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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, & Ligthvoet, 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, Antoniw, 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) (Burleson, & Goldsmith, 1998; Cutrona, 1990; Cutrona & Suhr, 1992; Horowitz et al., 2001; Jones & Burleson, 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 emotion-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 information 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 yr) 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 no 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 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 (Cohen's $f^2 = .085$) 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 Times 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 Times 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 partial support of the matching hypothesis, *density of PCCB* was negatively related to impact if the session concerned *uncontrollable stressors*; the relationship of *density of PCCB* to children's well-being with controllable stressors 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)	Age	-.14	5.01**	.11	
	Proportion of problem centred behaviour	.60	-3.27**		
	Proportion of child centred behaviour	.71	1.32		
Undesirable (n = 279)	Age	.71	2.01*	.09	
	Proportion of problem centred behaviour	.64	8.50***		
	Proportion of child centred behaviour	.64	-4.42***		
Controllable (n = 304)	Age	-.14	-.83	.12	
	Proportion of problem centred behaviour	.50	2.33*		
	Proportion of child centred behaviour	.66	13.28***		
Uncontrollable (n = 106)	Age	-.14	-5.71***	.08	
	Proportion of problem centred behaviour	.50	1.43		
	Proportion of child centred behaviour	.66	2.62**		
Effects personal relationships (n = 332)	Age	-.07	3.10*	.11	
	Proportion of problem centred behaviour	-1.30	-1.56		
	Proportion of child centred behaviour	.51	-2.33*		
Does not effects personal relationships (n = 78)	Age	.81	1.21	.05	
	Proportion of problem centred behaviour	-.13	13.01***		
	Proportion of child centred behaviour	.09	-5.40***		
Stigma (n = 151)	Age	.81	.28	.13	
	Proportion of problem centred behaviour	.09	3.34**		
	Proportion of child centred behaviour	.81	1.36		
No stigma (n = 259)	Age	-.11	-1.76	.04	
	Proportion of problem centred behaviour	-.48	-.66		
	Proportion of child centred behaviour	-.08	-.15		
	Age	-.15	7.28***		
	Proportion of problem centred behaviour	-.44	-4.08***		
	Proportion of child centred behaviour	.83	-.73		
	Age	.83	1.98*		
	Proportion of problem centred behaviour	.18	3.64*		
	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 & Burleson, 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. The relationship between PCCB and child well-being when the stressors were within the child's control was nonsignificant. 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 & Burleson, 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. In fact 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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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