016. During this period, children using the SMS service were presented with an automated text with a link to an online questionnaire at the end of their sessions. Only sessions ended by the counsellor and labelled as "counselling sessions" were included, leaving out pranks, factual information seeking, sessions with adults (age >23 yrs.) and sessions where the client stopped writing prematurely. In total, 6060 sessions met these criteria. Only sessions where the child completed an end-session questionnaire (EQ) and a follow-up questionnaire (FQ) two weeks after receiving counselling were included. EQ was completed after 1875 sessions (response rate of 30.9%). FQ was completed two weeks after 652 sessions (response rate of 49.9% of sent questionnaires and 10.8% of all included sessions). Coding of counsellor behaviour was performed on 448 randomly selected sessions from the sessions where the child had completed both questionnaires.

Sample characteristics were compared with the characteristics of all the sessions meeting the inclusion criteria. The participants in our sample were significantly younger, $\chi^2(3) = 10.33, p = .016$. Sessions concerning family relationships were overrepresented in the sample, and sessions related to body, health, sex and sexuality were underrepresented, $\chi^2(8) = 20.69, p = .008$. The content analysis sample did not significantly differ from all sessions on children's gender or how experienced they were using the service.

The sample represents at least 147 of the 450 trained volunteers working at the helpline. All counsellors have a professional background in social or educational work (teacher, psychologists, paediatricians, pedagogues, etc.).

Procedure

The study is based on anonymised data that are routinely collected at the child helpline in agreement with the national Danish Data Protection Agency (ref. 2012-42-0291), which also includes permission to share these data for research purposes, as long as they cannot be traced back to any specific child. Conducting this study was in line with the policy of the helpline, providing children with a voice and listening to their opinions on matter what influences them.

Children that contact the child helpline are anonymous. Throughout this study, they retained this status, but records were provided with a unique ID that connected the text messages with the questionnaires. Due to the anonymity of the children and the type of service provided, it is not possible to control the data for recurring clients. The analytical unit in this study refers to individual sessions, not to individual children.

The SMS system at the Danish child helpline was created to ensure that the helpline, along with researchers or other third parties, do not have access to the child's telephone number. When the child texts the helpline, the child receives an automated message informing them that the dialogue will be saved for the purposes of improving the service. During the data-collection period, this text also provided a link with additional information about the research project (a child-friendly version of the research protocol).

When the counsellor ended each session, an automated text with a link to the EQ was sent to the child. Children who gave active consent in the EQ received an automated message two weeks later with a link to the FQ. The children were informed that this automated text message would be sent on a weekday at 7.30 pm and that they could leave the study at any time by writing the text "Nej Tak" ("No thanks") in which case they would not receive any more texts. The questionnaires were distributed through the helpline's text system, thus protecting the children's anonymity throughout the entire study.

All counsellors received information about the study and that the sessions would be documented, evaluated and subjected to analysis.

Content analysis

Following a standard procedure of the helpline, counsellors coded the reason for contact for each session on eight different problem clusters divided into 39 different subcategories. Four stressor dimensions were included in the study: *controllability*, *desirability*, *life domain affected by the event* and *stigma*. The dimension of *duration of consequences* was left out in the current study, since its interpretation was less straightforward in the context of children and youth. Two of the authors categorised each of the 39 subcategories on the four different stressor dimensions based on a typical contact with the helpline concerning the different reasons for contact (see Appendix). Reasons for contact coded as "Other" by the counsellor ($n = 38$) were not included in the part of the analysis that involved stressor dimensions. Hence, this part of the analysis included 410 sessions.

An extensive coding manual (Eskjær & Helles, 2015; Neuendorf, 2002) was developed, borrowing from previous content analyses of counsellor behaviour (Fukkink & Hermanns, 2009a; Nieuwboer et al., 2014; Williams et al., 2009), social support (Cutrona & Suhr, 1992; Fukkink, 2011) and helper responses (Mishara et al., 2007), adapted to the SMS context of the current study. Child-centred (CCCB) and problem-centred (PCCB) counsellor behaviour were the two main categories, each divided into six subcategories (see Table 1 for an overview).

Three master's degree students and two counselling staff members, who were blind to the impact scores, were trained by the first author to code the session transcripts. A random selection of 15% of the sessions was also coded by the first author. Inter-coder reliability was calculated on a message-by-message basis (see Table 1). In case of discrepancies, the two coders discussed the final coding until consensus was reached.

Six variables were created based on the CCCB and PCCB categories: (1) the proportion of CCCB and (2) the proportion of PCCB representing the *density* of each behaviour type in a session (using

Table 1. Categories of counsellor behaviour: frequency and inter-coder reliability.

Variable	Frequency in sessions (%) ^a	Frequency in messages (%) ^a	% Agreement ^b	Cohen's kappa ^b
Problem-centred counselling behaviour (PCCB)				
Exploring the problem	92.6	34.8	88.0	.740
Directive counselling	79.5	15.7	89.8	.641
Collaborative problem solving	90.2	30.9	86.3	.681
Providing factual information	58.7	10.8	93.7	.693
Referral to other professionals	45.1	9.6	94.4	.730
Tangible help	1.8	0.4	99.8	.666
Child-centred counselling behaviour (CCCB)				
Empathetic statements or exploring emotions	79.7	19.5	90.0	.683
Complimenting	53.1	8.4	97.2	.838
Normalising	39.7	5.0	98.2	.804
Showing presence	92.6	8.6	98.0	.887
Invite to reconnect	47.1	4.4	99.2	.915
Paraphrasing	94.4	35.9	81.4	.595
	<i>M</i>	<i>SD</i>		
Variation of PCCB (0-6)	3.68	1.09		
Variation of CCCB (0-6)	4.07	1.23		
	% of sessions	<i>N</i>		
PCCB dominant sessions	44.2%	198		
CCCB dominant sessions	8.3%	37		
PCCB/CCCB balanced sessions	47.5%	213		

^aCalculated for 6,019 messages from 448 sessions.

^bCalculated for 871 messages from 73 sessions.

proportion to give each session the same weight despite differences in session length/number of messages); the *variation* of (3) CCCB or (4) PCCB (a score between 0 and 6, indicating the prevalence of different types of counselling behaviour present in a session within that category; 0 = none of the behaviour types within this category were present; 6 = all of the behaviour types within this category were present); and the *predominance* of either (5) CCCB or (6) PCCB. If a session included 50% or more CCCB than PCCB, it was regarded as *predominantly child-centred* and vice versa. The remaining sessions, without a clear dominant representation of either CCCB or PCCB, were labelled as *balanced*.

End-session and follow-up questionnaires

Two brief online surveys were specifically developed to evaluate performance on the main goals of the service: giving children a voice, increasing well-being and empowering children. It was decided to use the children's own subjective assessments as a measure of impact. Studies have shown that *perceived* support is a stronger predictor of changes in mental health than *received* support (Mokkenstorm et al., 2017) and that clients' ratings are stronger predictors of outcome than those of the therapists or external raters (Horvath, Symonds, & Harmon, 1991).

The EQ, administered immediately after the session (Time 1), consisted of seven impact items rated on a 5-point smiley scale with statements at each end of the scale (e.g. from: "It didn't help at all" (=1) to "It helped a lot" (=5)). In accordance with recommendations for surveying children, a smiley scale was chosen, with a frowning smiley at "1", a neutral smiley at "3" and a smiling smiley at "5" (de Leeuw, 2011). The seven items were grouped into three constructs: being heard (e.g. "In the session with [Helpline] ... we didn't talk/we talked about what I wanted"), well-being (e.g. "After talking to [Helpline] I feel ... much worse/better") and empowerment (e.g. "After talking to [Helpline] I have ... no/an idea about what to do"). Cronbach's alpha for *being heard* was .80, for *well-being* .83 and for *empowerment* .79, indicating adequate internal consistency for all scales.

The FQ, administered two weeks later (Time 2), consisted of six impact items measuring well-being (e.g. "Since talking to [Helpline] I feel ... much worse/better") and empowerment (e.g. "Have you tried any of the things you discussed with [Helpline]? None/all of it"). Four of the items were direct replicates of the EQ. The construct of "being heard" was only explored in the first questionnaire, where it was assumed the child had this experience clear in mind. In the EQ, the child was asked if he or she had an idea about what to do, while in the FQ, the child was asked if he or she had done any of the things discussed with the counsellor. Lastly, the child was asked if he or she saw the helpline as a future resource, but only in the FQ. Cronbach's alpha for well-being was .83 and for empowerment .74, indicating adequate internal consistency for the scales.

Analysis

The scores from the content analysis (i.e. counsellor behaviours and stressors) were related to the impact scores at Time 1 and Time 2 in multiple regression models. The statistical power for the regression models was good ($\beta = .99$) for small-to-medium effects ($f^2 = .085$) in the full sample with up to seven predictors from our main analysis (see Table 2).

Table 2. Regression models of counsellor behaviour predicting impact ($N = 448$).

Predictor	<i>B</i>	<i>T</i>	<i>F</i>	<i>R</i> ²
Time 1: Being Heard			4.64***	.07
Age	-.06	-2.74**		
Density of PCCB	-.61	-1.48		
Density of CCCB	1.52	3.71***		
Variation of PCCB	-.08	-1.67		
Variation of CCCB	.01	.30		
PCCB dominant	.31	1.92		
CCCB dominant	-.52	-2.40*		
Time 1: Well-being			8.15***	.12
Age	-.11	-5.18***		
Density of PCCB	-.32	-.80		
Density of CCCB	1.40	3.47**		
Variation of PCCB	-.09	-1.96		
Variation of CCCB	-.10	-2.24*		
PCCB dominant	.21	1.32		
CCCB dominant	-.55	-2.52*		
Time 1: Empowerment			8.60***	.12
Age	-.09	-4.70***		
Density of PCCB	-.42	-1.07		
Density of CCCB	1.20	3.01**		
Variation of PCCB	-.17	-3.55***		
Variation of CCCB	-.04	-.88		
PCCB dominant	.28	1.78		
CCCB dominant	-.25	-1.15		
Time 2: Well-being			4.65***	.07
Age	-.08	-3.11**		
Density of PCCB	.00	.01		
Density of CCCB	1.03	2.01*		
Variation of PCCB	-.18	-2.93**		
Variation of CCCB	-.06	-1.06		
PCCB dominant	.13	.66		
CCCB dominant	-.31	-1.13		
Time 2: Empowerment			8.14***	.12
Age	-.07	-3.63***		
Density of PCCB	-.06	-.16		
Density of CCCB	.73	1.85		
Variation of PCCB	-.17	-3.73***		
Variation of CCCB	-.12	-2.70*		
PCCB dominant	.08	.49		
CCCB dominant	-.13	-.61		

Note: *** $p < .001$, ** $p < .01$, * $p < .05$

Results

In total, 411 of the sessions involved girls (91.7%), 36 involved boys (8.0%) and in one session, gender was unknown. The participating children were 12 years old or younger in 39.1% of the sessions and 4.0% were with youth of 18 years and above. Approximately half of them were using the SMS service for the first time (47.3%), 30% had used the service a few times, and the remaining children had used the service more than three times.

The sessions represented a variety of reasons to contact the child helpline. Most common were peer relationships (31.0%) and psychosocial mental health issues (23.2%), followed by family relationships (13.8%), body and health (9.8%) and abuse and violence (7.6%). (See Appendix for details about the issues raised by the children.)

Children were on average positive about the service and indicated that they were “being heard” ($M = 4.34$ on a scale range of 1–5, $SD = 0.97$), experienced improved well-being (T1: $M = 3.91$, $SD = 0.98$; T2: $M = 3.53$, $SD = 1.21$) and a feeling of empowerment (T1: $M = 3.69$, $SD = 0.97$; T2: $M = 3.66$, $SD = 0.94$) after their session.

Counsellor behaviours

As indicated in Table 1, a typical session consisted of both child-centred (CCCB) and problem-centred (PCCB) counsellor behaviour. In total, 44.2% of the sessions were labelled as *PCCB-dominant*, 8.3% as *CCCB-dominant* and 47.5% as *balanced*. *Paraphrasing*, as an element of CCCB, was frequently observed (94.4% of sessions). In addition, *exploration of the problem* and *collaborative problem solving* (92.6% and 90.2% of sessions), as elements of PCCB, were a frequent counsellor behaviour. In general, PCCB was more common than CCCB. About two-third of the 6,019 messages (69.6%) from counsellors included at least one type of PCCB, compared to 54.0% of the sessions including at least one type of CCCB.

Counsellor behaviour related to counselling impact

The relationships between counsellor behaviours and the impact variables at the child level were analysed in a multiple regression model, controlling for children’s age (see Table 2). Very few participants were boys, so gender was not included in the models. Age was negatively related to impact, with lower scores for older children at both Time 1 and 2; age was included in all models. Interpreting the results for Time 2 is not straightforward for a small part of our sample, because confounding factors may have influenced the results. In fact, at follow-up, 11.3% of the young clients ($n = 49$) reported that they contacted the helpline again seeking help concerning the same issues during the period between Time 1 and 2.

Density of CCCB was consistently positively related to session impact for all outcome measures. *CCCB-dominant counsellor behaviour*, however, was negatively related to children’s experience of being heard and well-being at Time 1. No significant relation was found between the *density of PCCB* and impact.

Generally, variation of counselling strategies did not contribute to session impact. *Variation of CCCB* showed a negative correlation with children’s well-being at Time 1 and empowerment at Time 2. Also, *variation of PCCB* was negatively correlated with children’s empowerment at Time 1 and with well-being and empowerment at Time 2.

This pattern for the different measures at T1 and T2 show that a balanced approach, with a non-dominant child-centred focus (CCCB) in combination with a focused problem-centred strategy (PCCB), is related to the most positive outcomes of the SMS counselling sessions. Or, put differently, sessions with relatively high levels of CCCB and a clear focus in PCCB proved to be related to the most favourable outcomes at the child level. Conversely, SMS sessions with a dominant focus on either the child or the problem were associated with less impact, as experienced by the children.

Stressors, counsellor behaviour, and session impact

We subsequently analysed subsamples to explore the relationship between counsellor behaviour and impact across different types of stressors. Following the optimal matching hypothesis, we focused our final analysis on the density of CCCB and PCCB in the SMS counselling sessions. Well-being at the end of the session was the impact measure.

Table 3 summarises the results for the different stressors. Similar to the results from our previous analysis (see Table 2), we found *density of CCCB* to be the most robust predictor for immediate changes in well-being across most stressor dimensions, controlling for age. In support of the matching hypothesis, *density of PCCB* was negatively related to impact if the session concerned *uncontrollable* stressors; this variable was positively related to children's well-being with controllable stressors, as expected, although this relationship was not statistically significant.

Discussion

An increasing number of children and youth contact child helplines via SMS to seek support for a variety of issues (Child Helpline International, 2010; Child Helpline International, 2017). The purpose of the current study was to explore counsellor behaviour in the context of SMS counselling and relating this to impact at the child level and exploring different dimensions of stressors.

Children's well-being and feelings of empowerment after the sessions were on average positive, both immediately after the session and two weeks later, acknowledging variations. Our content analysis of SMS sessions showed that the helpline staff applied a variety of counselling strategies.

Table 3. Regression models of counsellor behavior predicting well-being (EQ).

Variable	Predictor	B	t	F	R ²
Desirable (n = 131)			5.01**	.11	
	Age	-.14	-3.27**		
	Proportion of problem centred behaviour	.60	1.32		
Undesirable (n = 279)	Proportion of child centred behaviour	.71	2.01*	.09	
	Age	-.12	-4.42***		
	Proportion of problem centred behaviour	-.32	-.83		
Controllable (n = 304)	Proportion of child centred behaviour	.64	2.33*	.12	
	Age	-.14	-5.71***		
	Proportion of problem centred behaviour	.50	1.43		
Uncontrollable (n = 106)	Proportion of child centred behaviour	.66	2.62**	.08	
	Age	-.07	-1.56		
	Proportion of problem centred behaviour	-1.30	-2.33*		
Effects personal relationships (n = 332)	Proportion of child centred behaviour	.51	1.21	.11	
	Age	-.13	-5.40***		
	Proportion of problem centred behaviour	.09	.28		
Does not effects personal relationships (n = 78)	Proportion of child centred behaviour	.81	3.34**	.05	
	Age	-.11	-1.76		
	Proportion of problem centred behaviour	-.48	-.66		
Stigma (n = 151)	Proportion of child centred behaviour	-.08	-.15	.13	
	Age	-.15	-4.08***		
	Proportion of problem centred behaviour	-.44	-.73		
No stigma (n = 259)	Proportion of child centred behaviour	.83	1.98*	.04	
	Age	-.07	-2.57*		
	Proportion of problem centred behaviour	.18	.55		
	Proportion of child centred behaviour	.57	2.29*		

Note: *** $p < .001$, ** $p < .01$, * $p < .05$

Problem-Centred Counsellor Behaviour (PCCB) was predominant in the sessions, whereas Child-Centred Counsellor Behaviour (CCCB) occurred less frequently. A recent meta-analysis of Rains et al. (2015) found no significant differences in the application of informational support (PCCB) and emotional support (CCCB) in online counselling. In contrast, our findings indicate a relatively high prevalence of PCCB. Perhaps the asynchronous, broken-up character of SMS dialogue stimulates counsellors to seek a more cognitive and factual counselling strategy biased towards informational support and problem solving.

Counsellor behaviour related to counselling impact

We found that a higher density of CCCB was related to positive impact at the child level, although in a balanced combination with PCCB. It might not be sufficient, but certainly necessary, that the counsellor continuously express empathy, warmth and positive regard (Rogers, 2007) when texting the children – perhaps especially within the framework of SMS technology, where a number of phatic and relations cues in the communication (Jakobson, 1960) are absent by default and thus need to be deliberately inserted into the discourse. In this regard, the current study underlines the importance of person-centeredness when helping others in new contexts of SMS counselling – as previous studies have documented using other counselling technologies (Cutrona & Suhr, 1992; Cutrona, Cohen, & Igram, 1990; Jones & Bureson, 1997; Mokkenstorm et al., 2017; Siewert et al., 2011). These findings emphasise that the classic teachings of Carl Rogers are also highly relevant for counselling in the new context of SMS (Cook, Biyanova, & Coyne, 2009).

Stressor dimensions, counsellor behaviour and impact

In accordance with the theory of optimal matching, we found a negative relationship between a higher density of problem-centred counsellor behaviour (PCCB) and child well-being, when children addressed stressors outside their control. We also found a positive, but not significant, relationship when stressors were within the child's control. Hence, our findings seem to provide partial support for the matching hypothesis. Other studies have also found only partial support for the optimal matching hypothesis in regard to the matching of PCCB (Cutrona et al., 1990; Cutrona & Suhr, 1992; Jones & Bureson, 1997; Siewert et al., 2011; van Dolen & Weinberg, 2017), and our study fits in with the general outcomes in this line of research. It still might be that PCCB is an essential ingredient in counselling sessions concerning stressors within control of the client, but there may not be a linear relationship between PCCB and the well-being of the client. Instead, our findings stress the importance of a dual approach with a balance of problem-centred and child-centred counsellor behaviour in SMS sessions. The fact is that dominant approaches were not associated with children's positive evaluations of session impact.

Finally, variation of types of support within problem-centred or person-centred behaviour did not seem to contribute to the impact of the SMS sessions. In fact, sessions with relatively homogeneous counsellor support predicted more positive outcomes for children's well-being and empowerment. This finding suggests that SMS counselling is most effective when counsellors maintain a focused approach when working on finding solutions to a child's problem with a high density of child-centred support. Perhaps the format of texting limits the flexibility for the counsellor to attempt a variety of different approaches. This "less is more" interpretation of the findings needs further study.

Study limitations

This study is not without important limitations. First, the findings of our correlational study involve associations between SMS content and child-impact measures – not causal effects. Second, the counsellors categorised the reasons for contact and the researchers coded these on stressor dimensions. However, research on stigma shows that individual perceptions of stigma (i.e. an emic perspective)

may differ from the views of others (i.e. an etic perspective) (Cutrona & Suhr, 1992; Mickelson, 2001). Further, coding counsellor approaches was focused on the quantity, but not the quality, of counsellor behaviours; for example, providing factual information was coded as present, no matter if the information was correct or not. Lastly, it should be noted that measuring the impact of SMS counselling as a brief intervention is a complex matter. Our study into SMS counselling is a real life study and confounding factors may influence the results. The young clients might seek help at a time when their well-being hits a low point. It is also possible that SMS session ends with a conclusion that is hard to accept for the client during contact with the helpline, although the advice is sound and is necessary in a long-term perspective.

Implications for practice

While the SMS context may induce a functional communication style of advice-seeking and problem-focused counselling, counsellors should provide focused, problem-based support while frequently expressing empathy and positive regard when texting with children. Echoing the classic teachings of Carl Rogers, an empathetic approach still seems relevant for effective counselling in the new medium of texting (Burlison & Goldsmith, 1998; Rogers, 1951). Most children explicitly ask for advice when contacting the helpline. However, providing useful advice in the context of SMS, while having very little information about the child and the child's situation and resources, is a difficult task. Our study suggests that SMS counselling can be an effective tool in the context of child helplines, and, when providing SMS counselling for children, child-centred counselling is the cornerstone of effective counselling complemented with (but not dominated by) problem-centred counselling.

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References

- Burleson, B. R., & Goldsmith, D.J. (1998). How the comforting process work: Alleviating emotional distress through conversationally induced reappraisals. In P. Andersen, & L. K. Guerrero (Eds.), *Handbook of communication and emotion; research, theory, applications, and contexts* (pp. 245–280). San Diego, CA: Academic Press.
- Børns Vilkår. (2018). *Dokumentationsrapport 2017 – Børns Vilkår's Rådgivning* [Documentation report 2017 – Børns Vilkår's counselling service]. Valby, Denmark: Børns Vilkår.
- Child Helpline International. (2010). *Data 2010 – Connecting to Children – A Compilation of child helpline data*. Retrieved from: <http://orgchi-tukhnakal.savviihq.com/wp-content/uploads/2017/05/ctc2010webspread.pdf>
- Child Helpline International. (2017). *We listen to the voices of children and young people*. Retrieved from: <https://www.childhelplineinternational.org/wp-content/uploads/2017/11/WeListen.pdf>.
- Cook, J. M., Biyanova, T., & Coyne, J. C. (2009). Influential psychotherapy figures, authors, and books: An Internet survey of over 2,000 psychotherapists. *Psychotherapy: Theory, Research, Practice, Training*, 46(1), 42–51. doi: 10.1037/a0015152
- Cutrona, C. (1990). Stress and social support – In Search of optimal matching. *Journal of Social and Clinical Psychology*, 9(1), 3–14.
- Cutrona, C., Cohen, B., & Igram, S. (1990). Contextual determinants of the perceived Supportiveness of helping behaviours. *Journal of Social and Personal Relationships*, 7(4), 553–562. doi: 10.1177/0265407590074011
- Cutrona, C., & Russell, D. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. Sarason, I. Sarason, & G. Pierce (Eds.), *Social support, an interactional view* (pp. 319–366). New York: John Wiley & Son.
- Cutrona, C., & Suhr, J. (1992). Controllability of stressful events and satisfaction with Spouse support behaviours. *Communication Research*, 19(2), 154–174. doi: 10.1177/009365092019002002
- Eskjær, M., & Helles, R. (2015). *Kvantitativ indholdsanalyse [quantitative content analysis]*. Frederiksberg, Denmark: Samfundslitteratur.
- Fukkink, R. (2011). Peer counselling in an online chat service: A content analysis of social support. *Cyberpsychology, Behaviour and Social Networking*, 14(4), 247–251. doi: 10.1089/cyber.2010.0163
- Fukkink, R., Bruns, S., & Ligtvoet, R. (2016). Voices of children from around the globe: An international analysis of children's issues at child helplines. *Children & Society*, 30(6), 510–519. doi: 10.1111/chso.12150
- Fukkink, R., & Hermanns, J. (2009a). Children's experiences with chat support and telephone support. *Journal of Child Psychology and Psychiatry*, 50(6), 759–766. doi: 10.1111/j.1469-7610.2008.02024.x
- Fukkink, R., & Hermanns, J. (2009b). Counselling children at a helpline: Chatting or calling? *Journal of Community Psychology*, 37(8), 939–948. doi: 10.1002/jcop.20340
- Gibson, K., & Cartwright, C. (2014). Young people's experiences of mobile phone text counselling: Balancing connection and control. *Children and Youth Services Review*, 43, 96–104. doi: 10.1016/j.childyouth.2014.05.010
- Green-Hamann, S., & Sherblom, J. (2014). The influences of optimal matching and social capital on communicating support. *Journal of Health Communication*, 19(10), 1–15. doi: 10.1080/10810730.2013.864734
- Haxell, A. (2015). On becoming textually active at Youthline, New Zealand. *British Journal of Guidance & Counselling*, 43(1), 1–12. doi: 10.1080/03069885.2014.922163
- Helles, R. (2009). *Personlige medier i hverdagslivet [personal Medias in Everyday life]*. Copenhagen, Denmark: Faculty of Humanities, University of Copenhagen.
- Horowitz, L. M., Krasnoperova, E. N., Tatar, D. G., Hansen, M. B., Person, E. A., Galvin, K. L., & Nelson, K. L. (2001). The way to console may depend on the goal: Experimental studies of social support. *Journal of Experimental Social Psychology*, 37(1), 49–61.
- Horvath, A., Symonds, B., & Harmon, L. W. (1991). Relation between working alliance and outcome in Psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38(2), 139–149. doi: 10.1037/0022-0167.38.2.139
- Horvath, A. (2001). The alliance. *Psychotherapy: Theory/Research/Practice/Training*, 38(4), 365–372.
- Jakobson, R. (1960). Closing statement: Linguistics and poetics. In T. A. Sebeok (Ed.), *Style in language* (pp. 350–449). Cambridge, MA: MIT Press.
- Jensen, K., & Helles, R. (2011). The internet as a cultural forum: Implications for research. *New Media & Society*, 13(4), 517–533. doi: 10.1177/1461444810373531
- Jones, S. M., & Burleson, B. R. (1997). The impact of Situational variables on helpers' perceptions of comforting messages: An attributional analysis. *Communication Research*, 24(5), 530–555. doi: 10.1177/009365097024005004
- King, R., Bambling, M., Reid, W., & Thomas, I. (2006). Telephone and online counselling for young people: A naturalistic comparison of session outcome, session impact and therapeutic alliance. *Counselling and Psychotherapy Research*, 6(3), 175–181. doi: 10.1080/14733140600874084

- King, R., Nurcombe, B., Bickman, L., Hides, L., & Reid, W. (2003). Telephone counselling for adolescent suicide prevention: Changes in suicidality and mental state from beginning to end of a counselling session. *Suicide and Life-Threatening Behaviour*, 33(4), 400–411. doi: 10.1521/suli.33.4.400.25235
- Lazarus, R., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Pub.
- de Leeuw, E. D. (2011). *Improving data quality when surveying children and Adolescents: Cognitive and social development and its role in questionnaire construction and pretesting*. Utrecht: Utrecht University. Retrieved from: http://www.aka.fi/globalassets/awanhat/documents/tiedostot/lapset/presentations-of-the-annual-seminar-10-12-may-2011/surveying-children-and-adolescents_de-leeuw.pdf.
- Loane, S., & D'Alessandro, S. (2013). Communication that changes lives: Social support within an online health community for ALS. *Communication Quarterly*, 61(2), 236–251. doi: 10.1080/01463373.2012.752397
- Mickelson, K. (2001). Perceived stigma, social support, and depression. *Personality and Social Psychology Bulletin*, 27(8), 1046–1056. doi: 10.1177/0146167201278011
- Mishara, B., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I., Bardon, C., Campbell, J. K., & Berman, A. (2007). Which helper behaviours and intervention styles are related to better short-term outcomes in telephone Crisis intervention? Results from a silent monitoring study of Calls to the U.S. 1–800-SUICIDE network. *Suicide and Life-Threatening Behaviour*, 37(3), 308–321. doi: 10.1521/suli.2007.37.3.308
- Mokkenstorm, J., Eikelenboom, M., Huisman, A., Wiebenga, J., Gilissen, R., Kerkhof, A., & Smit, J. (2017). Evaluation of the 113 online suicide prevention crisis chat service: Outcomes. Helper behaviors and comparison to telephone hotlines. *Suicide and Life-Threatening Behavior*, 47(3), 282–296. doi: 10.1111/sltb.12286
- Neuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage Publications.
- Nieuwboer, C. C., Fukkink, R. G., & Hermanns, J. M. A. (2014). Practitioner response to parental need in email consultation: How do they Match? A content analysis. *Child & Youth Care Forum*, 43(5), 553–567. doi: 10.1007/s10566-014-9253-2
- Rains, S., Brunner, S., Akers, C., Pavlich, C., & Goktas, S. (2017). Computer-mediated communication (CMC) and social support: Testing the effects of using CMC on support outcomes. *Journal of Social and Personal Relationships*, 34(8), 1186–1205. doi: 10.1177/0265407516670533
- Rains, S., Peterson, E., & Wright, K. (2015). Communicating social support in computer-mediated contexts: A meta-analytic review of content analyses examining support messages shared online among individuals coping with illness. *Communication Monographs*, 82(4), 403–430. doi: 10.1080/03637751.2015.1019530
- Rogers, C. (1951). *Client-centred therapy: Its current practice, implications and theory*. London: Constable.
- Rogers, C. R. (2007). The necessary and sufficient conditions of therapeutic personality change. *Psychotherapy: Theory, Research, Practice, Training*, 44(3), 240–248. doi: 10.1037/0033-3204.44.3.240
- Rosenfield, M. (1997). *Counselling by telephone*. London: SAGE Publications.
- Siewert, K., Antoniw, K., Kubiak, T., & Weber, H. (2011). The more the better? The relationship between mismatches in social support and subjective well-being in daily life. *Journal of Health Psychology*, 16(4), 621–631. doi: 10.1177/1359105310385366
- Sindahl, T. N. (2013). *Chat counselling for children and youth - A Handbook*. Amsterdam: Child Helpline International.
- Suler, J. (2000). Psychotherapy in cyberspace: A 5-dimensional model of online and computer-mediated psychotherapy. *Cyberpsychology & Behaviour*, 3(2), 151–159. doi: 10.1089/109493100315996
- United Nations. (1989). *Convention on the rights of the child. Treaty Series*, 1577, 3.
- van Dolen, W. M., & Weinberg, C. (2017). Child helplines: How social support and controllability influence service quality and well-being. *Journal of Services Marketing*, 31(4–5), 385–396. doi: 10.1108/JSM-07-2016-0254
- Williams, R., Bambling, M., King, R., & Abbott, Q. (2009). In-session processes in online counselling with young people: An exploratory approach. *Counselling and Psychotherapy Research*, 9(2), 93–100. doi: 10.1080/14733140802490606

Appendix

Children's issues and corresponding stressor dimensions.

Reason for contact	Desirability	Controllability	Personal relationships	Stigma
Family relationships				
Death in the family (bereavement)	Negative	Lower	Higher	Lower
Parent-child relationship/parenting	Negative	Higher	Higher	Lower
Parents addiction and/or mental health issues	Negative	Lower	Higher	Higher
Parents arguing	Negative	Lower	Higher	Lower
Current divorce	Negative	Lower	Higher	Lower
Residence (in divorce families)	Negative	Lower	Higher	Lower
Child custody	Negative	Lower	Higher	Lower
Parents collaboration after divorce	Negative	Lower	Higher	Lower
Blended families	Negative	Higher	Higher	Lower
Child visitation	Negative	Higher	Higher	Lower
Abuse and violence				
Neglect	Negative	Lower	Higher	Higher
Physical abuse/Violence	Negative	Lower	Higher	Higher
Bullying	Negative	Lower	Higher	Higher
Emotional abuse (include: witness to violence)	Negative	Lower	Higher	Higher
Sexual Abuse	Negative	Lower	Higher	Higher
Discrimination	Negative	Lower	Higher	Higher
Problems in regards to the authorities				
Out-of-home care/Foster care/Institution	Negative	Lower	Higher	Higher
Social services	Negative	Lower	Lower	Higher
The State Administration (divorce cases)	Negative	Lower	Lower	Lower
Psycho-social mental health				
Fear and anxiety	Negative	Higher	Higher	Higher
Substance use and abuse	Negative	Higher	Higher	Higher
Loneliness	Negative	Higher	Higher	Higher
Body/Physical appearance	Negative	Not applicable	Lower	Higher
Suicide/Suicidal thoughts	Negative	Higher	Higher	Higher
Self-harm	Negative	Higher	Lower	Higher
Eating disorders	Negative	Higher	Higher	Higher
Mental illness/Diagnoses	Negative	Higher	Higher	Higher
Peer relationships				
Teasing	Negative	Higher	Higher	Lower
Love	Positive	Higher	Higher	Lower
Friendship	Positive	Higher	Higher	Lower
School-related issues				
Academic problems/Homework	Negative	Higher	Lower	Lower
Problems with teacher	Negative	Higher	Lower	Lower
Collaboration between home and school	Negative	Lower	Higher	Lower
Not liking to go to school	Negative	Higher	Lower	Lower
Body and health				
Physical Illness	Negative	Lower	Lower	Lower
Pregnancy, contraception and STDs	Negative	Higher	Higher	Lower
Body Development	Negative	Lower	Lower	Lower
Sex and sexuality				
Sexual identity	Not applicable	Lower	Higher	Higher
Sexual practice	Positive	Higher	Lower	Lower

Paper II

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**Texting at a Child Helpline: How Structural Characteristics of Text-Message
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Texting at a Child Helpline: How Structural Characteristics of Text-Message Counseling Influence Counseling Impact

Abstract

This study investigated the influence of structural characteristics such as text volume, session length and duration, response latency, and waiting time on counseling impact. The analysis was based on 603 text-message counseling sessions at a child helpline and connects information about the structure of the counseling session and the effects on the clients. The results showed that sessions characterized by more text volume from the counselor in each message but with fewer messages from beginning to end were more effective than sessions without these characteristics. Further, the session duration had a positive impact, while counselor response latency did not. This indicates that the clients might benefit from the asynchronous affordance of texting as long as the counselor responds promptly and with dense messages. We also found that immediate counseling impact predicted medium-term counseling impact and child agency as measured two weeks after the child or young person received counseling.

Keywords: child helpline, impact, SMS, text messaging, counseling, mediated communication

Introduction

Texting has been a growing form of communication since the 1990s. It includes both text messaging (SMS) and instant messaging (Facebook Messenger, Snapchat, and WhatsApp are popular examples; Piwek & Joinson, 2016). All of these applications are primarily text-based and are sometimes used for almost synchronous communication (similar to real-time chat) and at other times for asynchronous communication (such as emails) (Helles, 2010; Helles, 2013; Hwang, 2011). Text messaging is private and, when used via a mobile device, transportable, thereby enabling communication across contexts (Helles, 2010; Hwang, 2011).

Texting is first and foremost associated with the life phase of young people (Helles, 2009; Ling, 2010; Lyddy, Farina, Hanney, Farrell, & Kelly O'Neill, 2014). Given the silent, time flexible, and private nature of texting, some adolescents prefer this modality when seeking help with delicate issues. Consequently, there is growing interest in using texting as a tool for delivering age-appropriate, social intervention-based services such as child helplines.

Child helplines are support services for children that use technology to provide anonymous and/or confidential access to someone who will listen. Child helplines provide young people with an opportunity to be heard — a fundamental right as outlined in the United Nations Convention on the Rights of the Child (United Nations, 1989) — and a safe, confidential, and accessible reporting mechanism for children suffering from violence and abuse (European Commission, 2015). There are child helplines in 146 countries (Child Helpline International, 2016). In 2016, there were more than 24 million contacts between child helplines and young people in need (Child Helpline International, 2017).

Technology-based tools have created opportunities for helplines to reach children since the 1960s (Child Helpline International, 2011). Child helplines must constantly evolve

and stay current with age-appropriate, confidential, and anonymous ways of providing help, and in many cases they are pioneers in using new technology as platforms for social work. Contemporary practitioners in the health services are moving their practices in the same direction (Bjerke, Kummervold, Christiansen, & Hjortdahl, 2008; Furber et al., 2011; Reamer, 2015; Suler, 2000). Within the context of child helplines, one of the latest developments is the implementation of SMS services. In 2016, child helplines worldwide provided more than half a million counseling sessions via SMS, making this the second most common way (after telephone counseling) for children to receive help (Child Helpline International, 2017). However, despite its growing importance, it is unknown how this SMS service format is influencing children's experience with the helplines.

In this article, we examine the structural characteristics of dialogue-based, human-handled, text-message counseling and explore the importance of these characteristics for counseling impact (see Figure 1 for the conceptual model).

Child helpline impact

Article 12 in the United Nations Convention on the Rights of the Child (United Nations, 1989) forms the foundation for the work of child helplines: *"Helplines play a major role in children expressing their views freely and they are trusted and well used because they are confidential, accessible, and build on children's own capacities"* (Willow, 2010, p. 138). In addition, child helplines use as their basis the articles that state children's right to protection and growth (United Nations, 1989), seeking to protect and impact children's lives in positive ways.

In the current study, we understand child helpline impact with reference to these articles and in line with previous studies of child helpline impact (Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2009a; King, Bambling, Reid, & Thomas 2006b) as we explore

the child's perception of changes in well-being, empowerment, and the feeling of being heard. As anonymous helplines are often described as a first step toward sustainable help (Sindahl, 2013; van Dolen, Weinberg, & Ma, 2013; van Dolen, & Weinberg, 2017), we have a particular interest in exploring the child or young person's capacity and ability to act, stimulated by the text message dialogue with a helpline counselor. We refer to this last aspect as "agency" (Emirbayer, & Mische, 1998). Due to ethical and technical challenges, there is a great lack of follow-up studies of anonymous counseling services (Gould, Kalafat, HarrisMunfakh, & Kleinman, 2007; King, Nurcombe, Birckman, Hides, & Reid 2003), leaving most counselors and helpline services with no knowledge of what happens after the session has ended. The current study attempts to bridge this gap. This leads to the following hypothesis:

H1a: Immediate counseling impact will have a positive influence on medium- and long-term counseling impact as measured at a two-week follow-up.

H1b: Immediate counseling impact will have a positive influence on child agency.

H1c: Child agency will have a positive influence on counseling impact at follow-up.

Structural characteristics of text-message counseling

Dialogue-based counseling through text messages is virtually unexplored. For this reason, we draw on research on mainly chat and telephone counseling in our review of the literature in order to determine which structural characteristics may be important in the context of text-message counseling. Chat and telephone communication resemble text-message counseling in that they are all mediated, dialogue-based, and can be provided in an anonymous manner. Chat and text-message counseling also share the characteristic of being text-based. However, while telephone and synchronous chat counseling require the client and counselor to be present (in front of their computer, tablet, or on the phone at the same time), text-message

communication does not require presence (Castelnuovo, Gaggioli, Mantovani, & Riva, 2003; Frehner, 2008; Helles, 2009; Sindahl, 2013; Suler, 2000). Texting has the possibility of being both (almost) synchronous and asynchronous (Goumi, Volckaert-Legrier, Bert-Erboul, & Bernicot, 2011). Because of this, concepts such as time, pauses, and waiting are especially interesting variables.

Counselor response length. We define “response length” as the average number of characters sent by the counselor per message within a session. A text conversation consists of a number of messages, each consisting of a number of characters, together providing the total text volume of the interaction. For many years, there was a limit of 160 characters for an SMS. Today this limit only has practical influence on billing (Walsh & Brinker, 2016). Even so, the idea of character limitation has influenced the communication style with the use of abbreviations and “text speak” (Walsh & Brinker, 2016).

The ability to listen is a core competence of counselors (Danby et al., 2009; Rosenfield, 1997) and one may assert that talking is to some extent the opposite of listening (Sindahl, 2013, van Dolen, Weinberg, & Ma, 2016). From this perspective, we would assume that fewer words from the counselor would increase counseling’s impact on the young client. This assumption is supported by a recent study of chat counseling at a child helpline, where a large text share by the counselor negatively influenced the child’s immediate well-being after seeking emotional support from the helpline (van Dolen, Weinberg, & Ma, 2016). A content analysis of a chat helpline for people with suicidal ideation showed that although counselors rated sessions with many words as being higher in perceived helpfulness, expert judges of the same sessions did not rate sessions with increased word volume as better than sessions with little word volume (Barak & Bloch, 2006).

However, the asynchronicity of text counseling constitutes a different context for listening (Dolev-Cohen & Barak, 2013). The counselor and the child can write responses without interrupting or taking “speak-time” from the counterpart. On the contrary — especially in text counseling — listening needs to be an active act (Danby et al., 2009). Through text the counselor needs to show the child that he or she has listened, understands, and has something to offer the child to move forward with his or her problem. Therefore, we assume a positive impact of response length on a child or young person’s immediate impact:

H2: Counselor response length will have a positive effect on counseling impact.

Counselor response latency. Communicating in writing is much slower than oral conversations, even when synchronous (Bambling, King, Reid, & Wegner, 2008; Fukkink & Hermanns, 2009a; Fukkink & Hermanns, 2009b; Reid & Caswell, 2005; Schalken, 2008; Sindahl, 2013; Suler, 2000; Tidwell & Walther, 2002). This creates inevitable response latencies in written counseling sessions (King et al., 2006a). Fukkink and Hermanns (2009a) found that chat counseling had a slightly better impact than telephone counseling on child well-being at a Dutch child helpline and suggested that reflection time in counseling — due to response latency — might actually have a positive effect on the help-seeking child.

Response latency occurs in text counseling when the child is spending time putting his or her thoughts into writing and occurs again when the counselor is doing the same. It might not be the case that both types of response latencies are beneficial for the child. Where it is mentioned by both counselors and children that having time to write, rewrite, and edit one’s thoughts is an advantage of text-based counseling (Bambling et al., 2008; Fukkink & Hermanns, 2009a; Sindahl, 2013; Suler, 2000), it might not have the same positive effect when waiting for a reply. Previous research has shown that even response latency in email communication can lead to negative relational evaluations, and studies of text messaging

have also found that people value immediacy (Seo, Kim, & Yang, 2016). Suler (2000) suggests that one of the advantages of synchronous therapy is the therapist's effort to be with the client in real time, which may be interpreted as a sign of commitment and dedication and creates the experience of presence (Park & Sundar, 2015). Latency on the counselor's side might be interpreted by the young client as lacking these characteristics. Consequently, we hypothesize:

H3: A high degree of counselor response latency will have a negative effect on counseling impact.

Waiting time. We know from studies of service quality that waiting time can result in negative responses, such as boredom, irritation, anxiety, tension, and helplessness (Carmon, Shanthikumar, & Carmon 1995; Mattila & Mount, 2003; Park & Sundar, 2015). We expect this negative response to waiting to be particularly strong when experienced by a help-seeking child. Consequently, we predict:

H4: A long waiting time before the session will have a negative effect on counseling impact.

Session duration. Although it might be the case that session length in therapy does not have a significant impact on treatment effects (Turner et al., 1996), there still seems to be a standard duration of approximately 45 to 60 minutes. The slowness of writing, and consequent response latency in online therapy, challenge these standards (Suler, 2000). Anonymous mediated counseling will in many cases not have a standard for session length. However, many have a preferred or fixed maximum time limit. Fukkink and Hermann (2009a) suggest that, for child helplines, session length may be positively associated with increased well-being. However, counselors at an Australian child helpline suggest that, to be productive, sessions should be kept within a certain time frame (Bambling et al., 2008). A

recent study on chat counseling at a child helpline showed a negative effect of session duration on children seeking emotional support, presumably due to being exposed to negative emotions for too long as well as to a lack of capacity to process the content of the session (van Dolen, Weinberg, & Ma, 2016).

Due to the asynchronicity of text sessions, time might not have the same effect as we see in the previously mentioned studies. Texting enables the child to reflect and respond when convenient and when they are ready to hear the response from the counselor — not having to cope with the counselor’s immediate reaction might be considered positive by the child writing about emotional and personal issues (Suler, 2000). The possible asynchronicity of the text-message sessions results in sessions shorter than one hour as well as sessions taking several days. As the theory provides both arguments for shorter and longer sessions, and the asynchronicity of texting makes it possible for the child to have increased power over the pace of the sessions, we suggest that texting session duration might be positively linked to impact.

H5: Session duration in minutes (time) will have a positive effect on the immediate counseling impact.

Session length (number of messages from counselor). A text session can have a duration in time, but also a length in the number of messages exchanged. While time might challenge the child’s cognitive capacity in synchronous counseling, which requires presence — in asynchronous counseling, the session length, measured as the total number of messages exchanged, might be the important variable.

Where session duration in counseling, as measured in time, has been the subject of a few studies (see above), we have identified only one study that assessed the effects of session length as measured in the number of messages (or “turns”) at a peer counseling chat service

(Fukkink, 2011). In this study, a positive relationship was found between length and rated quality (Fukkink, 2011).

A possible strength of text counseling (as opposed to synchronous chat, which was the focus of the aforementioned study) is the fact that the child will have the dialogue present on her or his mobile phone after the session has ended. She or he will be able to return to the dialogue and reread it. For this purpose, sessions with fewer messages might be more productive, providing the child with a better overview of the counseling process. For these reasons, we propose:

H6: The number of messages from the counselor will have a negative effect on counseling impact.

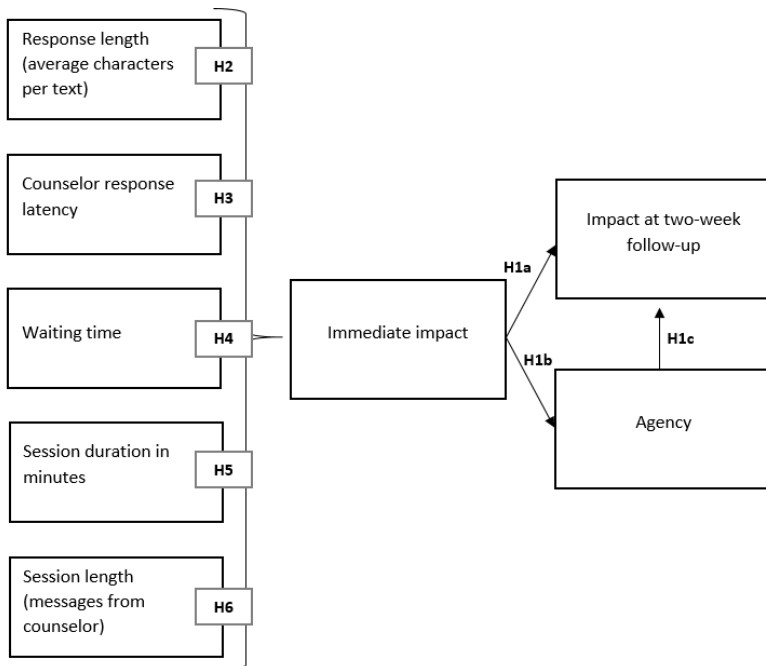


Figure 1. Conceptual model

In summary, we hypothesize that immediate counseling impact is positively influenced by the counselor writing longer but fewer messages, longer session duration, and shorter response latency and waiting time.

Methods

The data for the present study were collected at the Danish child helpline, *BørneTelefonen*. The structural characteristics of text-message sessions were collected through the system used at the helpline and merged with data from the service users via an end-session survey and a follow-up survey also administered through the counseling system.

The Danish child helpline

The Danish child helpline responds to more than 50,000 contacts from children and young people each year. *BørneTelefonen* offers mediated, one-session counseling for children and young people under the age of 23¹ via telephone, chat, an online advice column, and texting. The helpline is accessible online and through the common European child helpline number 116 111 and is open 365 days a year from 11:00 a.m. until 2:00 a.m.

The helpline is primarily staffed by 450 trained volunteers, all with professional backgrounds. Children contact the helpline with issues such as problems with friends, bullying, self-harm, and sexual abuse (see Table 1). A study by the National Council for Children in Denmark showed that 18% of eighth-grade students who had sought help because they or someone close to them had experienced violence at home had sought that help from *BørneTelefonen* (National Council for Children, 2015).

The texting service began at the end of 2012 and the number of contacts has since grown. In 2017, *BørneTelefonen* conducted more than 10,500 sessions through the texting

service, making text counseling account for more than 20% of all sessions with children and young people at the helpline (Børns Vilkår, 2018).

Sample

Our data were collected between June 14, 2015, and June 14, 2016. During this period, all youths using the texting service where a counselor had ended the sessionⁱⁱ were presented with an automated text with a link to an online questionnaire. The present study includes all sessions ($n = 603$) with children and young people who completed an End-Session Questionnaire (ES-Q) and a Follow-Up Questionnaire (FU-Q) two weeks after receiving counseling. Only sessions involving fully completed questionnaires were included in this study.

FU-Q was sent only to children who provided active consent in the ES-Q. The child consented to receiving an automated text two weeks after counseling on a weekday at 7:30 p.m. and was informed that he or she could always change his or her mind and text “Nej tak” (“No thanks”), in which case they would receive no further texts.

Sample characteristics compared to the characteristics of all sessions meeting the inclusion criteria are listed in Table 1. A goodness-of-fit chi-squared test revealed the significance in the distribution of age and the reason for contact in the sample group compared to the population. The participants were significantly younger ($\chi^2(3) = 20.98, p < .001$), and we found an overrepresentation of sessions concerning family relationships and an underrepresentation of sessions about body, health, sex, and sexuality ($\chi^2(8) = 24.37, p < .01$). We did not see significant differences for gender or experience in using the helpline.

Table 1. *Descriptive statistics and participants*

	Included (n = 603)		All sessions (n = 6,060)		χ^2
	N	(%)	N	(%)	
Gender					2.96
Boy	58	(9.6)	718	(11.8)	
Girl	543	(90.0)	5,326	(87.9)	
Unknown	2	(0.3)	16	(0.3)	
Age					20.98***
9-12	237	(39.3)	1,564	(26.2)	
13-14	198	(33.1)	1,945	(32.5)	
15-17	139	(23.2)	1,993	(33.3)	
18 +	24	(4.0)	478	(8.0)	
User experience ^a					3.46
First time	293	(48.8)	847	(47.0)	
Recurrent (1-3 previous sessions)	175	(29.2)	522	(29.0)	
Experienced (4-10 previous sessions)	74	(12.3)	270	(15.0)	
Very experienced (> 10 previous sessions)	58	(9.7)	164	(9.1)	
Reason for contact ^b					24.37**
Family relationships	85	(14.1)	637	(10.5)	
Abuse and violence	44	(7.3)	452	(7.5)	
Problems in regards to the authorities	3	(0.5)	60	(1.0)	
Body and health	58	(9.6)	731	(12.1)	
Psycho-social mental health	143	(23.7)	1,287	(21.2)	
Peer relationships	187	(31.0)	1,820	(30.0)	
School-related issues	11	(1.8)	174	(2.9)	
Sex and sexuality	26	(4.3)	455	(7.5)	
Other	46	(7.6)	444	(7.3)	

Notes: *** $p < 0.001$, ** $p < 0.01$

^aSince this is self-reported data, we only have the information on children who completed the ES-Q (n = 1,803).

^bReported by counselor. Only one reason can be chosen.

Datasets and instruments

The dataset consists of descriptive variables on the clients, session content, structural characteristics of the session, and survey responses from the children and young people. The datasets are merged via a unique user ID for each session. The use of a unique ID makes it possible to collect and merge the data without compromising the child or young person's anonymity.

Demographics. The counselor record after each session provides information about the young client's gender, age, and reason for contact based on information from the child or young person during the session.

Session structure. The child helpline’s text-counseling system provides information on the session content, waiting time, latency time, text volume, and session time. Table 2 lists the structural variables included and how they were defined.

Table 2. Predictor variables

Variable name	Definition
Counselor response length	Average number of characters per message by the counselor in session. Calculated as the total number of characters by the counselor divided by the total number of messages by counselor.
Counselor response latency	Average time from when the child sends a message in an active session until the counselor replies. When the child sends multiple messages, the latency time is calculated from the first message until the last reply from the counselor.
Waiting time	Minutes from when the child sends a second message to the helpline (replying to an automated text received after the first message was sent) until the counselor sends the first message back.
Session duration	Minutes elapsed from the first message from the counselor (defining the session start) until the counselor technically ends the session by sending an automated text to the child (defining the session end).
Session length	Number of messages the counselor sends to the child from the beginning to the end of the session.

Child survey. Assessing the impact of anonymous, mediated counseling is challenging (Mishara & Daigle, 1997; Mishara et al., 2007; Mishara & Côté, 2014), but the technology used for text-message counseling has opened up ways of distributing questionnaires while still acknowledging children’s need for informed consent and anonymity. This makes the dataset examined here unique with the possibility of exploring questions that have never been studied before.

Impact data were collected through an online questionnaire using IBM Data Collection Interviewer Server Administration Version 6. Two questionnaires were used, the End-Session Questionnaire (ES-Q) and the Follow-Up Questionnaire (FU-Q).

In the ES-Q, the immediate impact was measured by seven items: (1) When talking to BørneTelefonen, I ... (wasn't / was taken seriously), (2) Did it help talking to BørneTelefonen? (Not at all / A lot), and (3) After talking to BørneTelefonen I feel ... (much worse / much better) were adapted from previous studies on child helpline impact (Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2009a). (4) In the session with BørneTelefonen, we ... did / didn't talk about what I wanted was developed for the purpose of this study. (5) After talking to BørneTelefonen, I have ... (no / an idea about what to do) was adapted from the Session Impact Scale – (SIS-BC) (Elliott & Wexler, 1994) and the Youth Counseling Impact Scale – (YCIS) (Riemer & Kearns, 2010) and has been applied in several impact studies of child helplines (Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2009a; King, Bambling, Reid, & Thomas 2006b). (6) After talking to BørneTelefonen, the problem is ... (much worse / solved) was adapted from the SDQ P11-17 Follow-Up, Strengths and Difficulties Questionnaire (Goodman, n.d.). (7) After talking to BørneTelefonen, I have more trust in myself (disagree / agree) was adapted from an impact study of the Swedish child helpline (Andersson & Osvaldsson, 2012).

In the FU-Q, the medium-long term impact was measured by four items repeated from the ES-Q: (1) Did it help talking to BørneTelefonen? (Not at all / A lot), (2) Since talking to BørneTelefonen, I feel ... (much worse / much better), (3) Since talking to BørneTelefonen, the problem is ... (much worse / solved), and (4) After talking to BørneTelefonen, I have more trust in myself (disagree / agree). One item was added to measure agency adapted from the Youth Counseling Impact Scale (YCIS) (Riemer & Kearns, 2010): Have you tried any of the things you discussed with BørneTelefonen? (None / All of them).

A larger sample of items was tested qualitatively on three girls and two boys aged 11 to 17 using a “think aloud technique” adapted from cognitive interviewing (Beatty & Willis, 2007) and was discussed with the helpline staff, providing crucial feedback on the constructs,

phrasing, scaling, and the attractiveness of the question items. Two versions of the questionnaires were pilot tested at the helpline in April and May 2015, looking at drop out (to estimate the number of items possible and appeal messages in the automated texts asking to answer the questionnaires), internal consistency, and dispersion. We sent out the FU-Q at two different times in the pilot tests, 4:30 p.m. and 7:30 p.m., and received the highest answering rate at the latter time.

Each question was rated on a 5-point smiley scale with statements at each end of the scale (for example, from “It didn’t help at all” (=1) to “It helped a lot” (=5)). In accordance with recommendations for surveying children, a smiley scale was chosen with a frowning smiley at 1, a neutral smiley at 3, and a smiling smiley at 5 (de Leeuw, 2011).

Internal consistency for each of the scales was good to excellent based on examination using Cronbach’s α . The α for *Immediate impact* was .91. The scale with four items measuring *Impact at follow-up* had an α of .89. No increases in α for any of the scales could have been achieved by eliminating more items. Cronbach’s α could not be calculated for the single-item measure of *Agency*.

Data analysis and results

Sample characteristics

The sample consisted of 603 SMS-mediated counseling sessions. The demographic data are shown in Table 1. The vast majority of the participants were girls (90.0%, $n = 543$). The average age of the respondents was 13.2 years of age with a standard deviation of 2.6 years. Approximately half of the respondents used the service for the first time (48.8%, $n = 293$), while almost 1 in 10 were very experienced users of the SMS counseling service, having used it at least 10 times before (9.7%, $n = 58$).

The structural characteristics of the sessions are reported in Table 3. The data show that text messages from counselors varied from a mean of 40 characters to a mean of 741 characters per message. The mean average response length was 189 characters per message from the counselor in session. The average response latency in session was 5.4 minutes and varied from an average of less than one minute to 124 minutes (the latter included only sessions where the child had to wait until the following day for a response). Waiting time before the session was activated by a counselor varied from less than one minute to more than a day (again, this included clients who were not responded to within the opening hours on the same day). The mean waiting time for reaching a counselor was 90.4 minutes. Session duration varied from four minutes to almost two days. The mean session duration was approximately 3 hours. Finally, the number of messages a counselor sent to the child during a session varied between two and 78, with a mean of 13.4 messages.

Table 3. *Descriptive statistics on structural characteristics (n = 603)*

	Min	Max	Median	Mean	SD
Response length	40 characters	741 characters	172 characters	189 characters	91.0
Response latency	< 1 minute	2 h 4 m	3 minutes	5.4 minutes	10.0
Waiting time	< 1 minute	24 h 52 m	19 minutes	1 h 30 m	239.4
Session duration	4 minutes	47 h 11 m	1 h 9 m	2 h 50 m	330.5
Session length	2 messages	78 messages	11 messages	13.4 messages	8.83

Linking the session length and session duration, we found an average session included 13.4 messages from a counselor within an average time frame of 170 minutes.

The end-session survey results showed that in 84.9% (n = 512) of the included sessions, the child or young person experienced immediate positive effects after the session (see Table 4). At a two-week follow-up, this number dropped to 62.9% (n = 379). At follow-

up, 63.7% (n = 384) reported having done at least some of the things discussed with the counselor.

Table 4. *Counseling impact (n = 603)*

	M	SD	Negative		Neutral		Positive	
			n	%	n	%	n	%
Immediate counseling impact	3.94	0.88	80	13.3	11	1.8	512	84.9
Counseling impact at follow-up	3.46	1.12	174	28.9	50	8.3	379	62.9
Agency at follow-up	3.68	1.26	105	17.4	114	18.9	384	63.7

Test of structural model

Structural equation modeling was used to test our model. The analysis employed maximum likelihood estimation using the SPSS AMOS 23 software program.

Response length, *Counselor response latency*, *Waiting time*, *Session duration*, and *Session length* were treated as exogenous variables; *Immediate impact*, *Impact at follow-up*, and *Agency* were considered endogenous variables. Finally, age and gender were included as control variables.

The Pearson correlations for the variables included in the analysis are presented in

Table 5.

Table 5. *Correlation table*

	Age	Gender	Response length	Response latency	Waiting time	Duration	Session length	Immediate impact	Impact at FU
Gender	-.12**								
Response length	.13**	-.02							
Response latency	.03	.00	.13**						
Waiting time	-.07	.01	.02	.03					
Duration	-.00	-.04	.04	.64***	.14**				
Session length	.16***	-.04	-.19***	.03	.02	.32***			
Immediate impact	-.20***	.08	.16**	-.03	-.05	-.00	-.23**		
Impact at follow-up	-.23***	.06	.06	-.03	-.01	-.01	-.29***	.57***	
Agency	-.05	.04	-.06	-.05	-.01	-.01	-.08*	.34***	.41***

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

A structural equation model was estimated. The adequacy of the model was assessed using several common fit indices (Byrne, 2012). The fit statistics for the model indicate an acceptable fit (Comparative Fit Index (CFI) = .966, the root mean square error of approximation (RMSEA) = .071, standardized root mean square residual (SRMR) = .034) between the hypothesized model and the data (Hu & Bentler, 1999). The standardized coefficients for the model are shown in Table 6.

Table 6. *Summary of results*

Independent variable	Dependent variable	Standardized estimate
Response length	Immediate impact	.12**
Response latency	Immediate impact	-.16**
Waiting time	Immediate impact	-.07
Duration	Immediate impact	.18**
Session length	Immediate impact	-.26***
Immediate impact	Impact at follow-up	.48***
Immediate impact	Agency	.34***
Agency	Impact at follow-up	.25***

Notes: *** $p < 0.001$, ** $p < 0.01$

The results showed that the child or young person's immediate perception of counseling impact was a positive predictor of counseling impact at follow-up. Hence, we accepted Hypothesis 1a. Next, the immediate counseling impact significantly influenced the child's agency at follow-up. Therefore, we accepted Hypothesis 1b. Finally, the child's agency had a positive effect on the impact at follow-up, so we accepted Hypothesis 1c.

In addition, the estimated coefficients showed that the counselor response length had a significant and positive influence on the immediate counseling impact. Therefore, Hypothesis 2 was accepted. Also, the results showed that the counselor response latency had a significant and negative relationship with the immediate counseling impact. So, Hypothesis 3 was accepted. Regarding the effect of the waiting time on the immediate counseling impact, this was negative but not significant. Consequently, Hypothesis 4 was rejected. The duration of the text-message counseling session had a significant and positive effect on the immediate

counseling impact. Thus, Hypothesis 5 was accepted. Session length, measured in the number of messages from the counselor, had a negative effect on the immediate counseling impact, so we accepted Hypothesis 6.

Regarding the control variables of age and gender, no significant impact was found when adding these variables to the model. These controls were removed from the analysis to create a more parsimonious model (Westland, 2015).

Discussion

In this article, we have examined the structural characteristics of text-message counseling and how they influence counseling impact at a child helpline immediately and in the medium-long term. Needless to say, the structures of a counseling session are only a minor aspect of what constitutes changes in a young client's life. However, our results showed significant influences that might prove helpful in developing a productive counseling practice.

Examining the immediate and the medium- and long-term impact, our results showed that counseling sessions have an impact, both immediately after the session as well as two weeks later. Similar findings were previously published regarding child helpline telephone, chat, and email services (Andersson & Osvaldsson, 2012; Fukkink & Hermanns, 2009a; Fukkink & Hermanns, 2009b; King et al., 2006b; King et al., 2003; Sindahl, 2013; van Dolen et al., 2016; van Dolen & Weinberg, 2017). This indicated that using text messages as a medium in child helpline counseling may provide similar results to other more commonly researched modalities (telephone, chat, and email), but comparative studies are needed to confirm this.

We also found that after a substantial number of sessions, the child indicated that he or she was able to perform some of the tasks discussed with the counselor (which we labeled “agency”) and that this was positively linked to the counseling impact. This is an indication of child helplines’ ability to work as springboards or catalysts for the children and youth contacting the service.

Examining the structural aspects of the sessions, we found that sessions characterized by fewer messages from the counselor and more full messages in the amount of texts the counselor was producing in each message seemed to have a more positive impact on the help-seeking young clients. Powell and Roberts (2017) found that the number of text interactions in natural digital interactions were associated with greater reported cognitive and affective empathy. Our results indicated that this might not be the case for communicating with children through texting in a counseling context. The idea that text messages should be very brief (Walsh & Brinker, 2016) does not seem to apply to the counseling context. Perhaps this way of communicating provides the child a better overview of the session content due to fewer messages to read when reviewing the content. In addition, it might create a greater experience of being listened to due to the counselor writing more in each message, thus providing the child or young person with visible feedback on what the counselor heard and how the counselor understood the young client and his or her situation.

Different modalities set different conditions for the counselor to perform active listening and guidance to the helpline service users (Danby et al., 2009). When texting, the counselor is silent, invisible, and, because of the asynchronicity of this format, also absent. The affordances of texting offer both possibilities and constraints (Hutchby, 2001). Our data suggest that counselors need to be expressive and elaborate in their writing, and the asynchronous format of texting allows them the time to bring more depth to their messages (Lapadat, 2002). This stands in contrast to research on synchronous chat, wherein a large text

share by the counselor was found to negatively influence the child's immediate well-being after seeking emotional support from the helpline (van Dolen, Weinberg, & Ma, 2016).

Interestingly, we saw a significant negative correlation between response length and session length ($r = -.19, p < .001$). This hints at the possibility for the counselor to influence the session length, making them shorter by writing more in each message.

The results also show that session duration and length are indeed quite different features in relation to text messaging (Castelnuovo et al., 2003; Frehner, 2008; Helles, 2009; Goumi et al., 2011). Sessions can be long in duration but short in quantity of messages and vice versa. Duration showed a positive influence on the counseling impact and the number of messages showed a negative impact. Research in synchronous chat counseling has shown ambivalent results concerning the effects of session duration (Bambling et al., 2008; Fukkink & Hermann, 2009a; van Dolen, Weinberg, & Ma, 2016). Powell and Roberts' (2017) study of natural digital interactions found a positive association between the duration of interaction and compassionate empathy. A long duration with few texts will indicate that the correspondence is quite asynchronous and, based on the current study results, this asynchronicity does not seem to be a limitation but perhaps even a strength of text-message communication. Possible reasons for this could be that the asynchronicity affords greater control over when and how to respond to messages, leaving reflection time and greater face management (Gibson & Cartwright, 2014; Suler, 2000; Thurlow & Brown, 2003).

However, although we see a positive effect of duration, counselors should not prolong the session duration by taking extra time to respond to the child. Our results show that response latency on the counselors' side had a negative effect on the counseling impact. As stated by Kalman, Ravid, Raban, & Rafaeli: *"In asynchronous CMC, a quick response is one of the only non-verbal tools that can be used to signal immediacy, care, and presence"* (2006, p. 12). Latency may be effective for the person producing a response, but not for the one

waiting for it (Suler, 2000; Seo, Kim, & Yang, 2016). Therefore, counselors should make sure to respond to the child as quickly as possible (reducing the anxiety of waiting for a response), while also encouraging the child to take his or her time to respond — perhaps even taking a break from the session — to reflect on the issues discussed.

We did not see a significantly negative effect of waiting time before counseling. This is surprising as prior research has shown that waiting time can result in negative responses such as boredom, irritation, anxiety, tension, and helplessness (Carmon, Shanthikumar, & Carmon 1995). At the helpline participating in the present study, there has been a great focus on handling children and youth waiting to reach a counselor through technical features such as automated messages, etc. The results herein might reflect these efforts.

The variables included in our study are all interlinked. Because of response latency due to writing, the sessions will either become longer in duration or shorter in words, compared to oral exchanges. Writing a long message will probably take longer than writing a short message, thereby increasing response latency and waiting time for new children who are waiting to get through. Therefore, while changing counselor behavior in order to meet some of the recommendations of this article, other aspects might be negatively influenced. Consequently, it is recommended that text-message counselors pay more attention to the number of messages and amount of text in each message in the session and less attention to the clock.

The present study is the first of its kind to examine how structural characteristics of text-message counseling impact children and youth seeking help at a child helpline. The child helpline under study provided a suitable context for conducting this research since it has a strong tradition of collecting data, has invested in technology that can support this type of research, and has a high degree of awareness and use among the youth population. However,

there may be cultural differences that challenge the generalizability of our findings to helplines in other parts of the world. Further studies on these differences are encouraged.

Text-message or SMS counseling can be conducted in many ways. It can be a one-text-one-answer type of service or even based on automated texts without any counselor involvement. The results of the current study are relevant for services offering dialogue-based, human-handled, text counseling, and even within this field there are important differences in the technology affecting the structural aspects of the counseling session. Further research could explore the effectiveness of different kinds of text-message counseling so the impact of child helplines could be further improved.

References

- Andersson, K., & Osvaldsson, K. (2012). Utvärdering av BRIS Internetbaserade stödkontakter [Evaluation of BRIS Internet-based support contacts]. *Research Report on childhood and the study of children*. Sweden: University of Linköping.
- Bambling, M., King, R., Reid, W., & Wegner, K. (2008). Online counselling: The experience of counsellors providing synchronous single-session counselling to young people. *Counselling and Psychotherapy Research*, 8(2), 110-116. doi: 10.1080/14733140802055011
- Barak, A., & Bloch, N. (2006). Factors related to perceived helpfulness in supporting highly distressed individuals through an online support chat. *Cyberpsychology & Behavior*, 9(1), 60-8. doi: 10.1089/cpb.2006.9.60
- Beatty, P., & Willis, G. (2007). Research Synthesis: The Practice of Cognitive Interviewing. *Public Opinion Quarterly*, 71(2), 287-311. doi: 10.1093/poq/nfm006
- Bjerke, T., Kummervold, P., Christiansen, E., & Hjortdahl, P. (2008). "It Made Me Feel Connected" - An Exploratory Study on the Use of Mobile SMS in Follow-Up Care for Substance Abusers. *Journal of Addictions Nursing*, 19(4), 195-200. doi: 10.1080/10884600802504735
- Byrne, B. (2012). *Structural equation modeling with Mplus, basic concepts, applications, and programming* (Multivariate applications series). New York, N.Y: Routledge.
- Børns Vilkår. (2018). *Årsstatistik 2017* [Annual Statistics 2017]. Valby: Børns Vilkår.
- Carmon, Z., Shanthikumar, J. G., & Carmon, T. F. (1995). A Psychological Perspective on Service Segmentation Models: The Significance of Accounting for Consumers' Perceptions of Waiting and Service. *Management Science*, 41(11), 1806-1815. doi: 10.1287/mnsc.41.11.1806
- Castelnuovo, G., Gaggioli, A., Mantovani, F., & Riva, G. (2003). From psychotherapy to e-therapy: The integration of traditional techniques and new communication tools in clinical settings. *Cyberpsychology & Behavior*, 6(4), 375-82. doi: 10.1089/109493103322278754

- Child Helpline International. (2011). *2011 General Child Helpline Data*. Retrieved from <http://www.childhelplineinternational.org/resources/data/connecting-to-children/connecting-to-children-2011-data/>
- Child Helpline International. (2016). *Annual Report 2015*. Retrieved from http://www.childhelplineinternational.org/media/166985/child_helpline_international-annual-report-2015.pdf
- Child Helpline International (2017). *We Listen to the Voices of Children and Young People*. Retrieved from: <https://www.childhelplineinternational.org/wp-content/uploads/2017/11/WeListen.pdf>
- Danby, S., Butler, C., & Emmison, M. (2009). When 'listeners can't talk': Comparing active listening in opening sequences of telephone and online counseling. *Australian Journal of Communication, 36*(2), 1–23.
- Dolev-Cohen, M., & Barak, A. (2013). Adolescents' use of Instant Messaging as a means of emotional relief. *Computers in Human Behavior, 29*(1), 58-63. doi: 10.1016/j.chb.2012.07.016
- Elliott, R., & Wexler, M. M. (1994). Measuring the Impact of Sessions in Process-Experiential Therapy of Depression: The Session Impacts Scale. *Journal of Counseling Psychology, 41*(2), 166-74. doi: 10.1037/0022-0167.41.2.166
- Emirbayer, M., & Mische, A. (1998). What Is Agency? *American Journal of Sociology, 103*(4), 962-1023. doi: 10.1086/231294
- European Commission. (2015). *9th European Forum on the rights of the child - Coordination and cooperation in integrated child protection systems*. Reflection paper. Retrieved from http://ec.europa.eu/justice/fundamental-rights/files/2015_forum_roc_background_en.pdf
- Frehner, C. (2008). *Email, SMS, MMS, the linguistic creativity of asynchronous discourse in the new media age* (Linguistic insights 58). Bern New York: Peter Lang.
- Fukkink, R. (2011). Peer counseling in an online chat service: A content analysis of social support. *Cyberpsychology, Behavior and Social Networking, 14*(4), 247-251. doi: 10.1089/cyber.2010.0163
- Fukkink, R., & Hermanns, J. (2009a). Children's experiences with chat support and telephone support. *Journal of Child Psychology and Psychiatry, 50*(6), 759-766. doi: 10.1111/j.1469-7610.2008.02024.x
- Fukkink, R., & Hermanns, J. (2009b). Counselling children at a helpline: Chatting or calling? *Journal of Community Psychology, 37*(8), 939-948. doi: 10.1002/jcop.20340
- Furber, G., Crago, A., Meehan, K., Sheppard, T., Hooper, K., Abbot, D., Allison, S. & Skene, C. (2011). How adolescents use SMS (short message service) to micro-coordinate contact with youth mental health outreach services. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 48*(1), 113-5. doi: 10.1016/j.jadohealth.2010.05.022
- Gibson, K., & Cartwright, C. (2014). Young people's experiences of mobile phone text counselling: Balancing connection and control. *Children and Youth Services Review, 43*, 96-104. doi: 10.1016/j.childyouth.2014.05.010
- Goodman, R. (n.d.). *SDQ-S11-17 FOLLOW UP*. Retrieved from: <http://www.sdqinfo.org/py/sdqinfo/b3.py?language=Danish>
- Gould, M., Kalafat, J., HarrisMunfakh, J., & Kleinman, M. (2007). An Evaluation of Crisis Hotline Outcomes Part 2: Suicidal Callers. *Suicide and Life-Threatening Behavior, 37*(3), 338-352. doi: 10.1521/suli.2007.37.3.338
- Goumi, A., Volckaert-Legrier, O., Bert-Erboul, A., & Bernicot, J. (2011). SMS length and function: A comparative study of 13- to 18-year-old girls and boys.(Report). *Revue Europeenne De Psychologie Appliquee, 61*(4), 175. doi: 10.1016/j.erap.2011.07.001

- Helles, R. (2009). *Personlige medier i hverdagslivet* [Personal Medias in Everyday Life]. Copenhagen: Faculty of Humanities, University of Copenhagen.
- Helles, R. (2010). Hverdagslivets nye medier [The New Media of Everyday Life]. *Dansk Sociologi*, 21(3), 49-63. doi: 10.22439/dansoc.v21i3.3360
- Helles, R. (2013). Mobile communication and intermediality. *Mobile Media & Communication*, 1(1), 14-19. doi: 10.1177/2050157912459496
- Hu, L. & Bentler, P. M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modeling*, 6(1), 1-55. doi: 10.1080/10705519909540118
- Hutchby, I. (2001). *Conversation and technology: From the telephone to the internet*. Malden, MA: Polity Press.
- Hwang, Y. (2011). Is communication competence still good for interpersonal media?: Mobile phone and instant messenger. *Computers in Human Behavior*, 27(2), 924-934. doi: 10.1016/j.chb.2010.11.018
- Kalman, Y., Ravid, G., Raban, D., & Rafaeli, S. (2006). Pauses and Response Latencies: A Chronemic Analysis of Asynchronous CMC. *Journal of Computer-Mediated Communication*, 12(1), 1-23. doi: 10.1111/j.1083-6101.2006.00312.x
- King, R., Bambling, M., Lloyd, C., Gomurra, R., Smith, S., Reid, W., & Wegner, K. (2006a). Online counselling: The motives and experiences of young people who choose the Internet instead of face to face or telephone counselling. *Counselling and Psychotherapy Research*, 6(3), 169-174. doi: 10.1080/14733140600848179
- King, R., Bambling, M., Reid, W., & Thomas, I. (2006b). Telephone and online counselling for young people: A naturalistic comparison of session outcome, session impact and therapeutic alliance. *Counselling and Psychotherapy Research*, 6(3), 175-181. doi: 10.1080/14733140600874084
- King, R., Nurcombe, B., Bickman, L., Hides, L., & Reid, W. (2003). Telephone Counselling for Adolescent Suicide Prevention: Changes in Suicidality and Mental State from Beginning to End of a Counselling Session. *Suicide and Life-Threatening Behavior*, 33(4), 400-411. doi: 10.1521/suli.33.4.400.25235
- Lapadat, J. (2002). Written Interaction: A Key Component in Online Learning. *Journal of Computer-Mediated Communication*, 7(4), 0. doi: 10.1111/j.1083-6101.2002.tb00158.x
- de Leeuw, E.D. (2011). *Improving Data Quality when Surveying Children and Adolescents: Cognitive and Social Development and its Role in Questionnaire Construction and Pretesting*. Utrecht, the Netherlands: Utrecht University. Retrieved from: http://www.aka.fi/globalassets/awanhat/documents/tiedostot/lapset/presentations-of-the-annual-seminar-10-12-may-2011/surveying-children-and-adolescents_de-leeuw.pdf
- Ling, R. (2010). Texting as a life phase medium. *Journal of Computer-Mediated Communication*, 15(2), 277-292. doi: 10.1111/j.1083-6101.2010.01520.x
- Lyddy, F., Farina, F., Hanney, J., Farrell, L., & Kelly O'Neill, N. (2014). An Analysis of Language in University Students' Text Messages. *Journal of Computer-Mediated Communication*, 19(3), 546-561. doi: 10.1111/jcc4.12045
- Mattila, A., & Mount, D. (2003). The impact of selected customer characteristics and response time on E-complaint satisfaction and return intent. *International Journal of Hospitality Management*, 22(2), 135-145. doi: 10.1016/S0278-4319(03)00014-8
- Mishara, B., & Daigle, M. (1997). Effects of Different Telephone Intervention Styles with Suicidal Callers at Two Suicide Prevention Centers: An Empirical Investigation. *American Journal of Community Psychology*, 25(6), 861-885. doi: 10.1023/A:1022269314076

- Mishara, B., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I., Bardon, C., Campbell, J. K., & Berman, A. (2007). Which Helper Behaviors and Intervention Styles are Related to Better Short-Term Outcomes in Telephone Crisis Intervention? Results from a Silent Monitoring Study of Calls to the U.S. 1-800-SUICIDE Network. *Suicide and Life-Threatening Behavior*, 37(3), 308-321. doi: 10.1521/suli.2007.37.3.308
- Mishara, B. L. & Côté, L. P. (2014). Suicide Prevention and New Technologies: Towards Evidence Based Practice. In B. L. Mishara, B.L. & A. J. F. Kerkhof (Eds.), *Suicide Prevention and New Technologies – Evidence Based Practice* (1-23). UK: Palgrave Macmillan.
- The National Council for Children. (2015). For mange unge opsøger ikke hjælp, når de har brug for den [Too Many Young People Do Not Seek Help When They Need It]. *Børneindblik*. 4(2), 1-15.
- Park, E., & Sundar, S. (2015). Can synchronicity and visual modality enhance social presence in mobile messaging? *Computers in Human Behavior*, 45, 121-128. doi: 10.1016/j.chb.2014.12.001
- Piwek, L., & Joinson, A. (2016). "What do they snapchat about?" Patterns of use in time-limited instant messaging service. *Computers in Human Behavior*, 54(C), 358-367. doi: 10.1016/j.chb.2015.08.026
- Powell, P., & Roberts, J. (2017). Situational determinants of cognitive, affective, and compassionate empathy in naturalistic digital interactions. *Computers in Human Behavior*, 68(C), 137-148. doi: 10.1016/j.chb.2016.11.024
- Reamer, F. (2015). Clinical Social Work in a Digital Environment: Ethical and Risk-Management Challenges. *Clinical Social Work Journal*, 43(2), 120-132. doi: 10.1007/s10615-014-0495-0
- Reid, W., & Caswell, D. (2005). A National Telephone and Online Counselling Service for Young Australians. In J. Batch & R. Wootton (Eds.), *Telepediatrics: Telemedicine and child health* (169-187). London, Royal Society of Medicine Press.
- Riemer, M., & Kearns, M. A. (2010). Description and psychometric evaluation of the Youth Counseling Impact Scale. *Psychological Assessment*, 22, 259-268. doi: 10.1037/a0018507
- Rosenfield, M. (1997). *Counselling by Telephone*. London: SAGE Publications.
- Schalken, F. (Eds.). (2008). *Handbook for implementing online counselling - setting up a child helpline via the internet*. Amsterdam: Child Helpline International.
- Seo, M., Kim, J., & Yang, H. (2016). Frequent Interaction and Fast Feedback Predict Perceived Social Support: Using Crawled and Self-Reported Data of Facebook Users. *Journal of Computer-Mediated Communication*, 21(4), 282-297. doi: 10.1111/jcc4.12160
- Sindahl, T. N. (2013): *Chat Counselling for Children and Youth - a Handbook*. Amsterdam: Child Helpline International.
- Suler, J. (2000). Psychotherapy in cyberspace: A 5-dimensional model of online and computer-mediated psychotherapy. *Cyberpsychology & Behavior*, 3(2), 151-159. doi: 10.1089/109493100315996
- Thurlow, C. & Brown, A. (2003). Generation txt? The sociolinguistics of young people's text-messaging. *Discourse Analysis Online*. Retrieved from: <http://extra.shu.ac.uk/dao1/articles/v1/n1/a3/thurlow2002003-01.html>
- Tidwell, L. C., & Walther, J. B. (2002). Computer-Mediated Communication Effects on Disclosure, Impressions, and Interpersonal Evaluations: Getting To Know One Another a Bit at a Time. *Human Communication Research*, 28(3), 317-48. doi: 10.1111/j.1468-2958.2002.tb00811.x

- Turner, P., Valtierra, M., Talken, T., Miller, V., DeAnda, J., & Hill, Clara E. (1996). Effect of Session Length on Treatment Outcome for College Students in Brief Therapy. *Journal of Counseling Psychology, 43*(2), 228-232. doi: 10.1037/0022-0167.43.2.228
- The United Nations. (1989). *Convention on the Rights of the Child*. Treaty Series, 1577, 3.
- van Dolen, W. M., Weinberg, C. & Ma, L. (2016, May/June). *Are you listening? An Empirical Investigation of an IT-Mediated Helpline*. Presented at 14th International Research Conference in Service Management, La Londe les Maures, France.
- van Dolen, W. M., Weinberg, C. B., & Ma, L. (2013). The Influence of Unemployment and Divorce Rate on Child Help-Seeking Behavior about Violence, Relationships, and Other Issues. *Child Abuse & Neglect: The International Journal, 37*(2-3), 172-3), p.172-180.
- van Dolen, W. M., & Weinberg, C. (2017). Child Helplines: How Social Support and Controllability Influence Service Quality and Well-Being. *Journal of Services Marketing, 31*(4-5), 385-396. doi: 10.1108/JSM-07-2016-0254
- Walsh, E., & Brinker, J. (2016). Short and Sweet? Length and Informative Content of Open-Ended Responses Using SMS as a Research Mode. *Journal of Computer-Mediated Communication, 21*(1), 87-100. doi: 10.1111/jcc4.12146
- Westland, J. (2015). *Structural equation models, from paths to networks* (Studies in systems, decision and control). Cham: Springer.
- Willow, C. (2010). *Children's right to be heard and effective child protection - A guide for Governments and children rights advocates on involving children and young people in ending all forms of violence*. Sweden: Save the Children.
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ⁱLegislation in Denmark gives young people who are being provided with any special care when they turn 18 the possibility of receiving “aftercare” until the age of 23. For this reason, the Danish child helpline includes them in their target group.

ⁱⁱIn a substantial number of sessions, the client simply stops responding without the session having come to an end. Since “ending” is necessary in order to distribute an End-Session Questionnaire, it was not possible to include these sessions in this study.

Paper III

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Children's experiences texting with a child helpline

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ABSTRACT

We explore how children experienced texting with a child helpline, based on 724 qualitative responses representing 586 individual SMS counselling sessions. The data were collected through a questionnaire distributed immediately after receiving counselling and two weeks later. The children expressed the importance of feeling listened to and accepted by the counsellor, gaining new perspectives or developing a plan of action. They also emphasised the importance of the counsellors being sensitive to their readiness for change by providing advice and directives when needed and a listening ear when that was preferred. Only a few comments concerned the medium of texting itself, indicating that the sense of psychological closeness can move the technology to the background and outside one's awareness.

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Introduction

In 2016 child helplines all over the world responded to children more than 24 million times (Child Helpline International, 2017a). Texting was the second most common way (after telephone calls) for children to receive help from a child helpline (Child Helpline International, 2017a).

The Danish national child helpline responds annually to more than 45,000 contacts from children looking for help (Børns Vilkår, 2018). Since 2012, children have been able to receive this help via texting. In this article, we explore how the children experience these text counselling sessions.

The article is based on 724 responses to open-ended questions from children and youth who used the text counselling service between June 2015 and June 2016.

Anonymous one-session text message counselling

Text counselling, as explored in this article, is an anonymous service where a child or young person can have a dialogue with a counsellor through SMS technology. The child uses his mobile phone, while the counsellor typically works from a computer. Often, the counsellor will communicate with several children simultaneously, since the children are not active all the time.

Child helplines communicate with children and young people through technologies that are familiar to them (Gibson & Cartwright, 2014) and allow them to contact a counsellor, when needed and convenient and from any location (Gibson & Cartwright, 2014; Mallen, Vogel, Rochlen, & Day, 2005). Anonymous mediated counselling can contribute to a feeling of privacy for young people and be emancipating, making it possible to seek help without the involvement of other adults (Brenes et al., 2011; Gibson & Cartwright, 2014). It provides the child or young person a feeling of control by being able to instigate and end the contact at any time, and controlling the information exchanged and the actions taken as a consequence thereof (Mallen et al., 2005).

In addition, text counselling is characterised as asynchronous, although it is often used in almost synchronous ways (Goumi, Volckaert-Legrier, Bert-Erboul, & Bernicot, 2011; Helles, 2013). Children and counsellors do not experience the same kind of presence that has been described for synchronous mediated counselling (i.e. telephone and synchronous chat) (Rettie, 2009; Sindahl, 2013; Suler, 2004). Children can write a text to the helpline during recess and review the counsellor's answer during lunch, and maybe not reply before the end of the day. Because of this, text counselling creates not only a space-distance but also a time-distance between the two parties in the dialogue (Frehner, 2008; Rettie, 2009). This asynchronicity, combined with a strong preference for immediacy (Seo, Kim, & Yang, 2016), requires counsellors to answer with a certain haste, but at the same time allowing the child to take longer breaks in the conversation (Børns Vilkår, 2015; Gibson & Cartwright, 2014). A study of session length and response latency at a text counselling service showed that immediacy at the counsellor's end and latency at the child's end had a positive influence on the impact of the counselling (Sindahl & van Dolen, 2018).

When the session is finished, it still stays on the child's mobile phone until he or she decides to delete it. The child can go back and reread the session and possibly feel further supported. The child can show the session to someone else (i.e. a parent or a schoolteacher) when it is helpful (Børns Vilkår, 2015).

By being accessible in numerous ways, child helplines play an important role in securing for children a way to be heard and access to protection, as outlined in the United Nations Convention on the Rights of the Child (United Nations, 1989). Because of the anonymity involved, as well as the mediated characteristics of this type of service, child helplines are considered low-threshold services for children in need of help (Sindahl, 2013).

Anonymous text counselling via mobile phones continues the technological development that has characterised the field of anonymous mediated counselling since the 1950s' telephone counselling services (Haxell, 2015), followed by different internet-based counselling services such as e-mail and chat counselling (Mishara & Kerkhof, 2013).

The Danish text counselling service

[...] I am cutting and it's really rough, I am waiting for a meeting with [treatment centre] it's a psychiatric ward for teens, they will tell me if I will get pills, admission or some other help ... I have so many thoughts about cutting and suicide, I can't stand it anymore. I don't know what to do. (Girl, 13 years old)
 It sounds like you're going through a rough patch, and there are a lot of things going on in your life right now. I feel like telling you how great it is that you will start [treatment] because it takes a lot of courage! And I also think it's really great that you write us when things become too much for you. Would it be ok for me to ask you some questions? (Counsellor)

The above sample from a text counselling session with the Danish child helpline shows the openness and richness of the messages exchanged. The two messages are from the beginning of a session that lasted 88 minutes, with 39 messages exchanged between child and counsellor from start to finish.

At the Danish child helpline, both the counsellor and the child are anonymous. They only have the letters on the keyboard to communicate with.

The counsellors are instructed to work from a child's perspective but to communicate in a professional manner and to avoid using elements such as "squeeze-text", acronyms and smileys (Børns Vilkår, 2015), things that are often described when discussing "SMS language" but whose use might be somewhat exaggerated: "... after all, the texter will want to ensure that they are understood" (Lyddy, Farina, Hanney, Farrell, & Kelly O'Neill, 2014, p. 547).

Because of asynchronicity, the counsellor can accompany the child over a longer span of time (compared to one-session telephone or chat counselling), and the child can take the initiative to problem-solve while the counsellor remains available on the phone (Sindahl, 2016). However, when the session ends, there is no follow-up, and any further contact can only be initiated by the child and will appear to the counsellor as a new contact (Børns Vilkår, 2015).

Text counselling has been part of Danish child helpline services since 2012, targeting children and youth up to age 23. Since the texting service opened and until the end of 2017, counsellors have responded to 49,598¹ contacts from children and youth via SMS, making the texting service the fastest-growing counselling platform in the history of the helpline.

Method

During the data collection period, every SMS session ended by a counsellor ended with an automated message with a link to an online End-Session Questionnaire (ES-Q). Children who gave active consent in the ES-Q received an automated message two weeks later with a link to a Follow-Up Questionnaire (FU-Q). Data from the questionnaires were linked through unique IDs.

Instruments

Following the helpline's standard procedures, counsellors coded the child's age, gender and reason for contact for each session for eight different problem clusters divided into 39 different subcategories. This information was merged with data from questionnaires.

End-session questionnaire

The ES-Q consisted of seven quantitative items and one open-ended question. The open-ended question explored the child's experience with the session: "We would like to know how you experienced talking with [the helpline] or if you have any advice for us that will make the sessions more helpful".

During the data collection period there were 26,952 attempts to contact the helpline by SMS. Contact attempts were answered in 12,035 cases, and 6,060 of these met the inclusion criteria: (1) the session was a counselling session (excluding pranks, purely information seeking, etc.), (2) the client was a child or young person (excluding clients 23 years old or older), (3) the session concerned the child or young person (excluding third-party contacts) and (4) the session was closed by a counsellor (excluding sessions where the child stopped writing prematurely).

In 836 cases the child answered the open-ended question. After initial coding, answers which did not include explicit feedback on the counsellors' actions, or were too ambiguous to interpret, were removed from the analysis, leaving 476 comments, representing the same number of sessions.

Follow-up questionnaire

The FU-Q consisted of six quantitative items and three open-ended questions. The open-ended questions explored the child's experience during and after the session in regard to the problems raised: "What did you find helpful when talking to [the helpline]? What would you have liked the counsellor to do or say?" and "What happened after you talked to [the helpline]? (What did you feel/think/do and what happened because of that?)".

In 1,307 cases, the FU-Q was sent to a child. The first open-ended question was answered in 326 cases and the second in 281 cases. After initial coding, 248 comments were included, representing 203 different sessions.

Participants

The children

The texting service is predominantly used by girls (87.9%) concerned with peer problems such as love and friendship (30%) or psychosocial mental health issues such as self-harm, suicide and eating disorders (21.2%). In 7.5% of the sessions the primary reason for contact was abuse. The users of the texting service were 12 years old or younger in 25.8% of the sessions, 13 to 17 years old in 65.0% of the sessions and 18 or older in 7.9% of the sessions.

Table 1 shows the gender, age and reason for contact for all SMS sessions meeting the inclusion criteria during the data collection period and those included in the qualitative analysis.

A goodness-of-fit chi-square test revealed significance in the distribution of gender, age and reason for contact in the qualitative study sample ($n = 589$) compared to the full sample of sessions meeting the inclusion criteria ($n = 6,060$). The participants were significantly more often girls ($\chi^2 (1) = 17.34, p < .001$), younger ($\chi^2 (3) = 100.54, p < .001$), more often first-time users and less often very experienced users ($\chi^2 (3) = 22.17, p < .001$), and we found an overrepresentation of sessions concerning family relationships and peer problems and an underrepresentation of sessions about sex and sexuality ($\chi^2 (8) = 21.67, p < .01$).

The counsellors

The helpline is staffed by 450 volunteers. All counsellors have a professional and practical background in working with children. Often they are teachers, pedagogues, psychologists, social workers, nurses, doctors or students of these professions. At the helpline they are trained in different counselling skills in the areas of Rogerian active listening and narrative, systemic and solution-focused techniques. They are also trained in a five-phase counselling model adapted from the Dutch child helpline De Kindertelefoon (Sindahl, 2013).

The sessions

In an average SMS session with the Danish helpline, the counsellor sends 14 messages to the child; however, the sample also shows examples of sessions with only one message from the counsellor as

Table 1. Descriptive statistics, participants.

	All sessions ($n = 6,060$)		Participated in qualitative study ($n = 586$)	
	<i>N</i>	(%)	<i>N</i>	(%)
Gender				
Boy	718	(11.8)	37	(6.3)
Girl	5,326	(87.9)	549	(93.7)
Unknown	16	(0.3)		
Age				
12 or under	1,564	(25.8)	242	(41.3)
13–14	1,945	(32.1)	202	(34.5)
15–17	1,993	(32.9)	122	(20.8)
18+	478	(7.9)	16	(2.7)
Unknown	80	(1.3)	4	(0.7)
User experience ^a				
First time	847	(47.2)	320	(55.0)
Recurrent (1–3 times)	517	(28.8)	165	(28.4)
Experienced (4–10 times)	268	(14.9)	68	(11.7)
Very experienced (over 10 times)	162	(9.0)	29	(5.0)
Reason for contact ^b				
Peer relationships	1,820	(30.0)	197	(33.6)
Psychosocial mental health	1,287	(21.2)	131	(22.4)
Body and health	731	(12.1)	64	(10.9)
Family relationships	637	(10.5)	79	(13.5)
Sex and sexuality	455	(7.5)	25	(4.3)
Abuse and violence	452	(7.5)	35	(6.0)
School-related issues	174	(2.9)	14	(2.4)
Problems with authorities	60	(1.0)	2	(0.3)
Other	444	(7.3)	39	(6.7)

*** $p < 0.001$.

** $p < 0.01$.

* $p < 0.05$.

^aSince this is self-reported, the information is only available for children who answered the End-Session Questionnaire.

^bPrimary reasons for contact – only one reason was chosen.

well as sessions with more than 80 messages from the counsellor. Approximately half of the sessions ended within an hour, while 6.5% of the sessions lasted for more than a day. Longer sessions were handled by more than one counsellor, who typically work in four-hour shifts (Børns Vilkår, 2015).

Data analysis

The base material for the qualitative study was 1,443 answers from children and young people in the open-ended sections of the ES-Q (one open-ended question) and the FU-Q (two open-ended questions). Of these answers, 719 did not include explicit feedback on the counsellors' actions or were too ambiguous to interpret; these were removed from the analysis. Examples of answers not included in the analysis are: "Keep on doing what you do" and "Shit, the person didn't help me". The remaining 724 answers were included in the analysis. Some sessions included answers to one of the open-ended questions, others to two or all three. The 724 answers represent 586 individual sessions conducted by at least 166 counsellors.

Themes were extracted using an organic approach to coding and theme development (Clarke & Braun, 2018). The analytic approach was primarily inductive, where codes and themes were developed based on the data (Braun, Tricklebank, & Clarke, 2013). Coding was done on the full responses (which generally were very brief), allowing each comment from a child to be assigned as many codes as relevant. The aim was to identify and subtract patterns of meaning (themes) across the 724 comments (Clarke & Braun, 2014).

Coding of the 724 responses was done by the second and third authors in a stepwise process. First, the third author applied open coding (Glaser & Strauss, 1980) on the entire dataset. Then these codes were merged into categories and subcategories. A first set of themes was then developed from the categories. The second author then applied focused coding (Charmaz, 1994) on the entire dataset based on the developed themes, and lastly, responses that were not included in the developed themes and categories were recoded using open coding to see if themes that were overlooked in the first process would emerge. This led to a few additional categories.

To keep an open mind to the data, the authors were blind to the child's quantitative evaluation of the session, as well as the child's gender, age or any information about the session content, throughout the entire coding process.

Ethics

The study is based on anonymised data that are routinely collected at the child helpline in agreement with the national Danish Data Protection Agency (ref. 2012-42-0291), which also includes permission to share these data for research purposes, as long as they cannot be traced back to any specific child. This study is in accordance with the purpose of the helpline, to provide children with a voice and to listen to their opinions on matters that concern them.

The children that contact the child helpline are anonymous. Throughout this study, they retained this status, but data were provided with unique IDs that allowed us to associate the counselling sessions with the questionnaires.

The SMS system at the Danish child helpline was created in a way that ensures that the helpline, as well as researchers or other third parties, does not have access to the child's telephone number. When the child texts the helpline, the child receives an automated message. During the data collection period, this text also provided a link with additional information about the research project (a child-friendly version of the research protocol).

When the counsellor ends the session, an automated text with a link to the ES-Q is sent to the child. Children who gave active consent in the ES-Q received an automated message two weeks later with a link to the FU-Q. The children were informed that this automated text message would be sent on a weekday at 7:30 pm and that they could leave the study at any time by writing a text saying "Nej tak" ("No thanks") in which case they would not receive any texts. The questionnaires

were distributed through the helpline's text system, protecting the children's anonymity throughout the entire study.

All counsellors received information about the study and that sessions would be documented, evaluated and subjected to analysis.

Results

Analysis of the 724 answers revealed two major and two minor themes concerning counsellor behaviour, as well as one minor theme concerning the medium of texting as a basis for counselling. Table 2 presents these themes and their subcategories.

Direct quotes are included in the analysis. Children answered in Danish, but the quotes used in this article have been translated into English, attempting to be as loyal to the original text as possible. However, spelling errors and major grammatical errors were not translated. Each quote is supplemented by information on the child's gender and age, information gathered from the counsellors' logs.

Solving the problem

These were all comments that pointed to (1) the child seeking and obtaining (or not) advice or guidance on how to handle the situation the child was facing (2) and/or pointing towards changes in the child's behaviour or self-perception or perception of the situation. All of the subcategories of this theme were not only heavily represented in the ES-Q but also a very strong factor when the child – two weeks later – was asked to look back at what happened in the counselling session.

The children told us that they found the counselling session useful when they were able to learn what to do or to see their situation from a new perspective later: "I got a lot of good advice and a good response, so I knew what I could do [...]" (girl, 16) and "I found it REALLY helpful, I didn't know what I was supposed to do, now I know exactly what to do??" (girl, 12).

Table 2. Themes, categories and number of occurrences.

Themes	End-session		Follow-up	
	Positive comments	Negative comments	Positive comments	Negative comments
Categories				
Solving the problem				
The counsellor ...				
... helped me with what I need to do	76	19	63	4
... gave me the advice I needed	76	50	43	23
... helped me see myself and my situation differently	21	–	29	1
Building rapport				
The counsellor ...				
... was understanding and took me seriously	68	31	31	7
... was kind and friendly	47	11	14	4
... showed compassion	23	27	16	16
... listened to me	16	15	18	6
... had time for me	12	24	4	5
... let me talk about the things I needed to talk about	19	40	7	12
... explored my situation actively	6	22	5	5
The counsellors' skills				
The counsellor ...				
... was knowledgeable – good at explaining things and answering my questions	6	7	1	–
... answered in an age-appropriate way	9	19	4	3
The counselling relationship				
Wanted to know personal things about the counsellor	1	12	–	5
Experienced the counsellor as "mechanic"	–	11	2	3
The text message format				
Appreciated the SMS format	16	1	6	2
Experienced too much waiting time before or during the session	2	45	4	7

Examples of counselling leading to new perspectives were as follows: “The conversation made me see things in a different way” (boy, 10) and “I felt, I was shown an entirely new direction I hadn’t seen before. A new door was opened with better opportunities. I did what the person I wrote with and I agreed upon [...]” (girl, 16).

Typically, child helpline counsellors attempt to reduce the asymmetric and normative imperative of advice giving (Butler, Potter, Danby, Emmison, & Hepburn, 2010) by trying to avoid directives and instead finding solutions in collaboration with the child. This type of collaborative problem-solving was illustrated in the following comment: “It was totally nice to feel supported, and that nobody was making any choices for you, but instead helped you make your own decisions” (girl, 14). However, other children seemed to appreciate a more directive counselling approach: “I got good advice to solve a girl problem and I did what she told me to and the problem is solved now [...]” (boy, 11).

In the questionnaires, quite a few children asked for a more directive approach and/or that the counsellor would give more options or possible actions for them to choose from: “Maybe the counsellor can give more than ONE suggestion to solve the problem if that is possible” (girl, 11) and “Come up with more suggestions on what to do” (girl, 14).

A few comments indicated that applying a collaborative style, where counsellors seek to help the child or the young person to gain his or her own insights, is not always successful: “I don’t feel it was clarified what I could do better. The writing was kind of foggy, so I wasn’t wiser on what I could do” (girl, 14) and “I would like to have gotten more specific advice on exactly what to do to solve the problem. It is difficult to get there myself” (girl, 19).

Even though many children were happy to feel listened to, many seemed to have an expectation of a counselling session including advice and guidance on actions. As a 14-year-old girl put it: “[...] you are not helping – you only listen [...]”.

Building rapport

For this theme we found the proportion of negative comments much higher than for the previous theme. This is not necessarily an indication that the counsellors are less successful in building rapport, but perhaps negative counsellor behaviour under the heading of building rapport is much more noticeable to children seeking help. It is clearly important for the children to meet a counsellor who they feel takes them seriously, and who is kind and friendly.

Being kind and friendly included prioritising time to listen and show understanding and compassion: “I was very relieved, because the person took REALLY good time for me, and immediately answered ALL my questions. So I felt taken seriously. For the first time I felt that someone understood, and was properly listening to me!” (girl, 14). Some children on the other hand felt more expedited: “Think the employee was like very fast to just get the problem solved and then on to the next one. It didn’t feel like the person had time or that she wanted to help. [...]” (girl, 17).

To show understanding, friendliness and compassion requires words, especially when the body is invisible: “The longer your messages are, the more serious you seem” (girl, 13). While SMS messages are often thought of as short texts, in the context of counselling there might be such a thing as “too short”. Full messages that explore, suggest, explain and show effort and willingness to explore the child’s situation are preferable (Sindahl & van Dolen, 2018; Sindahl, Fukkink, & Helles, 2018). This needs to be done in a way that is understandable and adapted to the child’s age and cognitive skill level, as well as to his or her psychological readiness: “[The helpline] got me explained – in an understandable way” (girl, 13) and “[...] they welcomed me and talked decent to me at the level I was ready for” (girl, 10).

The counsellors’ skills

To match the child’s age and cognitive level is a balancing act that the counsellor needs to master. It demands not too much and definitely not too little:

The conversation could have been better, if the counsellor had been more competent. The questions I received were just too simple and ... so stupid that I didn't get anything out of the session and therefore I stopped it. When I write that I want to move out, questions like "You want to move out?" and "Is that a possibility for you?" don't help. I don't know what to do, that is why I write you. (Girl, 18)

However, several children emphasised how the counsellors had great knowledge on the topics discussed and were able to explain different concepts in a way that was understandable: "The counsellor had good expressions and things were made crystal clear, without being patronising. I give thanks" (girl, 14) and:

I have tried contacting others but they just gave grown-up answers like, it will come with time and that was that, so when I got another type of answer on [the helpline], which really helped a lot, I was very happy. (Girl, 13)

The counselling relationship

At the child helpline, the counsellors are anonymous. They can reveal their age or gender if asked, but in general the sessions are perceived as an interaction between child and counselling service – not child and counsellor. A few children mentioned that they would have liked to know the gender of the counsellor. A few also mentioned a need for the counsellor to express his or her opinion or own experiences more clearly.

Another aspect concerned the counsellor coming across as a robot – a nonhuman providing standardised answers or questions: "[...] what you could do better is perhaps not saying the same to all children but try to say something different to each child" (girl, 11) or "I feel that you are just repeating what I say" (girl, 12).

The text message format

On a positive note, quite a few children emphasised their appreciation of the possibility of writing about their problems: "[...] I also felt it was like a sort of diary I could tell anything to, and then it would give me answers [...]" (girl, 14). They also talked about the feeling of anonymity, being able to talk to a stranger instead of a person they knew and the possibility of rereading the conversation after it ended.

On a more critical note, we found a substantial number of comments from children frustrated about waiting – either before getting through to a counsellor or waiting for replies during the session:

If the answers came a bit faster, because otherwise you could feel that you have forgotten the feeling you had when you wrote, or you have just lost the motivation to write. Or that you write when you have time, but you get an answer when you have something you need to do. (Girl, 17)

Balance

The analysis of the children's comments after SMS sessions with the child helpline showed that providing advice and providing a caring atmosphere seemed to be in circular dependency rather than a question of either/or. Many comments pointed to both the problem-solving aspects and the rapport-building aspects of the counselling session. The analysis also showed that some children had a preference – or that some topics demanded – that the counsellor emphasise one or the other type of counsellor behaviour: "Felt there was much constructive advice, and not only 'comforting'" (boy, 18) and "I [...] managed to complete the things we talked about I should do [...] I felt that maybe the counsellor could be showing more compassion" (girl, 12).

To balance is also to meet the child age-appropriately and in conjunction with the child's cognitive level and psychological readiness. It involves showing sensitivity towards where the individual child is – both in general and right here and now. Several children commented on this, talking about what

happened after the session ended: “Nothing happened because I didn’t have enough courage” (girl, 12) and “Hmm maybe all I needed was some acknowledgement and just talking about stuff instead of the counsellor trying to get me to do things I am not ready for ... Like eating more or telling my parents” (girl, 18).

Discussion and conclusion

Understanding how the client views the counselling process is vital in predicting positive changes in the client’s life (Horvath, Symonds, & Harmon, 1991). In this study, we explored how children experience text counselling sessions at a child helpline.

Only a few comments concerned the medium. Some children would express their appreciation for writing instead of talking about their problems. Research indicates that the process of writing meets young people’s communication preferences (Gibson & Cartwright, 2014; Ling, 2010; Lyddy et al., 2014) and has a therapeutic effect in itself (Bolton, 2004; Gibson & Cartwright, 2014; Sindahl, 2013; Slatcher & Pennebaker, 2006). Other children would express frustration with regards to the inevitable waiting time that occurs when the service is asynchronous and more popular than the resources available can accommodate. Previous studies of chat and text counselling have pointed to the slowness of the communication being an obstacle for both counsellors and clients – perhaps challenging the feeling of presence (Bambling, King, Reid, & Wegner, 2008; Gibson & Cartwright, 2014). However, others have pointed to this as an opportunity to keep the client in a reflective state, and not having to produce content immediately (Fukkink & Hermanns, 2009b). A recent study suggests that the slowness in response is positive for the person producing the response and frustrating for the person waiting for it (Sindahl & van Dolen, 2018).

Nevertheless, most children did not comment on the medium but instead focused primarily on the counselling content and the relationship with the counsellor (who was anonymous to them and at times would be switched out once or several times during a session). This bears witness to the concept of immediacy – that the sense of psychological closeness can overcome the physical distance in such a way that the technology moves to the background and outside one’s awareness (Lombard & Ditton, 1997).

Child helplines are important and relevant tools in implementing Article 12 of the United Nations Convention on the Rights of the Child (the child’s right to be heard) (United Nations, 1989), a paragraph that child helplines all over the world can connect to: “At the core of our work is children’s right to be heard, to express themselves and to be listened to with empathy” (Child Helpline International, 2017b). Empathetic listening is important to the children and young people seeking help via texting. We found that children who sought text counselling were highly sensitive to the counsellors coming across as friendly and kind, while working with them on finding solutions to the problems they present. They needed to feel that they were taken seriously by the counsellor, and that the counsellor was committed to help and would give them the time needed. Research has shown that building rapport is no less important in mediated counselling than off-line (Chardon, Bagraith, & King, 2011; Gibson & Cartwright, 2014; Williams, Bambling, King, & Abbott, 2009). Our study to some extent supports these findings; however, while some children seemed to have a preference for a supportive, listening approach – using the service to vent more than to explore solutions – many others seemed to have strong desires to find ways out of their problems by use of the texting service.

Studying the comments showed that providing advice and a caring atmosphere seemed to be in circular dependency rather than a question of either/or. This balance is a challenging task for the counsellor, who, based on very little information (text messages in this case), has to assess what the child needs in order to move forward. At the same time the counsellor only has very few “speech actions” to do so (on average the counsellor sends 14 messages during a session), which means that he or she can’t drive the session forward using minimal responses such as “hmm” and

“tell me more ... ” (Danby, Butler, & Emmison, 2009). The counsellor needs to match the child’s needs immediately and give as much as possible with the very little information and text available.

Previous studies of online counselling with children have found that while clarifying problems and planning actions are common counsellor practises, exploring young people’s goals and reasons for seeking help is more sparsely applied (Chardon et al., 2011; Williams et al., 2009). Reading some of the comments from the children immediately after ending the counselling session, we wonder how it would have changed the direction of the session if children had been encouraged to express their hopes and wishes during the session rather than afterwards in an online questionnaire.

The findings in this study mirror the classical work of Bordin (1979) on working alliance in therapeutic relationships. According to Bordin, three discrete components are crucial to the effects of therapy: the bond (referring to mutual trust, acceptance and confidence), the goal (referring to the agreement on where the therapy should take the client) and the task (referring to the agreement on how the therapy should reach its goals). Analysing the 724 answers from children on productive and unproductive counsellor behaviour, we found that the children expressed how they felt listened to and accepted by the counsellor (bond), how they felt lighter and had new perspective or a plan of action based on the interaction with the counsellor (goal) and how counsellors often were sensitive to the child’s readiness for change, providing advice and directives when needed and a listening ear when the child was seeking that (task).

When children and young people seek help through texting, these old insights still apply. Early, as well as some contemporary, work on computer-mediated communication focused on “channel reduction” (Bambling et al., 2008; Fukkink & Hermanns, 2009a). Online communication is (often) “placeless”, “faceless” and “voiceless”, and a lack of nonverbal cues might limit the feeling of presence and the richness of the information getting through to the other party (Fukkink & Hermanns, 2009a). This was believed to promote a dialogue that was more impersonal and factual than if the parties were sitting across from each other (Powell & Roberts, 2017). On the other hand, the work of Suler suggested that anonymity, invisibility, asynchronicity, feeling more in power and less like reality, might actually promote a more open and disclosing attitude that might be productive in a counselling context (Suler, 2004). If texting is an ineffective way of communicating about problems and feelings, we must wonder why so many young people do it.

Even in the format of brief text messaging, counselling sessions are not “thin counselling sessions”. On the contrary, counsellors condense what in a phone conversation would be longer exchanges into a few condensed messages signalling care, concern and advice giving. According to the children seeking this service, advice needs to be spot on and immediate. The counsellor needs to point to – or explore – practical or cognitive actions that leave the child with a feeling of knowing what to do and being able to implement those changes with or without the help of others.

There are no standard solutions here. Some children need concrete and clear advice as well as comfort; others need to vent their feelings and be supported through a difficult time. This demands an enormous sensitivity and flexibility from the counsellor.

Limitations

A limitation of this study is the exclusive focus on the child’s own descriptions of the effects of the interaction. While the children might be experts in their own life, they are not experts in counselling, and so will hardly have the theoretical background to understand the full complexity of the intervention they have been a part of. In addition, the study is limited in the sense that the researchers have not had a chance to ask in-depth questions and to explore the children’s experiences in an even more qualitative manner. Future studies could benefit from a more in-depth exploration.

Note

1. Registered sessions from the helpline documentation system.

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References

- Bambling, M., King, R., Reid, W., & Wegner, K. (2008). Online counselling: The experience of counsellors providing synchronous single-session counselling to young people. *Counselling and Psychotherapy Research*, 8(2), 110–116. doi:10.1080/14733140802055011
- Bolton, G. (2004). *Writing cures, an introductory handbook of writing in counselling and psychotherapy*. Hove, East Sussex: Brunner-Routledge.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy, Theory, Research and Practice*, 16(3), 252–260.
- Børns Vilkår. (2015). *SMS Arbejdshæfte og Quickguide* [SMS workbook and quickguide]. Unpublished internal document. Valby: Børns Vilkår.
- Børns Vilkår. (2018). *Dokumentationsrapport 2017* [Documentation Report 2017]. Unpublished internal document. Valby: Børns Vilkår.
- Braun, V., Tricklebank, G., & Clarke, V. (2013). It shouldn't stick out from your bikini at the beach. *Psychology of Women Quarterly*, 37(4), 478–493.
- Brenes, G., Ingram, C., Danhauer, S., Roberts, M. C., Barnett, J. E., & Kelly, J. F. (2011). Benefits and challenges of conducting psychotherapy by telephone. *Professional Psychology: Research and Practice*, 42(6), 543–549.
- Butler, C. W., Potter, J., Danby, S., Emmison, M., & Hepburn, A. (2010). Advice-Implicative interrogatives: Building “client-centered” support in a children’s helpline. *Social Psychology Quarterly*, 73(3), 265–287. doi:10.1177/0190272510379838
- Chardon, L., Bagraith, K., & King, R. (2011). Counseling activity in single-session online counseling with adolescents: An adherence study. *Psychotherapy Research*, 21(5), 583–592. doi:10.1080/10503307.2011.592550
- Charmaz, K. (1994). The grounded theory method. In B. Glaser (red.), *More grounded theory methodology, a reader* (pp. 95–115). Mill Valley, CA: Sociology Press.
- Child Helpline International. (2017a). We listen to the voices of children and young people. Retrieved from <https://www.childhelplineinternational.org/wp-content/uploads/2017/11/WeListen.pdf>
- Child Helpline International. (2017b). Annual report 2016. Retrieved from <https://www.childhelplineinternational.org/wp-content/uploads/2017/09/2016-Annual-Report.pdf>
- Clarke, V., & Braun, V. (2014). Thematic analysis. In T. Teo (Ed.), *Encyclopaedia of critical psychology* (pp. 1947–1952). New York, NY: Springer. doi:10.1007/978-1-4614-5583-7
- Clarke, V., & Braun, V. (2018). Using thematic analysis in counselling and psychotherapy research: A critical reflection. *Counselling and Psychotherapy Research*, 18(2), 107–110. doi:10.1002/capr.12165
- Danby, S., Butler, C., & Emmison, M. (2009). When “listeners can’t talk”: Comparing active listening in opening sequences of telephone and online counseling. *Australian Journal of Communication*, 36(2), 1–23.
- Frehner, C. (2008). *Email, SMS, MMS, the linguistic creativity of asynchronous discourse in the new media age (linguistic insights 58)*. Bern New York: Peter Lang.

- Fukkink, R. G., & Hermans, J. M. A. (2009a). Children's experiences with chat support and telephone support. *Journal of Child Psychology and Psychiatry*, 50(6), 759–766. doi:10.1111/j.1469-7610.2008.02024.x
- Fukkink, R., & Hermans, J. (2009b). Counseling children at a helpline: Chatting or calling? *Journal of Community Psychology*, 37(8), 939–948. doi:10.1002/jcop.20340
- Gibson, K., & Cartwright, C. (2014). Young people's experiences of mobile phone text counselling: Balancing connection and control. *Children and Youth Services Review*, 43, 96–104. doi:10.1016/j.chilyouth.2014.05.010
- Glaser, B., & Strauss, A. L. (1980). *The discovery of grounded theory, strategies for qualitative research*. New York: Aldine Publishing.
- Goumi, A., Volckaert-Legrier, O., Bert-Erboul, A., & Bernicot, J. (2011). SMS length and function: A comparative study of 13- to 18-year-old girls and boys. *Revue Européenne de Psychologie Appliquée/European Review of Applied Psychology*, 61(4), 175–184.
- Haxell, A. (2015). On becoming textually active at youthline, New Zealand. *British Journal of Guidance & Counselling*, 43(1), 144–155. doi:10.1080/03069885.2014.922163
- Helles, R. (2013). Mobile communication and intermediality. *Mobile Media & Communication*, 1(1), 14–19. doi:10.1177/2050157912459496
- Horvath, A., Symonds, B., & Harmon, L. W. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38(2), 139–149.
- Ling, R. (2010). Texting as a life phase medium. *Journal of Computer-Mediated Communication*, 15(2), 277–292. doi:10.1111/j.1083-6101.2010.01520.x
- Lombard, M., & Ditton, T. (1997). At the heart of it all: The concept of presence. *Journal of Computer-Mediated Communication*, 3(2). doi:10.1111/j.1083-6101.1997.tb00072.x
- Lyddy, F., Farina, F., Hanney, J., Farrell, L., & Kelly O'Neill, N. (2014). An analysis of language in university students' text messages. *Journal of Computer-Mediated Communication*, 19(3), 546–561. doi:10.1111/jcc4.12045
- Mallen, M. J., Vogel, D. L., Rochlen, A. B., & Day, S. X. (2005). Online counseling: Reviewing the literature from a counseling psychology framework. *Counseling Psychologist*, 33(6), 819–871.
- Mishara, B., & Kerkhof, A. (Eds.). (2013). *Suicide prevention and new technologies*. Basingstoke: Palgrave Macmillan.
- Powell, P., & Roberts, J. (2017). Situational determinants of cognitive, affective, and compassionate empathy in naturalistic digital interactions. *Computers in Human Behavior*, 68, 137–148. doi:10.1016/j.chb.2016.11.024
- Rettie, R. (2009). Mobile phone communication: Extending Goffman to mediated interaction. *Sociology*, 43(3), 421–438. doi:10.1177/0038038509103197
- Seo, M., Kim, J., & Yang, H. (2016). Frequent interaction and fast feedback predict perceived social support: Using crawled and self-reported data of Facebook users. *Journal of Computer-Mediated Communication*, 21(4), 282–297. doi:10.1111/jcc4.12160
- Sindah, T. (2013). *Chat counselling for children and youth - a handbook*. Amsterdam: Child Helpline International.
- Sindah, T. N. (2016). Ti forskelle på chat og SMS. *Talerøret*, Unpublished internal document. Valby: Børns Vilkår.
- Sindah, T. N., Fukkink, R. G., & Helles, R. (2018). *SMS counseling at a child helpline: - counselor behavior, child stressors, and well-being*. Manuscript submitted for publication.
- Sindah, T. N., & van Dolen, W. M. (2018). *Texting at a child helpline: - how structural characteristics of text message counseling influence counseling impact*. Manuscript submitted for publication.
- Slatcher, R. B., & Pennebaker, J. W. (2006). How do I love thee? Let me count the words: The social effects of expressive writing. *Psychological Science*, 17(8), 660–664. doi:10.1111/j.1467-9280.2006.01762.x
- Suler, J. (2004). The online disinhibition effect. *CyberPsychology & Behavior*, 7(3), 321–326. doi:10.1089/1094931041291295
- The United Nations. (1989). *Convention on the rights of the child*. Treaty Series, 1577, 3.
- Williams, R., Bambling, M., King, R., & Abbott, Q. (2009). In-session processes in online counselling with young people: An exploratory approach. *Counselling and Psychotherapy Research*, 9(2), 93–100. doi:10.1080/14733140802490606

Paper IV

Manuscript title: Texting for Help: - Processes and Impact of Text Counseling with Children and Youth with Suicidal Ideation

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Texting for Help: Processes and Impact of Text Counseling with Children and Youth with Suicide Ideation

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Objective: To explore: (1) how children contacting a child helpline with suicide ideation differ from children discussing other topics, (2) whether text messaging effectively helps, and (3) which counselor behaviors are most effective.

Method: Of 6,060 text sessions at the Danish national child helpline, 444 concerned suicidality, of which the 102 sessions that included self-rated, end Session ratings were selected for content analysis.

Results: Twenty-six percentage of suicidal children had severe suicidality. The suicide sample had significantly more girls, was older than the nonsuicide sample, and more often recontacted the helpline in the 2 weeks prior to follow-up. 35.9% of suicidal children felt better immediately and over half ended the session with a plan of action. At follow-up, 23.9% of suicidal children reported feeling better; however, 37.0% reported feeling worse. Talking about emotions, expressing empathy, and encouraging the child to talk to someone were associated with positive impacts. Setting boundaries was associated with negative impacts.

Conclusions: Texting with suicidal children can be helpful, but should be considered a first step toward obtaining more sustainable help. Research is needed to determine how to better help children who felt worse or did not improve in the 2 weeks after contacting the helpline. Suggestions to further training of counselors are discussed.

In 2016, the Danish helpline conducted 9,685 counseling sessions by SMS text message exchanges and 6.3% of them concerned suicide as the main topic. Research (Zøllner, Rask, & Konieczna, 2013) found that 5.5% of Danish youth between age 13 and 18 years report that they have attempted suicide at least once and most are girls (67.8%). The same study showed that teenagers who have attempted suicide have significantly fewer

face-to-face contacts with peers, compared to teenagers who have not reported suicidal behavior. In addition, teenagers who are not thriving use texting/SMS significantly more than their peers (Zøllner et al., 2013).

Increasingly, child helplines are using new technologies to offer services that correspond to the changing communications preferences of their clients (Crosby Budinger, Cwik, & Riddle, 2015). In this article, we

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examine the use of text messaging in counseling children and young people with suicide ideation. Today, SMS counseling is the second most common way for children to receive help from a child helpline worldwide, after telephone contacts (Child Helpline International, 2017). However, we have little research on the effectiveness of text counseling, compared to help provided by telephone and Internet chat (Evans, Davidson, & Sicafuse, 2013; Mishara & Côté, 2014).

Child helplines are typically generalist helplines providing services to children with any concerns. In 2016, the Danish child helpline provided counseling 36,466 times to children and young people, of which, 2,079 counseling sessions concerned suicide. In the same year, 3,898 contacts with children and youth were answered by the national suicide helpline (Livslinien, 2017), indicating that child helplines—at least in Denmark—constitute a substantial part in suicide prevention for the younger population.

A growing body of research has consistently shown that helplines are effective tools in reducing distress and suicidality for help-seekers. Most of these studies concern telephone-based services (Gould, Kalafat, HarrisMunfakh, & Kleinman, 2007; King, Nurcombe, Bickman, Hides, & Reid, 2003; Lester, 2012; Mishara & Daigle, 1997; Mishara et al., 2007a) and one concerns chat-based interventions (Mokkenstorm et al., 2017). To our knowledge, there are no published studies on the efficacy of text-based suicide helpline services.

Studies have examined the relationship between counselor behaviors and client impact in order to establish best practices. In a study of two Canadian telephone suicide helplines, researchers found decreased depressive mood and suicidal urgency from the beginning to the end of a call for 17% of nonfrequent callers (Mishara & Daigle, 1997). They also found evidence that an active listening Rogerian nondirective approach, combined with directive questioning to assess risk and establishing a no-harm contract with the caller, proved more effective than a more directive approach with low

levels of Rogerian techniques (Mishara & Daigle, 1997). A large scale study at the telephone-based American national suicide prevention network found positive outcomes associated with validation of emotions, giving moral support, establishing good contact at the beginning of the call, reframing, counselor talking about their own experiences, and offering call backs (Mishara et al., 2007b). Behaviors associated with collaborative problem solving were associated with positive outcomes, but just engaging in active listening was not (Mishara et al., 2007b). A similar Dutch study conducted at a chat-based crisis helpline for suicidal people showed a positive association between measures on the Crisis Call Outcome Rating Scale and counseling sessions with a higher level of using a supportive approach and good contact, collaborative problem solving and active listening (Mokkenstorm et al., 2017). However, this study did not show any relationship between counselor style and changes in the clients' emotional state and suicidal ambivalence—partly due to a high degree of missing data since suicidal ambivalence was not explored in 64.1% of the session segments (first and last 10 min of session) subjected to analysis (Mokkenstorm et al., 2017).

In the context of child helplines, a study of the Australian Kids Helpline found that both rapport-building and task-oriented processes had similar effects on the young clients (Williams, Bambling, King, & Abbott, 2009). However, they concluded that there was a slightly stronger argument for suggesting that chat counselors should put more emphasis on rapport-building than on accomplishing tasks (Williams et al., 2009). A study of the Dutch Kindertelefoon found a positive relationship between sessions (telephone and chat) where solutions were offered and the child was taken seriously by the counselor (as interpreted by a jury of expert judges) and improvement of well-being as indicated by the child (Fukkink & Hermanns, 2007).

The present study is part of a larger research project looking at the general effects of counselor behavior on children contacting a child helpline via texting (Jensen, Sindahl,

& Wistoft, 2018; Sindahl, Fukkink, & Helles, 2018; Sindahl & van Dolen, 2018). The aims of this study are to determine (1) how children and youth contacting a child helpline with suicide ideation differ from children and youth discussing other topics; (2) whether text messaging helps children and young people with suicide ideation; and (3) which counselor behaviors are more effective for helping children with suicide ideation via texting.

We analyzed a sample of SMS sessions from a child helpline in order to determine the association between the session process and its impact, as indicated by the child immediately after receiving counseling and at a 2-week follow-up. Assessing impact of anonymous, technology-mediated counseling is challenging (Mishara & Côté, 2014; Mishara & Daigle, 1997; Mishara et al., 2007a), but the technology of SMS counseling has opened up ways of distributing questionnaires while still acknowledging the service users' need for informed consent and anonymity.

METHODOLOGY

The data for this study were collected at the Danish child helpline, *BørneTelefonen*. The helpline offers mediated one-session counseling for children and young people under the age of 23 by telephone, chat, an online advice column, and texting. The helpline is accessible online and through the common European child helpline number 116,111 and is staffed 365 days a year from 11:00 a.m. until 2:00 a.m. The helpline is primarily staffed by 450 trained volunteers—all with a professional background in child work.

Sample

Data were collected from June 14, 2015, to June 14, 2016. During this period, all children using the texting service, when a counselor ended the session, were presented with an automated text with a link to an online questionnaire. We excluded from the data set sessions with young people older than age 23, noncounseling seeking contacts and

third party contacts. This left a data set of 6,060 text-counseling sessions with children and young people. In 444 cases (7.1%), suicidal thoughts or behavior were either the primary reason for contact ($n = 303$) or a related topic ($n = 141$). The children contacting the helpline are anonymous and for this reason, the sample contains an unknown number of children who have contacted the center on more than one occasion.

Impact Study Sample. In 1,875 sessions, the child answered the End Session Questionnaire (EQ) (response rate: 30.9%). In 1,307 cases (69.7%), we received consent to send out the Follow-Up Questionnaire (FQ) and we received answers representing 652 sessions (49.9% of questionnaires sent). A Mann–Whitney U test was used to determine if participants who completed the FQ reported different immediate impact than participants who did not. The results showed significant differences between the two groups, $U = 458,018$, $z = 4.814$, $p < .001$. This indicates a positive bias in the data, which likely also applies for the EQ data. Such a positive bias for self-rated outcome measures in helpline research is suggested and discussed by Mokkenstorm et al. (2017) and Mishara et al. (2007b).

Content Analysis Sample. For the content analysis, we selected all sessions concerning suicide where the EQ was answered (excluding one who explicitly asked for the session not to be logged). The content analysis included 102 sessions (23.0% of all suicide sessions) (Figure 1).

Preliminary analyses were conducted to test whether the selected sessions (respondents) differed from nonrespondents. Nonparametric chi-square analyses were conducted with nominal variables, and univariate parametric analyses of variance were performed with continuous variables in order to compare responders and nonresponders on the outcome variables. We tested the variables: gender, age, reason for contact, session length, and average number of characters per text from the child and the counselor. Respondents and nonrespondents differed on the impact variables only in age ($F(1,431) = 20.92$, p

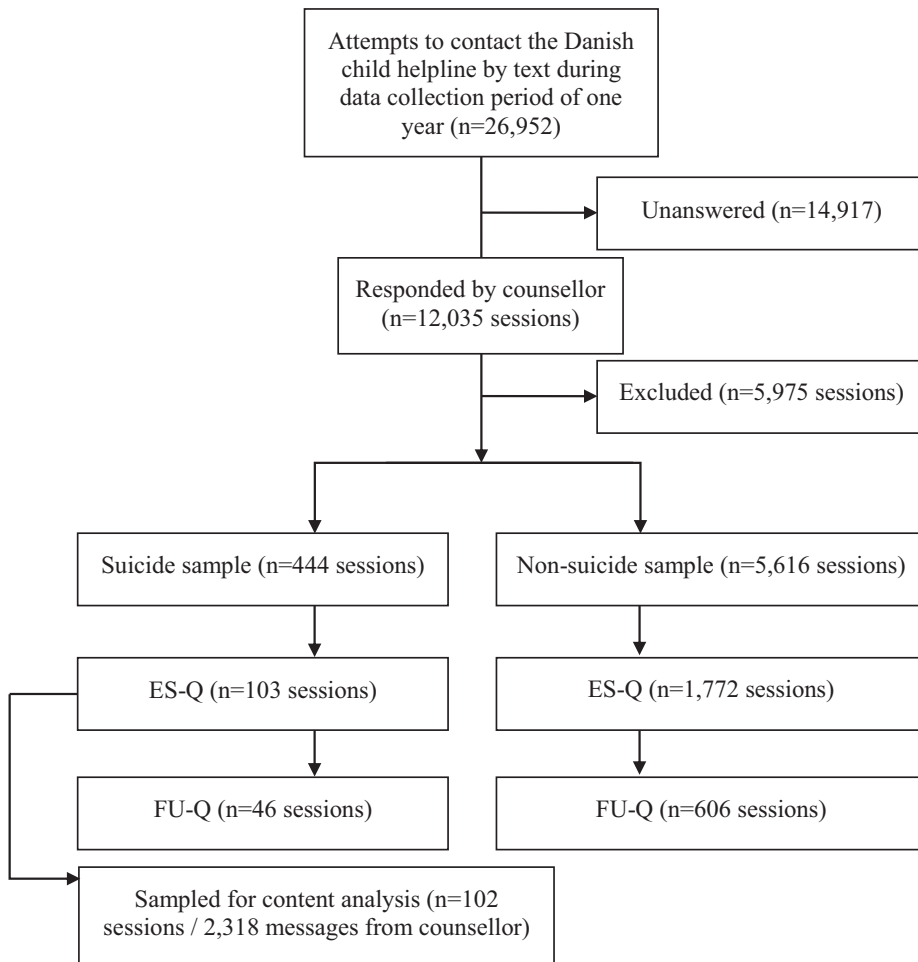


Figure 1. Consort diagram of sample.

= .05), gender ($\chi^2(N = 444, 1) = 8.46, p < .05$), and average number of characters per text from the child ($F(1,444) = 4.80, p = .05$).

Data Sets and Instruments

The child helpline's recording system provides information on session content, waiting time, latency time, text mass, session length (number of messages), and session duration. The counselor journal after each session contains information about the child's gender, age, and reasons for contact. Impact data were collected in an online questionnaire using IBM Data Collection Interviewer Server Administration Version 6. The data sets

were merged by use of a unique user ID for each session.

Content Analysis. A coding manual (Eskjær & Helles, 2015; Krippendorff, 2012; Neuen-dorf, 2002) was developed for the study based upon previous content analysis of comforting messages (Bippus, 2001; Burlson, 1984, 1985; Burlson & Goldsmith, 1998; Burlson & Samter, 1985; Caplan & Turner, 2007; Jones & Burlson, 1997), counselor behavior (Bedi & Duff, 2014; Bedi & Mallinckrodt, 2006; Duff & Bedi, 2010; Fukkink & Hermanns, 2007, 2009; Nieuwboer, Fukkink, & Hermanns, 2014; Williams et al., 2009), social support behavior (Cutrona & Russell, 1990; Cutrona & Suhr, 1992; Fukkink, 2011), and helper responses (Mishara & Daigle,

1997; Mishara et al., 2007a,b), adapted to the specificity of this particular context.

Three master's degree students and two counseling employees, who were blind to the impact scores, were trained by the first author to rate the session transcripts (522 sessions/7,657 messages). The data unit was identified as a full text message from a counselor. Each message was rated on 15 variables—"1" if the behavior was present, "0" if the behavior was absent in the message unit. A randomly selected 82 (15%) sessions were also rated by a researcher serving as "gold rater" (Mor et al., 2003). Interrater reliability was calculated on a message-by-message basis (1,068 messages). In cases of discrepancies, the rating was discussed by the two raters until consensus was reached. The average kappa was .718 (with the lowest agreement of 82.6% for paraphrasing, and the highest agreement of 99.2% for inviting the child to reconnect). See Table 1 for details.

For the suicide sample, an additional five variables were added (see Table 2)—one concerning the suicide risk level and four

concerning the extent that the counselor had performed components of a risk assessment. The same technique for calculating interrater reliability was applied with 38 out of the 102 suicide sessions (37.3%) rated by two raters. The average kappa was .715 (with the lowest agreement of 78.9% for assessing acute risk, and the highest agreement of 97.4% for assessing suicide thoughts).

End Session and Follow-up Questionnaire. The questionnaires used for this study were developed for the particularities of this type of counseling (anonymous, one-session only and targeting children and young people), the purpose of the service (increasing well-being, instilling empowerment, and giving children a voice), and to increase the likelihood of completion (e.g., by reducing the number of items to a minimum). In the development of the questionnaires, items were adapted from comparable studies or relevant standardized questionnaires (Andersson & Osvaldsson, 2012; Elliott & Wexler, 1994; Fukkink & Hermanns, 2007; Goodman, n.d.; King, Bambling, Reid, & Thomas, 2006; Riemer & Kearns, 2010).

TABLE 1
Interrater Reliability

Variable	% agreement	Cohen's kappa	Reliability value ^a
Encouraging to talk to someone (else) about the problem	88.9	.707	Substantial
Exploring the problem	87.2	.724	Substantial
Directive counseling	90.5	.662	Substantial
Collaborative problem solving	86.0	.674	Substantial
Providing factual information	94.3	.727	Substantial
Referral to other professionals	94.2	.744	Substantial
Empathetic statements or exploring emotions	90.6	.680	Substantial
Complimenting	96.9	.820	Outstanding
Normalizing	98.5	.822	Outstanding
Showing presence	97.7	.861	Outstanding
Inviting to reconnect	99.2	.901	Outstanding
Paraphrasing	82.6	.619	Substantial
Setting boundaries (counselor regulating the session)	96.7	.598	Moderate
Transparency	89.7	.578	Moderate
Asking for child's point of view (letting the child regulate the session)	86.1	.646	Substantial

Calculated for 1,066 messages from 82 sessions.

^aMcHugh, 2012.

TABLE 2
Risk Level and Risk Assessment, Suicide Sample
(*n* = 102)

	<i>N</i>	(%)
Risk level ^a		
Suicidal thoughts	76	(74.5)
Suicide plans	12	(11.8)
Acute risk	14	(13.7)
Assessment of suicidal thoughts		
Was spontaneously revealed by the child	93	(91.2)
Was expressed after counselor exploration	8	(7.8)
Not explored or revealed	1	(1.0)
Assessment of previous suicide attempts		
Was spontaneously revealed by the child	18	(17.6)
Was expressed after counselor exploration	9	(8.8)
Not explored or revealed	75	(73.5)
Assessment of suicide plans		
Was spontaneously revealed by the child	22	(21.8)
Was expressed after counselor exploration	17	(16.8)
Not explored or revealed	62	(61.4)
Assessment of acute risk		
Was spontaneously revealed by the child	25	(24.8)
Was expressed after counselor exploration	14	(13.9)
Not explored or revealed	62	(61.4)

^aRisk level is conservative, based on what has been assessed. In 61.4% of the sessions, suicide plans and acute risk were not assessed; hence, we do not know if the child actually had plans or was at acute risk.

The EQ consists of seven impact items (e.g., “After talking to BørneTelefonen, I feel . . .”), one background variable (how many times the child has used the service before), a consent form, and one open-ended question asking the child about his or her experience with talking with the helpline. All impact items were rated on a 5-point smiley scale with statements at each end of the scale (e.g., “. . . much worse”(=1)/”. . . much better”(=5)).

The FQ consisted of six impact items (four of which were repeated from the EQ with minor adaptations), one background variable

(had the child been in contact with the helpline within the past 2 weeks?), and two open-ended questions, exploring the child’s experience with the session as well as the child’s experience after the session regarding the problems raised. All impact items were rated on the same 5-point smiley scale as the EQ.

Ethics

The study used anonymized data that are routinely collected at the child helpline in agreement with the national Danish Data Protection Agency (ref. 2012-42-0291), which also include permission to share this data for research purposes, as long as it cannot be traced back to any specific child. Conducting this study is in accordance with the purpose of the helpline, to provide children with a voice and to listen to their opinions on matters that concern them.

Children who contact the child helpline are anonymous. Throughout this study, they retained this status, but records were provided with a unique ID that allowed us to associate the text messages with the questionnaires. When children text the helpline, they receive an automated message informing them that the dialogue will be saved for the purpose of improving the service. During the data collection period, this text also provided a link with additional information about the research project (a child friendly version of the research protocol). When the counselor ended the session, an automated text with a link to the EQ was sent to the child. Children who gave active consent in the EQ received an automated message 2 weeks later with a link to the FQ. The children were informed that this automated text message would be sent on a weekday at 7.30 p.m. and that at any time they could withdraw from the study by sending the text “Nej Tak” (“No thanks”), in which case they would not receive any texts. The questionnaires were distributed through the helplines text system, protecting the children’s anonymity throughout the entire study.

All counselors received information about the study and were informed that

sessions would be documented, evaluated, and subjected to analyses.

RESULTS

Suicide and Nonsuicide Sample Characteristics

Children who contact the child helpline's texting service concerning suicide often present other problems. In 32.0% of the suicide sessions, self-harm was also a topic, making this the most common related issue. Others common related issues were mental illness (15.1%), problems in their relationship with parents (14.0%), fear and anxiety (12.2%), loneliness (11.5%), eating disorders (10.4%), and bullying (7.7%). Overall, 32 related topics were documented by counselors along with a substantial "other" category (5.6%).

The risk profile of the children in the suicide sample is uncertain because suicide plans and acute risk were not assessed by the counselor, nor spontaneously revealed by the child in 63.4% of the sessions and a complete risk assessment was only present in 14 of the sessions (13.7%). In 91.2% of the sessions, the child spontaneously revealed suicidal thoughts; however, suicidal plans or acute risk was not explored in 61.4% of the sessions. However, we know that at least 12% of the sample expressed suicide plans and an additional 14% was at acute risk of attempting suicide. This leaves a minimum of 26% of the sample in the high-risk category. See Table 2 for details.

Table 3 summarizes descriptive statistics comparing the suicide and the nonsuicide sample on gender, age, and how often they used the service prior to the session. The suicide sample has significantly more girls (94.8%) than the nonsuicide sample (87.3%) ($\chi^2(1) = 21.35, p < .001$). This was expected, since we know that young suicide attempters are more often girls (Zøllner et al., 2013). However, since in Denmark 32.2% of young suicide attempters are male (Zøllner et al., 2013), there is a clear underrepresentation of boys in this helpline sample. The suicide

sample is also significantly older ($Mdn = 15$) than the nonsuicide sample ($Mdn = 14$), based on a Mann–Whitney U test, $U = 1,662,363, z = 13.635, p < .001$.

As for using the helpline repeatedly, the difference between the two groups is not significant. However, at the time of follow-up, significantly more of the suicide sample ($n = 21; 48.8%$) reported having been in contact with the helpline again in the previous 2 weeks compared to the nonsuicide sample ($n = 141; 23.8%$) ($\chi^2(1) = 14.97, p < .001$).

Effectiveness of Text Messaging for Children and Young People with Suicide Ideation

Table 4 summarizes the results from the impact measures and compares the suicide and the nonsuicide samples using a series of Mann–Whitney tests. As the impact measures are all answered on a five-point Likert scale with an unhappy smiley in one end (=1 and 2 on the scale), a neutral smiley in the middle (=3 on the scale), and a happy smiley at the other end (=4 and 5 on the scale), we report the results accordingly.

Comparing the suicide and the nonsuicide group, we see more negative impact results on all End Session impact variables for the suicide group. 35.9% of the suicide sample reported feeling better immediately after the counseling session ($M = 3.20$). This is significantly lower than the nonsuicide group ($M = 3.78$), where 60.9% reported improved well-being immediately after the session ($U = 63.928, z = -5.347, p < .001$). Almost half (48.0%) of the children in the suicide group stated that they did not feel more self-confident after talking to the helpline ($M = 2.57$), 22.8% felt they were not taken seriously by the helpline ($M = 3.74$), and a third of the children in the suicide sample were left with no plan of action (33.0%, $M = 3.30$). On the other hand, more than half of the suicide sample did leave the session with a plan of action (53.4%) and 64.4% did feel taken seriously by the helpline staff.

TABLE 3
Descriptive Statistics, Participants in Content Analysis

Sample	All sessions (<i>N</i> = 6,060)				Participated in impact study (<i>N</i> = 1,875)				Selected for content analysis (<i>N</i> = 522)			
	Suicide ^a		Nonsuicide		Suicide ^a		Nonsuicide		Suicide ^a		Nonsuicide	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
All	444		5,616		103		1,772		102		420	
Gender												
Boy	23	(5.2)	695	(12.4)	11	(10.7)	177	(10.0)	11	(10.8)	33	(7.9)
Girl	421	(94.8)	4,905	(87.3)	92	(89.3)	1,589	(89.7)	91	(89.2)	386	(91.9)
Not informed	0	(0.0)	16	(0.3)	0	(0.0)	6	(0.3)	0	(0.0)	1	(0.2)
Age												
≤12	42	(9.5)	1,522	(27.1)	18	(17.5)	698	(39.4)	17	(16.7)	171	(40.7)
13–14	88	(19.8)	1,857	(33.1)	34	(33.0)	582	(32.8)	34	(33.3)	132	(31.4)
15–17	191	(43.0)	1,802	(32.1)	35	(34.0)	428	(24.2)	35	(34.3)	103	(24.5)
18+	110	(24.8)	368	(6.6)	16	(15.5)	53	(3.0)	11	(2.6)	16	(15.7)
Not informed	13	(2.9)	67	(1.2)	0	(0.0)	11	(0.6)	0	(0.0)	3	(0.7)
User experience ^b												
First time					46	(45.5)	801	(47.3)	45	(45.0)	200	(47.8)
Recurrent (1–3 times)					23	(22.8)	494	(29.2)	23	(23.0)	129	(30.9)
Experienced (4–10 times)					16	(15.8)	252	(14.9)	16	(16.0)	52	(12.4)
Very experienced (10 < times)					16	(15.8)	146	(8.6)	16	(16.0)	37	(8.9)
Reason for contact ^c												
Peer relationships			1,807	(32.2)			643	(36.3)			138	(32.9)
Psycho-social mental health			912	(16.2)			277	(15.6)			78	(18.6)
Body and health			730	(13.0)			206	(11.6)			44	(10.5)
Family relationships			623	(11.1)			241	(13.6)			62	(14.8)
Sex and sexuality			454	(8.1)			97	(5.5)			16	(3.8)
Abuse and violence			428	(7.6)			106	(6.0)			33	(7.9)
School-related issues			173	(3.1)			53	(3.0)			9	(2.1)
Problems with authorities			56	(1.0)			10	(0.6)			1	(0.2)
Other			433	(7.7)			139	(7.8)			39	(9.3)

^aSessions where suicide was either the primary reason for contact or a related topic.

^bSince this is self-reported, the information is only available for children who have answered the End Session Questionnaire. Only one child, answering the EQ, from the suicide sample is not included in the study because she did not consent to logging the session.

^cPrimary reasons for contact—only one reason can be chosen.

TABLE 4
Impact (n = 1,875), Frequency Distribution, and Mann-Whitney U Test

	Negative (⊗ = 1 or 2)			Neutral (⊕ = 3)			Positive (⊙ = 4 or 5)			Mann-Whitney U			
	Suicide sample		Nonsuicide sample	Suicide sample		Nonsuicide sample	Suicide sample		Nonsuicide sample				
	N	%		N	%		N	%			N	%	
Immediate impact	33	31.7	259	14.4	22	21.2	361	20.1	49	47.1	1,175	65.5	U = 76,666, z = -3.194**
Feeling helped	21	20.4	148	8.4	45	43.7	544	30.7	37	35.9	1,080	60.9	U = 63,928, z = -5.347***
Well-being	34	33.0	307	17.7	14	13.6	228	13.1	55	53.4	1,200	69.2	U = 71,394, z = -3.626***
Plan of action	26	25.5	198	11.5	55	53.9	770	44.8	21	20.6	750	43.7	U = 62,845, z = -5.111***
Perceived burden of the problem	48	48.0	318	18.7	21	21.0	450	26.5	31	31.0	932	54.8	U = 54,027, z = -6.320***
Self-confidence	16	15.5	189	10.8	21	20.4	193	11.0	66	64.1	1,368	78.2	U = 79,394, z = -2.286*
Talked about what I wanted	23	22.8	192	11.2	13	12.9	179	10.5	65	64.4	1,339	78.3	U = 73,276, z = -2.909**
WAs taken seriously													
Impact at follow-up	14	30.4	116	19.1	10	21.7	126	20.8	22	47.8	364	60.1	ns
Feeling helped	17	37.0	100	16.2	18	39.1	168	27.2	11	23.9	350	56.6	U = 9,508, z = -3.877***
Well-being	11	25.9	102	16.9	6	13.6	114	18.8	27	61.4	389	64.3	ns
Agency	21	47.7	121	20.3	15	34.1	186	31.3	8	18.2	288	48.4	U = 8,124, z = -4.332***
Perceived burden of the problem	28	63.6	145	24.4	6	13.6	158	26.6	10	22.7	292	49.1	U = 7,418, z = -4.925***
Self-confidence	3	7.0	37	6.3	5	11.6	55	9.4	35	81.4	496	84.4	ns
Regards helpline as future resource													

***p < .001, **p < .01, *p < .05.

At follow-up, a substantial proportion of the suicide sample indicated that they were feeling even worse (37.0%, $M = 2.93$) and that the problems were more severe (47.7%, $M = 2.61$) than at the time they contacted the helpline. This is much higher than for the nonsuicide sample (well-being: $U = 9.508$, $z = -3.877$, $p < .001$; problem severity: $U = 8.124$, $z = -4.332$, $p < .001$). At the time of follow-up, 75.0% of the suicide sample ($M = 3.55$) and 83.1% in the nonsuicide sample ($M = 3.70$, ns) reported having engaged in at least some of the actions discussed with the counselor. 81.4% to 84.4% of the children indicated that they would use the helpline again if they were in need of help (ns).

Finally, it must be noted that more than half (63.6%) of the suicide sample indicated that they felt less trust in themselves (self-confidence) 2 weeks after talking to the helpline. This is a much higher number than for the nonsuicide sample (24.4%; $U = 7.418$, $z = -4.925$, $p < .001$).

Helpful Counselor Behaviors for Children and Youth with Suicide Ideation

Analysis of the impact measures (DV) showed multicollinearity, and for this reason, we aggregated them into one DV. Due to small sample size, the FQ data were not included in this part of the analysis. Session length (measured as number of messages from the counselor in a session) varied from 3 to 116 messages ($M = 23$, $SD = 17$). Using cumulative variables for counselor behavior would confound the effect of the session length and the nature of counselor behavior. Thus, the percentage of utilization of each behavioral category was computed for each of the 102 sessions in order to give each session the same weight as well as handling problems with collinearity. Table 5 summarizes the utilization of counselor behavior in the sample.

A multiple regression was performed on the suicide sample ($n = 102$). Evaluations of the statistical assumptions were undertaken prior to the analysis.

Preliminary Analysis. We found sample bias for two variables which had a

statistically significant correlation with the impact variable in the responding user sample ($n = 102$): age ($r(99) = -.29$, $p < .05$) and the average number of characters per text from the child ($r(99) = .23$, $p < .05$). It was decided to control for these two variables in the content analysis.

In addition, the variables for counselor behavior and session impact were examined to verify the extent of missing data, data entry errors, and the respect for statistical univariate and multivariate norms assumptions. The variable: "Showing presence" was excluded from the analysis due to concerns about its internal validity. This variable has a bimodal distribution suggesting that this intervention behavior was often present at the very beginning of the sessions. This led to a review of the textual content of these interventions, and it appears that a large part of the presence behavior is actually a mark of politeness to greet the child at the beginning of the session. Since this is not a clinical intervention behavior but rather a communicational characteristics, this variable was excluded from the analysis.

Only three participants had missing outcome data. Since this represents less than 5% of the total sample and they appeared to be missing at random, no missing data attribution procedure was performed (Tabachnick & Fidell, 2007). The three participants with missing data were removed from the analysis leaving the sample at $n = 99$. Several variables had asymmetric distributions and univariate extreme scores, which is expected given the asymmetry of many of them. A visual examination of the extreme scores was performed to ensure that they did not correspond to aberrant score, and none was identified as such. Taking into account the fact that the respect of the univariate and multivariate normal distribution does not constitute an assumption in multiple linear regressions, no transformations of these variables were carried out (Tabachnick & Fidell, 2007). However, close attention was paid to the distribution of the residuals of the multiple linear regression.

A correlation matrix was generated to evaluate the presence of linearity and

TABLE 5
Utilization of Helper Responses, Suicide Sample (n = 102)

	Total responses	Median ^a and range	
		Median	Range
Structural aspects			
Waiting time before session	—	15 min	1–1,255
Number of messages from counselor	2,318	19	3–116
Number of characters per message from counselor	401,869	176	49–417
Number of characters per message from child	235,290	77	9–471
Session time in minutes	27,357 min	107 min	6–2,423
Functional aspects (in order of prevalence) ^b			
Paraphrasing	914	8	1–42
Exploring the problem	872	6	0–54
Collaborative problem solving	740	6	0–34
Asking for child's point of view	607	5	0–22
Encouraging to talk to someone about the problem	571	5	0–24
Empathetic statements or exploring emotions	444	3	0–30
Transparency	335	3	0–17
Referral to other professionals	326	2	0–19
Directive counseling	318	2	0–20
Providing factual information	271	2	0–21
Complimenting	238	2	0–11
Showing presence	143	1	0–6
Setting boundaries	137	1	0–7
Inviting to reconnect	95	1	0–6
Normalizing	82	0	0–6

^aThe session characteristics are all skewed. For this reason, we report median instead of mean, to give a more accurate picture of the distribution.

^bNumber of messages from counselor in session utilizing this type of counselor behavior.

statistically significant associations between predictors and the outcome variables. These variables were entered into the matrix together with the impact construct and the control variable. The predictors: “Encouraging to talk to someone about the problem,” “Empathetic statements or exploring emotions,” and “Setting boundaries” showed a statistically significant correlation with the impact construct. In addition, the scatterplots of these predictors with the dependent variable were examined to ensure that the relationships between them were linear. The scatterplots of the three predictors had linear relationships with the impact variable.

A sequential multiple regression was performed between the impact variable as the dependent variable and “Encouraging to talk

to someone about the problem,” “Empathetic statements or exploring emotions,” and “Setting boundaries” as independent variables, and the control variables to assess the residual distribution and presence of influence points with the Cook distance because of the non-conformity to univariate and multivariate distribution of the independent variables. Influence points are a product of leverage and discrepancy and evaluate the change in regression coefficients when a case is deleted (Tabachnick & Fidell, 2007). The Cook distance (D_i) was calculated for all cases in the sample and measured their influence. As a rule of thumb, a case with a $D_i > 4/n - (k + 1)$, where k is the number of predictors, is suspected to be an influence point (Confais & Le Guen, 2007; Zakaria, Howard, & Nkansah, 2014). Using this criterion, in our sample, a

case with a Cook distance over .04 was considered suspect.

Entering these three predictors and the two control variables into the regression model led to a statistically significant equation model ($F(5, 93) = 6.53, p < .01$), with an R of .51. The adjusted $R^2 = .22$ indicates that a little less than a quarter of the change in impact was explained by knowing the score on the three predictors. Except for "Empathetic statements or exploring emotions," all regression coefficients of the independent variables differed statistically from zero. The residual distribution of this multiple regression model was judged normally distributed.

Three participants had a Cook distance greater than 0.04 on the Cook distance distribution histogram and these participants differed from the rest of the sample and were eliminated from the analysis, reducing the sample size to $n = 96$. The fact that the model and the regression coefficients changed after the suppression of the two participants is another indication that they represent points of influence. After their removal, the regression analysis found a statistically significant equation model ($F(5, 93) = 8.49, p < .01$), with an augmented R^2 of .32. The adjusted $R^2 = .28$ was higher too. Moreover, the regression coefficient of "Empathetic statements or exploring emotions" was statistically significant. The replication of the same verification procedures made it possible to ensure that there were no additional points

of influence in the sample. The final analytical sample was $n = 96$. All statistical assumptions were respected with the final sample.

Principal Results. A sequential multiple regression was performed between the impact construct as the dependent variable and "Encouraging to talk to someone about the problem," "Empathetic statements or exploring emotions," and "Setting boundaries" as independent variables, controlling for age and average number of characters per text from child (see Table 6). The analysis led to a statistically significant equation model ($F(5, 90) = 8.49, p < .01$), with an R^2 of .32 (see Table 6). The adjusted R^2 indicates that almost a quarter of the change in impact was explained by knowing the score of the three predictors while controlling for age and average number of characters per text from the child. All three regression coefficients differed statistically from zero. The 95% confidence limits for these three coefficients were respectively: 3.49 to 20.84 (encouraging to talk to someone about the problem); -37.91 to -8.63 (empathetic statements or exploring emotions); and 3.10 to 22.81 (setting boundaries). The size and the direction of the relationship between the three significant predictors and the dependent variable suggest that encouraging the child to talk to someone about the problem and showing empathy or exploring emotions contributed to positive impact, while

TABLE 6
Helper Behavior Related to Counseling Impact ($n = 96$)

	<i>B (SE)</i>	<i>B</i>	<i>t</i>	<i>p</i>	<i>R</i> ²	Adj. <i>R</i> ²
Model 1					.139	.121
Number of characters per message from child	0.02 (.01)	.22	2.25	.027		
Child age	-0.99 (.31)	-.30	-3.16	.002		
Model 2					.321	.283
Number of characters per message from child	0.01 (.01)	.10	1.02	.308		
Child age	-0.49 (.31)	-.15	-1.60	.112		
Encouraging to talk to someone about the problem	12.17 (4.37)	.27	2.79	.007		
Empathetic statements or exploring emotions	12.96 (4.96)	.24	2.61	.011		
Setting boundaries	-23.27 (7.37)	-.28	-3.16	.002		

setting boundaries was associated with negative impact immediately after counseling.

DISCUSSION

Suicidal children and youth *do* contact child helplines—when possible by texting. If we accept that the sample in this study is representative of children contacting the helpline, then a high-risk, suicidal child or young person contacted the Danish child helpline at least 541 times in 2016. This is an everyday event and suggests a need to train and increase counselor awareness toward helping this particularly vulnerable group even within general helplines.

Research Question 1: Differences Between Suicidal and Nonsuicidal Texters

Children and young people talking to the helpline about suicide were on average older than children who did not talk about suicide. This finding concurs with the fact that prevalence of suicide attempts is higher for young people than children (Jørgensen, 2017; Sheftall et al., 2016; Stalard, 2016). However, the child helpline may very well be in contact with children before suicide ideations occur, which suggests the possibility of their role in early prevention. Nevertheless, it should also be noted that despite the mean older age of suicidal children, our sample included children as young as 10 years old in the high suicide risk group.

We found that children contacting the helpline about suicide were much more likely than nonsuicidal children to have reconnected with the helpline again within the 2-week follow-up period. Previous research has reported suicidal callers to be significantly more likely to reconnect with helplines compared to nonsuicidal callers (Kalafat, Gould, Munfakh, & Kleinman, 2007; Spittal et al., 2015). However, a literature review on frequent callers did not find consistent evidence for this finding (Middleton, Gunn, Bassilios, & Pirkis, 2014). Multiple contacts to

helplines are a complex phenomenon. Complex and severe problems might require repeated contacts in order for the child to gain the confidence to explore more sustainable help. On the other hand, continuously reporting suicide ideation in texts to an anonymous helpline may indicate an unhealthy reliance on the service that may stand in the way of seeking more effective help (Kalafat et al., 2007). Both elements are probably relevant within the framework of child helplines. Helplines should accept that suicidal youth might need their service as an emotional regulator more than others, but also that it is important to seek solutions to ensure that children at risk are referred to sustainable and effective help outside the helpline. When offline help is established, helplines can still serve as a relevant adjunct.

Suicide is not a stand-alone problem, and in this study, we found a large variety of issues co-occurring with the child's suicide ideation. Self-harm was clearly the most prevalent. This suggests that there is substantial overlap between self-harm and suicide and it is important to be aware of the overlap between these issues when providing help. Several factors previously identified as related to suicide ideation were present in our sample (loneliness, bullying, etc.), including having problems with parents. Research from the Danish National Centre for Suicide Research shows that suicidal youth experience significantly less support from parents than their peers in difficult times (Zøllner et al., 2013). Because of the lack of perceived parental support, helplines may be an important source for help outside of the family.

However, not all young people in trouble use an anonymous helpline as a relevant way to get help. Boys are highly underrepresented. This may reflect boys' and men's general reluctance to seek help (Gould, Greenberg, Munfakh, Kleinman, & Lubell, 2006) and is documented by a general underrepresentation of boys and men among contacts to suicide helplines (Mishara & Daigle, 1997) and to helplines in general (Fukkink & Hermanns, 2007; Gould et al., 2006; Sindahl, 2013). Some helplines, for example the

Samaritans in the United Kingdom, have increased the use of their services by males as the result of publicity campaigns with messages targeting men.

Child helplines are general helplines, and in our study, the counselors are professional volunteers with some, but not extensive, training in handling suicidal callers, chatters, and texters. Risk assessment skills are often lacking among professional mental health providers, primary care physicians (Kalafat et al., 2007), and even in helplines dedicated to suicidal clients (Mishara et al., 2007a). Mishara et al. (2007a) found that suicide ideation was not assessed in half of the calls to the American Hopeline Network. We see this in our data, where a complete suicide risk assessment (assessing suicidal thoughts, previous attempts, suicide plans, and acute risk) was only present in 14 out of the 102 sessions concerning suicide (13.7%). When the assessment was performed, it was most often because the child had revealed suicide ideation spontaneously without the counselor's prior exploration. Because of this, we can hypothesize that suicide risk may be present in the nonsuicidal sample. American researchers found that 12% of callers to crisis hotlines, who were reported as nonsuicidal, actually reported themselves having suicidal thoughts either during or within 3 weeks after contacting the center (Kalafat et al., 2007).

One can only speculate why risk assessment is performed so infrequently. In a general helpline such as this, which does not advertise as specifically targeting suicidal youths, training counselors in risk assessment is only a minor aspect of their overall training and this skill may not be practiced often in a context where the vast majority of clients are concerned with other problems. In addition, counselors need to be secure in the belief that they will know what to do with the results of a complete risk assessment in order to perform it in the first place, which may not be the case due to their infrequent practice in helping suicidal children and youth. A suggestion would be to provide the counselors with easy access to necessary tools and guidelines,

which can be utilized on the spot, when a child expresses suicide ideations.

Research Question 2: The Impact of Texting

Fewer suicidal children reported immediately improved well-being after texting with the helpline than their nonsuicidal peers did. Previous studies have pointed to the fact that suicide helpline users may be more critical of the services they receive, reflecting their ambivalence about seeking help or being fueled by their state of suicidality, crisis, and despair (Deane, Wilson, & Ciarrochi, 2001; Wilson & Deane, 2010). This difference in reporting immediate improvements may reflect the fact that serious and complex problems that lead to contemplating suicide would generally take more than one session to resolve (Mishara & Daigne, 1997). Still, 35.9% of the suicide sample reported feeling better immediately after text counseling and more than half of them were left with a plan of action. Although different measures were used, it is relevant to mention that researchers at two Canadian suicide helplines found a decreased depressive mood from beginning to the end in 14% (17% for only nonfrequent callers) of calls (Mishara & Daigne, 1997). In a study of the American national suicide prevention network, a decrease in depressive mood was observed in 18.3% of the suicidal callers (Mishara et al., 2007b), and a Dutch study of an online suicide helpline found improvement in visitors' emotional states in 36.1% to 48.5% of the sessions (Mokkenstorm et al., 2017). In this context, the results of this study suggest the relevance of text counseling to help some texters during the course of a session. However, for many texters, particularly those with suicide ideation, the process of improving their emotional state may take more than a single contact with a helpline.

Two weeks after receiving counseling at the child helpline, 23.9% of the children in the suicide sample reported feeling better, but a high number (37.0%) actually report feeling worse. We find this to be a strong indicator

that texting with a helpline provides insufficient help for a substantial number of children and youth struggling with suicide ideation and must be supplemented by further, sustainable help. In 75.0% of sessions concerning suicide, the child reported subsequently having engaged in at least some of the actions discussed with the counselor. From reading the session transcripts and studying the content analysis, we know that many of these actions involved seeking help from someone else—a family member, a teacher, a doctor, etc. The fact that so many feel worse after 2 weeks might be an indication that the network surrounding these children may often fail to respond adequately and provide the much-needed help for these children—even when they are contacted directly by the child. The qualitative reports from the children 2 weeks later indicate that several of them had contacted family members, teachers, and health professionals after talking to the helpline, and that some had been successful but others had not. Children and young people are particular vulnerable groups with fewer resources available. This important area needs further exploration. Research has shown that more systematic follow-up on suicidal callers to helplines can be productive in reducing suicide ideation over time (Gould et al., 2018). Providing this service is complicated, but not impossible, in the context of child helplines, where the service users are below the age of majority and parental consent is not a possibility (examples of child helplines that provide follow-up services are Kids Helpline, Australia and Childline, UK).

Research Question 3: Helpful Counselor Behaviors

Two types of counselor behaviors were associated with positive impact: expressing empathy and exploring emotions and encouraging the child to talk to someone—a professional or a nonprofessional. Referrals to professionals alone were not related to impact. This result points to the fact that connecting the child with someone in his or her immediate, offline social environment seems

to be a productive strategy. Reading the session transcripts, we found numerous examples of counselors helping the child develop a plan of how he or she could tell someone about the distress he or she was feeling. These conversations included contemplation about who would be the best person to contact, determining the best time, discussing what the child could say, and often the counselor also suggested that the child could show the text conversation to the person he or she had chosen to confide in. This last strategy may be a unique potential benefit of counseling using a text-based medium, which leaves every word of the exchange on the child's mobile phone to potentially consult later. This research suggests that it is important to encourage counselors to look for support in the child's immediate network and promote use of potential supports with all children who are considering suicide. This research also supports the notion that effective interventions depend on the helper's engagement and empathy with the help-seeking client (Smith et al., 2015).

We found that setting boundaries was significantly associated with negative impact. Studies of online communication and anonymous counseling services often highlight the experience of control that help-seekers can feel when using a mediated format (Sindahl, 2013). Setting boundaries might compromise this feeling of being in control of the dialogue. Also, the fact that certain counselors may feel the necessity to set boundaries could be an indication of them having poor contact with the child in the first place. However, when we examined these sessions, we found numerous examples where the counselor seemed to reject the child's appeal because the counselor assessed the child as being too suicidal to continue the dialogue. In these cases, it seems that risk assessment gets in the way of engagement and containment of distress, as previous research on health care professionals' interactions with suicidal patients has indicated (Smith et al., 2015). A rejection of the help-seeking child could also be a result of the

practitioner's feelings of powerlessness when engaging with suicidal children (Smith et al., 2015). In other instances, the counselor expressed that the child provided too little information for the dialogue to be productive, indicating that some counselors could benefit from special training in handling text sessions with quieter and less responsive children.

Limitations

Our results are correlational. Thus, causal interpretations must be undertaken with caution. A randomized controlled research design poses several ethical and practical challenges making this a difficult alternative. This is a real life study and confounding factors may influence the results.

The effects measured in this study are based on self-ratings. This of course should be taken into account when comparing the results with studies using external raters (Mishara & Daigle, 1997; Mishara et al., 2007b). Previous studies have shown that *perceived* support is a stronger predictor of changes in mental health than support *received* (Mokkenstorm et al., 2017), so it makes sense to ask the participants themselves when measuring constructs such as being taken seriously, well-being, and self-confidence. However, the weakness of this method, compared to the use of external raters, is the large dropout rate with the positive bias that goes with it—as indicated in the current study. More systematic triangulation by obtaining and comparing data from multiple sources would be warranted in future research.

Future Research

Although the fact that a quarter of children felt better 2 weeks after their text exchange is heartening, the finding that 37% reported feeling worse needs to be better understood. As Mishara and colleagues pointed out (Mishara et al., 2007a), one cannot expect that a relatively brief interaction with a helpline will alone have a lasting

impact on suicide risk. The person's problems usually developed over months, and sometimes years, and it should take more than one brief text exchange to solve them in the long term. Furthermore, the circumstances that promoted the problems are generally the same before and after the contact with the helpline. The goal of crisis intervention helpline is to diminish the imminent risk of suicide at the time of the contact and to promote the use of other resources afterward that will eventually lead to the person obtaining the help they need to resolve their difficulties. We need to better understand how to ensure that fewer children who contact helplines feel worse afterward, and particularly if something could have been done during the text exchange that would have decreased the proportion of children who felt worse. It is possible that those who felt worse were already on a trajectory of a worsening situation when they initiated contact with the helpline. If, however, using different techniques during the text exchange could have stemmed the deterioration, those best practice methods need to be promoted in the training and supervision. In this study, we were able to identify some behaviors that could potentially improve the efficacy of helpline text exchanges, but much more research is needed.

We can ask whether it is possible that helplines can do more harm than good, and question their usefulness. In this study, the results indicate that the immediate impact was generally positive, which supports their short-term usefulness. But, the impact 2 weeks later is disheartening. Helplines may still be better than the alternatives. If children do not text to helplines, they are likely to see help from other sources on the Internet, with the inherent risk of finding a site or forum where suicide is encouraged rather than prevented. We need to better understand how helplines can interact by text in order to better diminish suicide risk over time, and increase the probability that children will get help from their family and friends after the text exchange. These are key challenges that need to be clarified by future research.

REFERENCES

- ANDERSSON, K., & OSVALDSSON, K. (2012). Utvärdering av BRIS Internetbaserade stödkontakter [Evaluation of BRIS Internet-based support contacts]. Research Report on childhood and the study of children. University of Linköping, Sweden.
- BEDI, R., & DUFF, C. (2014). Client as expert: A Delphi poll of clients' subjective experience of therapeutic alliance formation variables. *Counselling Psychology Quarterly*, *27*, 1–18.
- BEDI, R., & MALLINCKRODT, B. (2006). Concept mapping the client's perspective on counseling alliance formation. *Journal of Counseling Psychology*, *53*, 26–35.
- BIPPUS, A. M. (2001). Recipients' criteria for evaluating the skillfulness of comforting communication and the outcomes of comforting interactions. *Communication Monographs*, *68*, 301–313.
- BURLESON, B. R. (1984). Age, social-cognitive development, and the use of comforting strategies. *Communication Monographs*, *51*, 140–153.
- BURLESON, B. (1985). The production of comforting messages: Social - cognitive foundations. *Journal of Language and Social Psychology*, *4*, 253–273.
- BURLESON, B. R., & GOLDSMITH, D. J. (1998). How the comforting process work: Alleviating emotional distress through conversationally induced reappraisals. In P. Andersen, & L. K. Guerrero (Eds.), *Handbook of communication and emotion, research, theory, applications, and contexts* (pp. 245–280). San Diego: Academic Press.
- BURLESON, B., & SAMTER, W. (1985). Consistencies in theoretical and naive evaluations of comforting messages. *Communication Monographs*, *52*, 103–123.
- CAPLAN, S. E., & TURNER, J. S. (2007). Bringing theory to research on computer-mediated comforting communication. *Computers in Human Behavior*, *23*, 985–998.
- Child Helpline International. (2017). *We Listen to the Voices of Children and Young People*. Retrieved from: <https://www.childhelplineinternational.org/wp-content/uploads/2017/11/WeListen.pdf>
- CONFAIS, J., & LE GUEN, M. (2007). *Premiers pas en régression linéaire avec SAS®*. Documents de travail du Centre d'Économie de la Sorbonne.
- CROSBY BUDINGER, M., CWIK, M., & RIDDLE, M. (2015). Awareness, attitudes, and use of crisis hotlines among youth at-risk for suicide. *Suicide and Life-Threatening Behavior*, *45*, 192–198.
- CUTRONA, C. E., & RUSSELL, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support, an interactional view (Wiley series on personality processes)* (pp. 319–366). New York: John Wiley & Son.
- CUTRONA, C. E., & SUHR, J. A. (1992). Controllability of stressful events and satisfaction with spouse support behaviors. (Approaches to the study of communication, social support and helping relationships). *Communication Research*, *19*, 154–174.
- DEANE, F., WILSON, C., & CIARROCHI, J. (2001). Suicidal ideation and help-negation: Not just hopelessness or prior help. *Journal of Clinical Psychology*, *57*, 901–914.
- DUFF, C., & BEDI, R. (2010). Counsellor behaviours that predict therapeutic alliance: From the client's perspective. *Counselling Psychology Quarterly*, *23*, 91–110.
- ELLIOTT, R., & WEXLER, M. M. (1994). Measuring the impact of sessions in process-experiential therapy of depression: The session impacts scale. *Journal of Counseling Psychology*, *41*, 166–174.
- ESKJÆR, M., & HELLES, R. (2015). *Kvantitativ indholdsanalyse [Quantitative content analysis]*. Frederiksberg: Samfundslitteratur.
- EVANS, W., 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*, 471–487.
- FUKKINK, R. (2011). Peer counseling in an online chat service: A content analysis of social support. *Cyberpsychology, Behavior and Social Networking*, *14*, 247–251.
- FUKKINK, R., & HERMANN, J. (2007). *Children's experiences with the Kindertelefoon: Telephone support compared to chat support*. Amsterdam: SCOKohnstamm Instituut.
- FUKKINK, R. G., & HERMANN, J. M. A. (2009). Children's experiences with chat support and telephone support. *Journal of Child Psychology and Psychiatry*, *50*, 759–766.
- GOODMAN, R. (n.d.). SDQ-S11-17 FOL-LOW UP. Retrieved from: <http://www.sdqinfo.org/py/sdqinfo/b3.py?language=Danish>
- GOULD, M., GREENBERG, T., MUNFAKH, J., KLEINMAN, M., & LUBELL, K. (2006). Teenagers' attitudes about seeking help from telephone crisis services. *Suicide and Life-Threatening Behavior*, *36*, 601–613.
- GOULD, M., KALAFAT, J., HARRIS, M., MUNFAKH, J., & KLEINMAN, M. (2007). An evaluation of crisis hotline outcomes part 2: Suicidal callers. *Suicide and Life-Threatening Behavior*, *37*, 338–352.
- GOULD, M., LAKE, A., GALFALVY, H., KLEINMAN, M., MUNFAKH, J., WRIGHT, J., ET AL. (2018). Follow-up with callers to the national suicide

prevention lifeline: Evaluation of callers' perceptions of care. *Suicide and Life-Threatening Behavior*, 48, 75–86.

JENSEN, T. B., SINDAHL, T. N., & WISTOFT, J. (2018). *Children's experiences texting with a child helpline*. Manuscript submitted for publication.

JONES, S. M., & BURLESON, B. R. (1997). The impact of situational variables on helpers' perceptions of comforting messages: An attributional analysis. *Communication Research*, 24, 530–555.

JØRGENSEN, A. J., & Centre for Suicide Research. (2017). *Regionale variationer i selvmordsforsøg 2012-2015* [Regional differences in suicide attempts 2012-2015]. Odense: Centre for Suicide Research.

KALAFAT, J., GOULD, M., MUNFAKH, J., & KLEINMAN, M. (2007). An evaluation of crisis hotline outcomes part 1: Nonsuicidal crisis callers. *Suicide and Life-Threatening Behavior*, 37, 322–337.

KING, R., BAMBLING, M., REID, W., & THOMAS, I. (2006). Telephone and online counselling for young people: A naturalistic comparison of session outcome, session impact and therapeutic alliance. *Counselling and Psychotherapy Research*, 6, 175–181.

KING, R., NURCOMBE, B., BICKMAN, L., HIDES, L., & REID, W. (2003). Telephone counselling for adolescent suicide prevention: Changes in suicidality and mental state from beginning to end of a counselling session. *Suicide and Life-Threatening Behavior*, 33, 400–411.

KRIPPENDORFF, K. (2012). *Content analysis: An introduction to its methodology*. Newbury Park, CA: Sage.

LESTER, D. (2012). The effectiveness of suicide prevention and crisis intervention services. In D. Lester, & J. R. Rogers (Eds.), *Crisis intervention and counseling by telephone and the internet*, 3rd edn (pp. 411–421). Springfield, IL: Charles Thomas.

Livslinien (2017). *Livsliniens årsberetning 2016* [Annual Report, Livslinien 2016]. Copenhagen: Livslinien.

MCHUGH, M. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, 22, 276–282.

MIDDLETON, A., GUNN, J., BASSILIOS, B., & PIRKIS, J. (2014). Systematic review of research into frequent callers to crisis helplines. *Journal of Telemedicine and Telecare*, 20, 89–98.

MISHARA, B., CHAGNON, F., DAIGLE, M., BALAN, B., RAYMOND, S., MARCOUX, I., ET AL. (2007a). Comparing models of helper behavior to actual practice in telephone crisis intervention: A silent monitoring study of calls to the U.S. 1-800-SUICIDE network. *Suicide and Life-Threatening Behavior*, 37, 291–307.

MISHARA, B., CHAGNON, F., DAIGLE, M., BALAN, B., RAYMOND, S., MARCOUX, I., ET AL. (2007b). Which helper behaviors and intervention styles are related to better short-term outcomes in

telephone crisis intervention? Results from a silent monitoring study of calls to the U.S. 1-800-SUICIDE Network. *Suicide and Life-Threatening Behavior*, 37, 308–321.

MISHARA, B. L., & CÔTÉ, L. P. (2014). Suicide prevention and new technologies: Towards evidence based practice. In B. L. Mishara, & A. J. F. Kerkhof (Eds.), *Suicide prevention and new technologies – evidence based practice* (pp. 1–23). UK: Palgrave Macmillan.

MISHARA, B., & DAIGLE, M. (1997). Effects of different telephone intervention styles with suicidal callers at two suicide prevention centers: An empirical investigation. *American Journal of Community Psychology*, 25, 861–885.

MOKKENSTORM, J., EIKELENBOOM, M., HUISMAN, A., WIEBENGA, J., GILISSEN, R., KERKHOF, A., ET AL. (2017). Evaluation of the 113 online suicide prevention crisis chat service: Outcomes, helper behaviors and comparison to telephone hotlines. *Suicide and Life-Threatening Behavior*, 47, 282–296.

MOR, V., ANGELELLI, J., JONES, R., ROY, J., MOORE, T., & MORRIS, J. (2003). Inter-rater reliability of nursing home quality indicators in the U.S. *BMC Health Services Research*, 3, 1–13.

NEUENDORF, K. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage Publications.

NIEUWBOER, C., FUKKINK, R., & HERMANN, R. (2014). Practitioner response to parental need in email consultation: How do they match? A content analysis. *Child & Youth Care Forum*, 43, 553–567.

RIEMER, M., & KEARNS, M. A. (2010). Description and psychometric evaluation of the Youth Counseling Impact Scale. *Psychological Assessment*, 22, 259–268.

SHEFTALL, A., ASTI, L., HOROWITZ, L., FELTS, A., FONTANELLA, C., CAMPO, J., ET AL. (2016). Suicide in elementary school-aged children and early adolescents. *Pediatrics*, 138, 1–10.

SINDAHL, T. N. (2013). *Chat counselling for children and youth – a handbook*. Amsterdam: Child Helpline International.

SINDAHL, T. N., FUKKINK, R. G., & HELLES, R. (2018). *SMS counseling at a child helpline: - counselor strategies, child stressors, and well-being*. Manuscript submitted for publication.

SINDAHL, T. N., & VAN DOLEN, W. M. (2018). *Texting at a child helpline: - How structural characteristics of text message counseling influence counseling impact*. Manuscript submitted for publication.

SMITH, M. J., BOUCH, J. C., LAKEY, T., BRADSTREET, S., NIGHTINGALE, A., & O'CONNOR, R. (2015). Health services, suicide, and self-harm: Patient distress and system anxiety. *The Lancet Psychiatry*, 2, 275–280.

SPITTAL, M. J., FEDYSZYN, I., MIDDLETON, A., BASSILIOS, B., GUNN, J., WOODWARD, A., ET AL.

(2015). Frequent callers to crisis helplines: Who are they and why do they call? *Australian & New Zealand Journal of Psychiatry*, *49*, 54–64.

STALLARD, P. (2016). Suicide rates in children and young people increase. *The Lancet*, *387*, 1618.

TABACHNICK, B., & FIDELL, L. S. (2007). *Using multivariate statistics*, 5th edn. Boston, MA: Pearson.

WILLIAMS, R., BAMBLING, M., KING, R., & ABBOTT, Q. (2009). In-session processes in online counselling with young people: An exploratory approach. *Counselling and Psychotherapy Research*, *9*, 93–100.

WILSON, CORALIE, J., & DEANE, F. P. (2010). Help-negation and suicidal ideation: The

role of depression, anxiety and hopelessness. *Journal of Youth and Adolescence*, *39*, 291–305.

ZAKARIA, A., HOWARD, N. K., & NKANSAH, B. K. (2014). On the detection of influential outliers in linear regression analysis. *American Journal of Theoretical and Applied Statistics*, *3*, 100–106.

ZØLLNER, L., RASK, L., KONIECZNA, A., & Centre for Suicide Research. (2013). *Selvskadende adfærd blandt unge mellem 13-19 år* [Self-harming behavior among young people age 13-19]. Odense: Centre for Suicide Research.

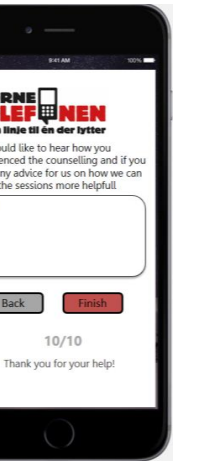
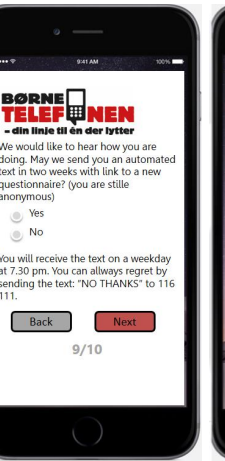
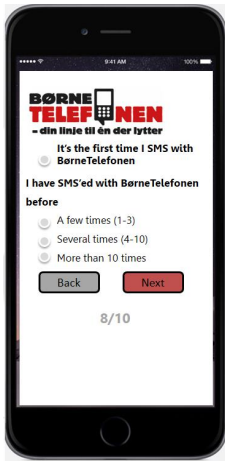
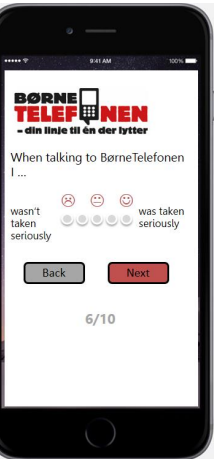
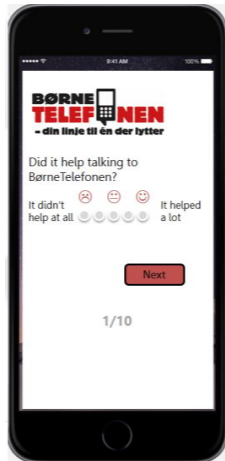
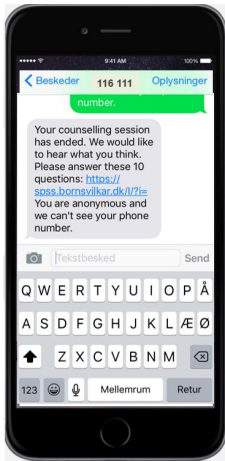
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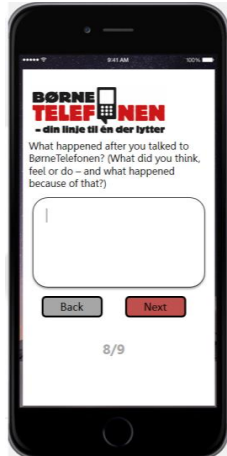
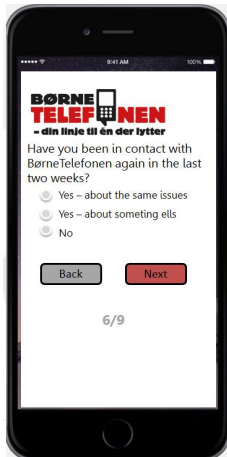
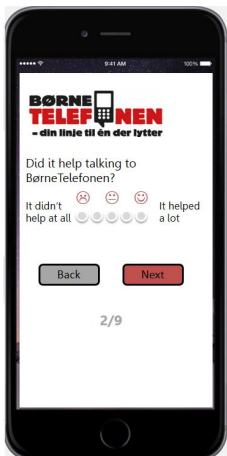
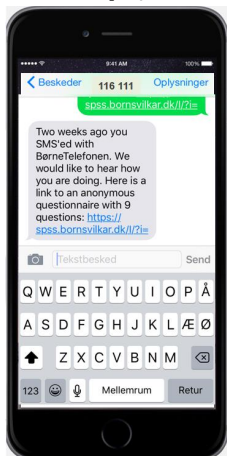
Appendix

Appendix 1: Questionnaires, translated

End Session Questionnaire



Follow-Up Questionnaire



Appendix 2: Questionnaires, Danish

End Session Questionnaire



Appendix 3: Variables in dataset created from system data

Name	Values (comments)
SMSID	<i>The ID used for merging the datasets</i>
<i>Start</i>	<i>(Date and time for session beginning. This is defined by the time the child receives the first text from a counsellor - not autoreplies)</i>
<i>End</i>	<i>(Date and time for session ending. When the counsellor press "End" in the system and an autoreply with link to the questionnaire is send)</i>
@#SMSb <i>Number of texts from child</i>	Number <i>(This is the total number of texts send by the child - including the two first texts initiating the contact)</i>
@#SMSr <i>Number of tests from counsellor</i>	Number <i>(This is the total number of texts send by the counsellor in the session - autoreplies not included)</i>
@l.Ventmin <i>Waiting time until counselling</i>	Minutes <i>(This is the number of minutes the child has waited to get the first text from the counsellor. You can regard this as "waiting in line")</i>
Gnsn.ventmin <i>Average waiting time in session (Response latency)</i>	Minutes <i>(This is the average waiting time after the first text is send by counsellor (the session begins). So this is the average number of minutes in the session the child has to wait for an answer from the counsellor)</i>
@#Tegnb <i>Number of characters from child</i>	Number <i>(This is the total number of characters the child has written - including the two first texts initiating the contact)</i>
@#Tegnr <i>Number of characters from counsellor</i>	Number <i>(This is the total number of characters the child has written - autoreplies not included)</i>
Gnsn.#tegnb <i>Average number of characters per text from child</i>	Number <i>(This is the average number of characters per SMS from the child)</i>
Gnsn.#tegnr <i>Average number of characters per text from counsellor</i>	Number <i>(This is the average number of characters per SMS from the counsellor)</i>
Sessionstidmin <i>Session time</i>	Minutes <i>(This is the number of minutes from the session starts till it ends)</i>
Kontakttidmin	Minutes <i>(This is the number of minutes from the child sends the first text till the session ends)</i>

Appendix 4: Research Protocol for Children

The screenshot shows a web browser window with the URL <https://www.bornetelefonen.dk/sms>. The page title is "Hvad er det for en undersøgelse I laver?". The content is organized into several sections:

- Hvem laver undersøgelsen?**

Det er Børns Vilkår, der laver undersøgelsen sammen med Københavns Universitet.
- Hvorfor?**

Der findes mange anonyme rådgivninger rundt omkring i verdenen. Fx findes der børnetelefoner i 145 af verdens 193 lande. Men faktisk ved vi alt for lidt om hvad der virker bedst, når man skal hjælpe børn og unge via fx telefon, chat- eller SMS teknologi. Det er det vi vil undersøge.
- Hvordan?**

Vi undersøger det ved at kigge på, hvad rådgiverne gør i samtalerne og så sammenligner vi det med om børnene får det bedre lige efter samtalen og 14 dage senere. På den måde, så kan vi sige, at når rådgiver gør A, så virker det bedre end når rådgiver gør B. Vi ved godt, at det er meget forskelligt hvad børn har brug for, så derfor er vi nød til at undersøge det rigtig mange gange, i forhold til mange forskellige børn og med mange forskellige problemer.
- Hvem kan være med?**

Alle børn og unge, der har fået SMS rådgivning på BørneTelefonen, kan være med i undersøgelsen, hvis de udfylder spørgeskemaerne. Vi vil dog kun kigge på de samtaler, hvor der er givet rådgivning på en eller anden måde. Hvis du ikke vil være med skal du bare lade være med at udfylde spørgeskemaerne.
- Hvem kan se samtalerne og svarene?**

Det er kun dem, der har med forskningsprojektet at gøre, der får samtalerne at se. Måske er der nogle eksempler, som vi senere gerne vil vise til andre, men det vil kun være små dele af en samtale og aldrig noget hvor man kan se hvem det er der har samtalen. Når forskningsprojektet er færdigt gemmer vi samtalerne i 6 måneder og så slettes de.
- Hvem hører om undersøgelsen?**

Når man finder ud af noget, som der ikke er andre der ved og som andre kan have glæde af, så er det vigtigt man fortæller det videre. Det vi finder frem til kan være med til at hjælpe mange børn og unge rundt om i hele verdenen. Undersøgelsen vil bl.a. blive beskrevet i artikler, i en bog og i undervisning – fx af andre der skal lave rådgivning af børn. Du vil også kunne læse om undersøgelsen her på hjemmesiden, når den er færdig. Men det er den altså først i slutningen af 2017.

At the bottom of the page, there are two green buttons with question marks and downward arrows:

- Projekt opgaver - ring i stedet for sms!**
- Virker det fra udlandet?**

On the right side of the page, there is a sidebar with a "mobning" section containing radio buttons for "Ret til et privatliv" and "Dem alle sammen!", and a red "Stem" button. Below this is a blue speech bubble graphic that says "Find dig ikke i stress! Se vores gode råd her". At the very bottom right, there are two green "Skjult side" buttons with a magnifying glass icon.

Appendix 5: Variables in dataset created from Counsellor Registration Form

Name	Values (<i>comments</i>)
SMSID	<i>The ID used for merging the datasets</i>
Henvender <i>Who contacts the helpline?</i>	1 - 8 = Not used 9 = The child it selves 10 = The child's (step)siblings 11 = The child's friends or class mates 12 = A boy/girlfriend (or ex) 13 = Not used 14 = Another child 15 = Another adult <i>(Only "9" is included in the dataset.)</i>
<i>Gender</i>	1 = Girl 2 = Boy 3 = Unknown
<i>Age</i>	1 = Not in use 2 = Don't know 3 – 26 = (Age = Value – 3) 27 = More than 23 <i>(Above 23 years of age are excluded, since they are not part of the target group for the helpline.)</i>
<i>Family Relationships (reason for contact)</i>	1 = Death in the family (bereavement) 2 = Parent-child relationship/parenting 3 = Parents with Addiction and/or Mental Health Issues 4 = Not used 5 = Parents arguing 6 = Current divorce 7 = Residence (in divorce families) 8 = Child Custody 9 = Parents collaboration after divorce 10 = Blended families 11 = Child Visitation 12 = No answer
<i>Abuse and Violence (reason for contact)</i>	1 = Neglect 2 = Physical Abuse / Violence 3 = Bullying 4 = Emotional Abuse (include: Witness to Violence) 5 = Sexual Abuse 6 = Discrimination 7 = No Answer
<i>Problems in regard to the authorities (reason for contact)</i>	1 = Out of Home Care/Foster Care 2 = Social Services 3 = Statsforvaltning 4 = No Answer
<i>Body and Health (reason for contact)</i>	1 = Physical Illness 2 = Pregnancy, Contraception and STD's 3 = Body Development 4 = No Answer

<i>Psycho-social Mental Health (reason for contact)</i>	1 = Fear and Anxiety 2 = Substance Use and Abuse 3 = Loneliness 4 = Body/Physical appearance 5 = Suicide/Suicidal thoughts 6 = Self Harm 7 = Eating Disorders 8 = Mental Illness / Diagnoses 9 = No Answer
<i>Peer Relationships (reason for contact)</i>	1 = Teasing 2 = Love 3 = Friendship 4 = No Answer
<i>School Related Issues (reason for contact)</i>	1 = Academic Problems / Homework 2 = Problems with Teacher 3 = Collaboration Between Home and School 4 = Not Liking to Go to School 5 = No Answer
<i>Sexuality (reason for contact)</i>	1 = Sexual Identity 2 = Sexual Practise / How to 3 = No Answer
<i>Outside Category (reason for contact)</i>	1 = Write 2 = No Answer
<i>Outside Category – Write (reason for contact)</i>	Text
<i>Region</i>	1 = Hovedstaden 2 = Midtjylland 3 = Nordjylland 4 = Sjælland 5 = Syddanmark <i>(The region in Denmark where the child comes from (when the child has provided this information))</i>

Related topics	21 = Death in the family (bereavement) 22 = Parent-child relationship/parenting 23 = Parents with Addiction and/or Mental Health Issues 24 = Parents arguing 25 = Current divorce 26 = Residence (in divorce families) 27 = Child Custody 28 = Parents collaboration after divorce 29 = Blended families 30 = Child Visitation 31 = Neglect 32 = Physical Abuse / Violence 33 = Bullying 34 = Emotional Abuse (include: Witness to Violence) 35 = Sexual Abuse 36 = Discrimination 37 = Out of Home Care/Foster Care 38 = Social Services 39 = Statsforvaltning 40 = Fear and Anxiety 41 = Substance Use and Abuse 42 = Loneliness 43 = Body/Physical Appearance 44 = Suicide/Suicidal Thoughts 45 = Self Harm 46 = Eating Disorders 47 = Mental Illness / Diagnoses 48 = Teasing 49 = Love 50 = Friendship 51 = Academic Problems / Homework 52 = Problems with Teacher 53 = Collaboration Between Home and School 54 = Not Liking to Go to School 55 = Physical Illness 56 = Pregnancy, Contraception and STD's 57 = Body Development 58 = Sexual Identity 59 = Sexual Practise / How to 60 = Outside Category 61 = Outside Category (string)
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<i>Neglect</i>	<p>1 = Yes, information has appeared that indicates neglect</p> <p>2 = No, absolutely no information indicating neglect has appeared</p> <p>3 = In doubt – I am not sure if the information in the session indicated neglect</p> <p><i>(This is only possible – and relevant - for children below the age of 18. This is the counsellors own estimate.)</i></p>
<i>Acute help</i>	<p>0 = No</p> <p>1 = Yes</p> <p><i>(The child is in a state where it needs help right here and now. This is not the same as this help is provided - if the child refuses to give up its anonymity)</i></p>
<i>Duty of care response</i> <i>The helpline will do a duty of care response and/or connect the child with a child advocate</i>	<p>2 = No</p> <p>1 = Yes</p> <p><i>(Counsellor reported. This is in the cases where the child choose to give up its anonymity in order for the helpline staff to provide for tangible help.)</i></p>
<i>The child has been informed of its rights</i>	<p>0 = Yes</p> <p>1 = No</p> <p><i>(Counsellor reported. 0 indicates that the counsellor has informed the child of rights during the session and 1 that this has not been a part of the session.)</i></p>
<i>Counsellor Number</i>	<i>(Each counsellor is provided with a unique number.)</i>
<i>How many handled the session?</i>	<p>1 = The session was handled by one counsellor</p> <p>2 = The session was handled by more than one counsellor</p> <p>3 = The session was registered by an employee</p> <p><i>(Counsellor reported. We have only measured this some of the period. If the session is registered by an employee (3) the session was not closed by a counsellor and the automated text with link to a questionnaire was not sent to the child. These sessions are excluded from the study.)</i></p>

Appendix 6: Coding Manual

Kodemanual, version 9

(4/4-2016)

Variablene er binære variable. Der kodes:

1 = tilstede (manifest – aflæselig i teksten). Dette uanset om det er tilstede én eller flere gange i en SMS.

Såfremt der ikke er kodet for sås dette som at adfærden *ikke* er tilstede i den pågældende SMS. Hvis det er hjælpsomt for dig, må du gerne kode det som "0".

Det er vigtigt at være systematisk og tjekke for alle variable for hver enkelt SMS.

Procedure:

1. Læs første besked
2. Gennemgå alle koderne og marker dem der er tilstede med "1"
3. Læs næste besked
4. osv.
5. Når hele samtalen er kodet gennemgå da kodningen for eventuelle fejl
6. IDnummer skrives fuldt ud (dvs. bogstavet skal også med)
7. Navngiv filen: IDnummer navn (fx D3827 Anne)
8. Mail kodning til Trine.

Brug manualen. Læs grundigt.

Ved uens kodning (kun ved samtaler med flere raters):

Efter Inter Rater Reliability er beregnet bliver koderne enige om en konsensus kodning. Den endelige kodning mailtes til Trine kommenteret (hvad er drøftet og hvad er begrundelsen for den endelige kodning).

C. Samtaler
om samtalen



A. Opgavecenteret
rådgivning

B. Barnecenteret
rådgivning

A. Opgaveorienteret rådgivning

Har fokus på at undersøge problematikken og problematikkenes løsninger

Navn	Kort beskrivelse	Detaljer	Eksempler
A.1. Undersøge problemet	Undersøge problemets historie (hvornår, hvor ofte, hvor meget, med hvem) og hvad der er forsøgt for at løse problemet.	<p><i>Hvad der er:</i> Spørgsmål, der undersøger problemets art, omfang, historie, relationer etc. Det kan også være faktuelle spørgsmål der danner basis for forståelse af problematikken. Hvad er forsøgt på at løse problemet, undtagelser, ressourcer i netværk som kan bruges, hvilke overvejelser barnet eller andre har gjort mv. Undersøger problemstillingen bagudrettet.</p> <p><i>Hvad det ikke er:</i> Ikke hypotetiske fremadrettede spørgsmål. Ikke spørgsmål alene til tema (<i>hvad skal vi tale om?</i>) (se C.3). Ikke direkte råd pakket ind som et spørgsmål (se A.3).</p>	<p>"Hvad sagde han så?" "Hvor længe har I været kæresten?" "Har du prøvet at ..." "Hvad mon der ville ske hvis ..." "Er der nogen der hjælper dig?" "Er der tidspunkter hvor x ikke er så slemt?" "Hvad har du prøvet indtil nu?" "Den der hidsgighed, hvad pokker stiller du op med den?"</p>
A.2. Direktiv rådgivning	Når rådgiver fortæller barnet hvad han/hun skal gøre	<p><i>Hvad der er:</i> Når rådgiver dikterer hvad barnet skal gøre for at håndtere problemstillingen. Inkluderer også diktering af konkrete handleplaner – altså hvad barnet skal gøre, hvornår etc. Løsninger kan være noget man kan gøre, men det kan fx også handle om at se en situation på en ny måde.</p> <p><i>Hvad det ikke er:</i> Ikke når det er præsenteret som forslag til drøftelse/overvejelse (se A.3)</p>	<p>"Det er vigtigt du får hjælp med det samme." "Du skal fortælle det til din mor." "Det skal du ikke bekymre dig om" "Jeg synes du skal ..." "Er der tidspunkter hvor x ikke er så slemt?" "Du skal skylle panddilerne ud nu"</p>
A.3. Kollaborativ problemløsning	Når rådgiver peger på giver konkrete råd og løsningsforslag på en ikke-direktiv, undersøgende måde	<p><i>Hvad der er:</i> Når rådgiver kommer med forslag til hvad barnet kan gøre for at håndtere problemstillingen. Også når disse forslag er "pakket ind" som et spørgsmål. Inkluderer også forslag til konkrete handleplaner – altså hvad barnet skal gøre, hvornår etc. Inkluderer også spørgsmål til barnets egne overvejelser mhp. løsning af problemstillingen. Inkluderer undersøgende, hypotetiske spørgsmål, der peger mod potentielle løsninger på problemet. Løsninger kan være noget man kan gøre, men det kan fx også handle om at se en situation på en ny måde.</p> <p><i>Hvad det ikke er:</i> Ikke hvis det blot er undersøge af hvad der er gjort eller baggrundsundersøgelse der måske/måske ikke fører frem til et godt råd (se A.1)</p>	<p>"Du kunne jo spørge om i skulle ses på et tidspunkt?" "... måske du kunne ..." "... evt. kunne du ..." "Hvad har du selv overvejet?" "I alle de være en idé at ..." "Hvad ville der ske hvis ...?"</p>

<p>A.4. Faktuel information</p>	<p>Når rådgiver giver konkret faktuel information</p>	<p><i>Hvad det er:</i> Når rådgiver trækker på sin faglige viden – fx om problematikken, psykoedukation, diagnostiserer, oplyser om rettigheder. Også selvom fakta reelt er forkerte.</p> <p><i>Hvad det ikke er:</i> Ikke når rådgiver vurderer barnets situation ud fra mere common sense principper (som fx at <i>Der skal nok blive bedre</i>). Ikke når det vedrører rammer for rådgivningen (åbningstider mv.) – skal som oftest kodes som C.1.</p>	<p>”Det er faktisk sådan at børn der bor i familier, hvor den ene forælder er alvorlig syg, ofte påtager sig meget ansvar og klarer så mange ting, at de næsten ikke har tid til at være børn...” ”Hvis I er under den kriminelle lavvande, som er 15 år, så...” ”Man må kun tage 2 panodiler ad gangen”</p>
<p>A.5. Henviser, professionelt</p>	<p>Når rådgiver peger på en professionel person eller tilbud, hvor barnet kan få yderligere hjælp</p>	<p><i>Hvad det er:</i> Når der er tale om professionel hjælp – lærer, pædagog, andre rådgivninger, læge etc. Det kan også være links til andre rådgivninger mv. Uanset om barnet tager imod henvisningen eller ej.</p> <p><i>Hvad det ikke er:</i> Henvisninger til barnets private netværk eller mere uklare henvisninger, som at barnet bare skal snakke med ”nogen”, (se O.3).</p>	<p>”Kan du snakke med din lærer?” ”LMS har en rådgivning ...” ”Kender du www.setlinjen.dk?”</p>
<p>A.6. Håndgribelig hjælp</p>	<p>Når rådgiver tilbyder at hjælpe barnet med noget, der rækker ud over samtalen.</p>	<p><i>Hvad det er:</i> At tilbyde bisidder, underretning, ringe efter hjælp her og nu. Også selvom det afvises af barnet. Kan også være at skrive noget for barnet, som barnet kan sende videre.</p> <p><i>Hvad det ikke er:</i> Ikke alene blot at tilbyde at snakke om det. Ikke almindelige gode råd.</p>	

B. Bamecentreret rådgivning:

Har fokus på at støtte, være empatisk, bygge barnet op ved ros og anerkendelse.

Navn	Kort beskrivelse	Detaljer	Eksempler
B.1. Forståelse / empati / følelser	Rådgiver udtrykker indlevelse og/eller forståelse for barnet.	<i>Hvad det er:</i> At tage eller anerkende barnets perspektiv, ikke vurdere. Alle aspekter omkring barnets følelser – spørge til dem, genkende dem, anerkende dem, reflektere dem tilbage til barnet. Også når de følelser vedrører problemstillingen (<i>"Hvordan har du det med det?"</i>). Når rådgiver bliver i smerten med barnet.	"Der kan jeg godt forstå" "Det kan jeg godt se" "Det kender jeg godt" "Du lyder ked af det" "Der er ok at være vred, når..." "Så nu er du ærgerlig over...?" "Hvordan har du det med det?"
B.3. Ros	Rådgiver roser barnet.	<i>Hvad det er:</i> Positive vurderinger af barnet eller barnets handlinger.	"Der er flot" "Hvor er det godt du sørger for at få noget hjælp..." "Hvor er det godt du ikke giver op!"
B.4. Almenføre / normalisere	Rådgiver fortæller barnet, at der er andre der har det som det.	<i>Hvad det ikke er:</i> Ikke blot "Ha det godt" – altså rene høflighedsfraser. <i>Hvad det er:</i> Når rådgiver giver udtryk for at det barnet oplever er alment – noget som flere børn oplever og ikke er unormalt. Kodes ind imellem sammen med A.4. <i>Hvad det ikke er:</i> Ikke alene at bruge ordet "man".	"Jeg har snakket med mange børn, der har det ligesom dig" "... normalt" "Det sker nogen gange/tit at ..." "Det er meget forskelligt hvornår man kommer i puberteten" (samtidigt A.4)
B.5. Vise tilstedeværelse	Rådgiver viser barnet at han/hun er der.	<i>Hvad det er:</i> Når rådgiver melder sig klar, lægger op til samtale.	Byde velkommen ("Hej", "Velkommen") "Jeg er her for dig" "Jeg har tid til dig" "Jeg vil gerne lytte"
B.6. Invitere til genbesøg	Når rådgiver fortæller barnet at det kan vende tilbage.	<i>Hvad det ikke er:</i> Ikke at invitere til genbesøg (se B.6). <i>Hvad det er:</i> Når rådgiver fortæller barnet at det har mulighed for at kontakte BørneTelefonen igen.	"Du er velkommen tilbage" "Du kan altid kontakte BørneTelefonen igen, hvis du har brug for det"
B.8. Parfraserer	At gentage de ord barnet har sagt / At opsummere det barnet har sagt med rådgivers egne ord (reformulering).	<i>Hvad det er:</i> Ofte (men ikke altid) en måde for rådgiver at tjekke om han/hun har forstået barnet korrekt. Grundmodellen i aktiv lytning, hvor rådgiver gentager det barnet har sagt på en spørgende måde. Rådgiveren kan benytte egne ord, men holder sig samtidigt tekstsnaert til det barnet har sagt. Ved særligt centrale ord og begreber kan en parafrasering bestå af ganske få – måske ét centralt ord – der spejles tilbage til barnet. <i>Hvad det ikke er:</i> Overfortolkninger af hvad barnet har sagt / lægge ord i munden.	"Hvis jeg lige skal prøve at sige lidt om hvad vi har fundet ud af du har gjort indtil nu for at få det bedre, så..." "Så når du skærer I dig selv, så oplever du at du får følelserne ud..." "Ok så I har været kræfter, men nu har I slået op?"

C. Samtaler om samtalen

Meta kommunikation

Navn	Kort beskrivelse	Detaljer	Eksempler
C.1. Metakommunikation, sætte rammer og grænser	Samtaler om samtalen, reguleringer.	<p><i>Hvad det er:</i> Når rådgiver eksplicit forsøger at regulere barnets forventninger til samtalen. Når rådgiver sætter konteksten for samtalen. Når rådgiver sætter grænser. Når rådgiver fx siger at der kun kan tales om én ting i samtalen.</p> <p><i>Hvad det ikke er:</i> Når rådgiver beder om feedback fra barnet (se C.3). Når rådgiver fx siger "Det forstod jeg ikke lige". Blot orientering om hvad rådgiver gør, som ikke kræver en regulering fra barnets side – fx "Jeg afslutter nu" (se C.2).</p>	<p>"Ii har talt sammen længe..." "Det jeg kan er..." "Jeg kan ikke..." "Børne telefonen er mest beregnet til at hjælpe børn med nogle ideer til hvordan de selv kan komme videre." "Hvis du har brug for, at vi snakker mere, så må du sige det – ellers afslutter jeg samtalen"</p>
C.2. Metakommunikation, forklare intentioner (transparens)	Samtaler om samtalen, transparens.	<p><i>Hvad det er:</i> Når rådgiver forklarer intention/formål med spørgsmål eller informerer om hvad han/hun gør. Forekommer hyppigt i forbindelse med spørgsmål til kommune, hvor rådgiver fortæller, at det er til statistik.</p> <p><i>Hvad det ikke er:</i> Når rådgiver beder om feedback fra barnet (se C.3).</p>	<p>"Jeg spoger fordi..." "Jeg spørger lige en kollega" "Jeg afslutter nu" "Jeg er i tvivl om hvad du mener?" "Det er til noget statistik" "Jeg vil derfor fortælle dig om dine muligheder..." "Ii undersøger hvor i landet børn kommer fra..."</p>
C.3. Rådgiver beder om respons	Rådgiver beder om barnets feedback på samtalen. Inviterer barnet ind i at metakommunikere om samtalen.	<p><i>Hvad det er:</i> Dette er også en form for "samtaler om samtalen", men hvor det er rådgiver der leder barnet stå for reguleringen. Det inkluderer også tilfælde, hvor rådgiver sætter et ? i enden på et statement i betydningen: "Har jeg forstået det rigtigt?" Alle tilfælde, hvor rådgiver forsøger at afstemme med barnet om rådgiver har forstået korrekt, om samtalen er hjælpsom, om det giver mening, om det bevæger sig i den retning barnet ønsker etc.</p>	<p>"Hvad vil du gerne tale om?/Hvad har du på hjerte?" "Hvad håber du på, at jeg kan hjælpe med?" "Skal vi gøre det?" "Må jeg spørge...?" "Hvordan kan jeg bedst hjælpe dig på vej?" "Taler vi om det vi skal tale om?" "Taler vi om det på en god måde?" "Kan du bruge det til noget?" "Har jeg forstået korrekt, at..." "Så det vi skal er... - er det korrekt?" "Hvad er vigtigst for dig, at vi får talt om?" (Ved flere problemstillinger) "Så det du gerne vil tale om er...?" "Så nu er du bange for, at skære dig selv igen?" (forstået som: "Er det rigtigt forstået?") "Hvordan har det været at snakke med mig om det på den her måde?" "Betyder det vi skal afrunde nu?" "Har vi fået snakket om det du gerne ville?" (OBS: kodes samtidigt som C.4) "Hvad siger du til det?"</p>

O. Andre variable

Navn	Kort beskrivelse	Detaljer	Eksempler
0.3. "Snak med nogen"	Når rådgiver taler med barnet om mulighed for at snakke med nogen (andre end rådgiveren).	<p>Hvad det er: Kan være undersøgende i forhold til hvem barnet <i>har</i> snakket med (kodes ofte også som A.1) eller pege fremad mod nogen barnet kan snakke med efter rådgivningen.</p> <p>Uanset om barnet tager imod opfordringen eller ej. Også når det er pakket ind som et spørgsmål. Også når det er mere generisk (altså ikke peger på en bestemt person, men blot at barnet skal kontakte en eller anden).</p> <p>Hvad det ikke er: Direkte henvisninger til professionelle (se A.5).</p>	<p>"Det er vigtigt at du får talt med en voksen om det." "Hvis du skulle vælge en at tale med det om, hvem skulle det så være?" "Har du nogen du kan snakke om det med?" "Har du snakket med..." "Har du overvejet at snakke med nogen?" "Er der nogen du kunne snakke med?"</p>

Kun for samtaler om selvmord

Risikoniveau

OBS: Oplysninger kodes med baggrund i samtaltens eksplícitte indhold. Dvs. der kan reelt være tale om et højere niveau end koden indikerer.

Der gives én kode baseret på følgende skala:

- 1 = Barnet har eksplicit givet udtryk for selvmordstanker.
- 2 = Barnet har eksplicit givet udtryk for selvmordsplaner (enten metode, sted eller tidspunkt).
- 3 = Akut – selvmordsforsøg er i gang eller planlagt inden for de næste 48 timer.

Risikovurdering

Undersøgt	Skala
Selvmordstanker	1 = Udtrykt spontant af barnet, men ikke udforsket yderligere af rådgiver. 2 = Udtrykt spontant af barnet og efterfølgende udforsket yderligere af rådgiver. 3 = Udtrykt på baggrund af rådgivers spørgen ind. 4 = Ikke spurgt til eller spontant udtrykt af barnet.
Tidligere selvmordsforsøg	1 = Udtrykt spontant af barnet, men ikke udforsket yderligere af rådgiver. 2 = Udtrykt spontant af barnet og efterfølgende udforsket yderligere af rådgiver. 3 = Udtrykt på baggrund af rådgivers spørgen ind. 4 = Ikke spurgt til eller spontant udtrykt af barnet.
Selvmordsplaner (tid, sted eller metode)	1 = Udtrykt spontant af barnet, men ikke udforsket yderligere af rådgiver. 2 = Udtrykt spontant af barnet og efterfølgende udforsket yderligere af rådgiver. 3 = Udtrykt på baggrund af rådgivers spørgen ind. 4 = Ikke spurgt til eller spontant udtrykt af barnet.
Akut risiko (selvmordsforsøg i gang eller planlagt udført inden for næste 48 timer)	1 = Udtrykt spontant af barnet, men ikke udforsket yderligere af rådgiver. 2 = Udtrykt spontant af barnet og efterfølgende udforsket yderligere af rådgiver. 3 = Udtrykt på baggrund af rådgivers spørgen ind. 4 = Ikke spurgt til eller spontant udtrykt af barnet.