Barriers and enablers to the delivery of email communication for a helpline service for young people

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A B S T R A C T

Objective: This qualitative study utilises the Behaviour Change Wheel (BCW) approach to identify barriers and enablers to the delivery of email communication in a mental health helpline service for young people, which are then linked to specific intervention strategies for improvement.
Methods: Semi-structured interviews were conducted with ten volunteers working for a free online helpline service for young people. Transcripts of the interviews were coded according to deductive then inductive themes.
Results: Ten core themes were identified. These were barriers or enablers, depending on the volunteers' level of experience with the email service. Enablers included the volunteers' skills, the resources and support offered to them. Barriers related to the asynchronous nature of email communication, need for additional training and volunteers' lack of confidence and motivation in responding to emails.
Innovation: This study expands current research on online mental health support by showing how the BCW can be a useful tool to identify influences on email helpline provision and offer strategies for its optimisation.
Conclusion: Offering training targeted to the email service, increasing the level of practice with mock-up emails, and introducing newsletters featuring positive feedback on the email service may improve the delivery of email helpline services for young people.

1. Introduction

Adolescence is considered a period of vulnerability to mental health problems, with 20% of young people between 17- and 22-years old suffering from a mental disorder in England [1]. Despite their heightened level of need, this group seems reluctant to seek professional support [2]. With 45% of youngsters in the UK not knowing where to seek help [3], 8 out of 10 individuals between 18 to 25-years old surf the internet to find support [4]. Crucially, since the start of Covid-19, the number of children contacting mental health services raised by a third in the UK [5]. For example, The Mix, a UK-based charity providing free confidential online support for youths, saw an increase in requests for mental health support for depression and anxiety, specifically in early 2021 [6]. These figures highlight the essential role of helplines in providing young people with accessible mental health support.

Helpline services offer confidential free emotional support and referral for emergency situations [7]. Contrary to online counselling, helplines are unauthorised to offer a diagnosis but can only provide emotional support and signpost users to external services [8]. Increasing research has been devoted to examining the barriers and enablers to the provision of helpline services' communication channels including webchat [9], telephone [10], and SMS/text-message [11].

Email is also a typical helpline communication tool [11], yet few studies have examined its use. Particularly, no research to date has systematically investigated the influences on its delivery. However, such a study would improve our understanding of how to optimise this service's delivery to better meet the needs of youths.

The Behaviour Change Wheel (BCW) can be useful in this regard, offering a theoretically-based, systematic framework to examine barriers and enablers to the implementation of an intervention, which then can be linked to corresponding intervention strategies or behaviour change techniques (BCTs) for optimisation [12]. Using the BCW, this study first highlights the barriers and enablers to the use of email communication by volunteers and staff in a mental health helpline service for young people, then BCTs are identified, which specifically address the barriers for improvement.

1.1. Email delivery in helpline services

The effectiveness of email as a communication tool can be analysed under the lens of media richness theory [13]. This suggests that media's ability to transmit information is influenced by whether the information is used in times of uncertainty (i.e., when there is a lack of information)

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or equivocality (i.e., when there is confusion or lack of understanding). The theory determines the 'richness' of a medium based on four criteria: (1) availability of immediate feedback and (2) multiple cues, (3) language variety, and (4) personal focus. Based on these, email sits on the leaner side of the spectrum mainly because of the lack of immediate feedback and multiple cues. When considering this communication channel, uncertainty is not a significant barrier as emails can carry a large amount of information to reduce uncertainty. However, equivocality can be problematic primarily due to the lack of nonverbal cues [14].

Equivocality has been seen as a barrier in research investigating email as a communication tool of helplines. Indeed, because of email's text-based and asynchronous format, the potential for misunderstanding the content and emotions is significant [15]. Additionally, counsellors or advisors usually report having difficulty showing active listening and conveying empathy and warmth due to the lack of auditory and verbal cues characteristic of traditional helpline modalities such as the telephone [16,17]. In this respect, research emphasises the importance of training and practice to improve online communication skills [18,19] as well as counsellors' confidence in their competencies [20,21].

Despite the aforementioned barriers, research has highlighted several enabling factors to email use in helpline services for youths. Its asynchronous format allows more flexibility for both the user and the helper, meaning that their continuous presence is not required [22,p. 270]. Additionally, helpline users can articulate their problems, explore, and describe their emotions more clearly [23] while putting aside any inhibitions usually present in less anonymous contexts. From a counsellor's perspective, the asynchronous format alleviates the time pressure of responding immediately, offering more time to elaborate on therapeutic responses compared to webchat helplines [24,25].

1.2. The Behaviour Change Wheel

The BCW is a systematic tool to design, evaluate, and optimise behaviour change interventions, synthesised from 19 existing frameworks [12].

The COM-B model forms the centre that theoretically explains the influences on a specific behaviour which, for this study, concerns the delivery of emails (see Fig. 1).

Note: An integrated illustration of COM-B (at the centre in green) surrounded by the 14 domains of the TDF (in yellow) with the Intervention Functions (in red) and Policy Categories (in grey) in the outer rings of the BCW.

The COM-B model shows that capability, opportunity, and motivation are the necessary and interactive conditions for a behaviour to occur (see Fig. 2) [26]. If a more granular understanding of the barriers and enablers to the behaviour is required, the Theoretical Domains Framework (TDF) can be used to expand on the COM-B components [12]. This integrative framework synthesises 14 theoretical domains, described in Table 1, which are linked to the COM-B components (see Fig. 1).

The Behaviour Change Technique Taxonomy (BCTTv1) collates a list of replicable intervention strategies or BCTs, which are defined as the 'active ingredients' of an intervention to produce behaviour change [12]. Using expert consensus and existing evidence, the Theory and Technique Tool allows for mapping the TDF domains to evidence-based BCTs [27]. Using mapping, the barriers to implementation classified by the TDF domains can be linked to specific BCTs that, when applied, can improve the delivery of an intervention.

The BCW approach has been successfully applied in previous studies to understand the barriers and enablers to the delivery of mental health interventions for young people, with BCTs identified for optimisation including face-to-face mental health communication [28], webchat counselling [29] and moderation of self-harm online forums [30].

1.3. The current study

Using the BCW framework, this qualitative study addresses the following questions:

1. Based on the COM-B model and TDF, what are the barriers and enablers to the delivery of email communication for volunteers in an online helpline service for young people?
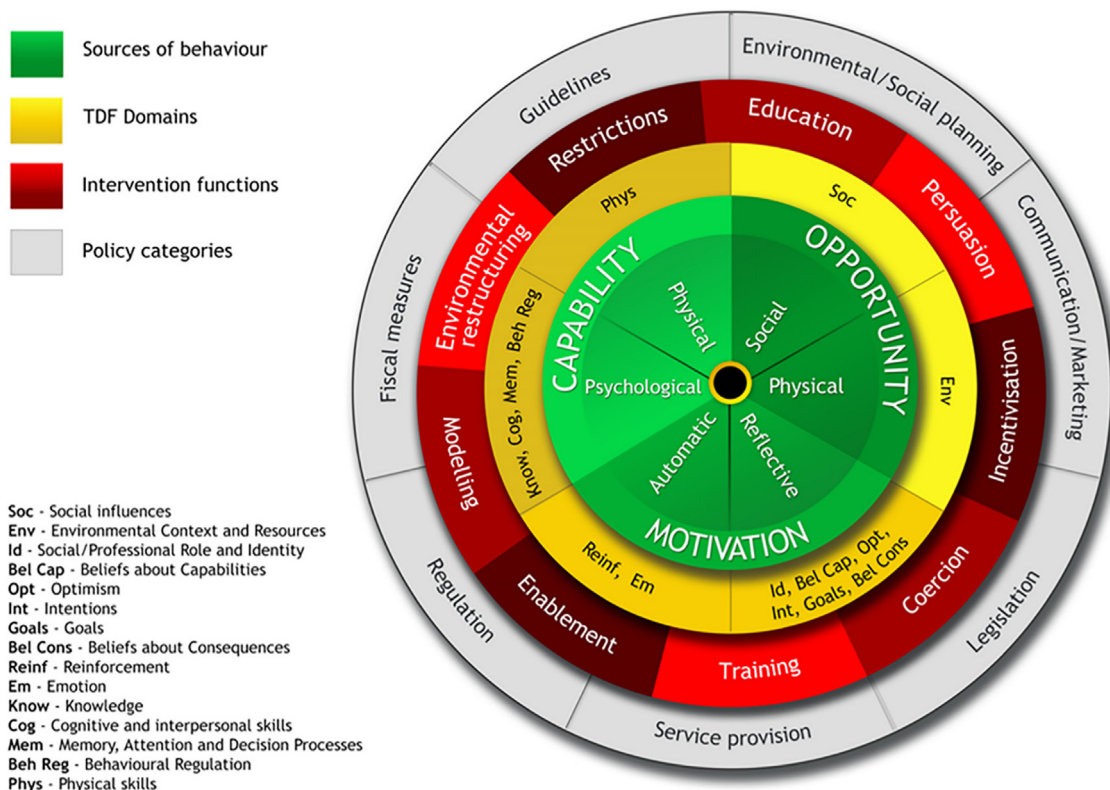

Legend:
- Green — Sources of behaviour
- Yellow — TDF Domains
- Red — Intervention functions
- Grey — Policy categories

Soc - Social influences
Env - Environmental Context and Resources
Id - Social/Professional Role and Identity
Bel Cap - Beliefs about Capabilities
Opt - Optimism
Int - Intentions
Goals - Goals
Bel Cons - Beliefs about Consequences
Reinf - Reinforcement
Em - Emotion
Know - Knowledge
Cog - Cognitive and interpersonal skills
Mem - Memory, Attention and Decision Processes
Beh Reg - Behavioural Regulation
Phys - Physical skills

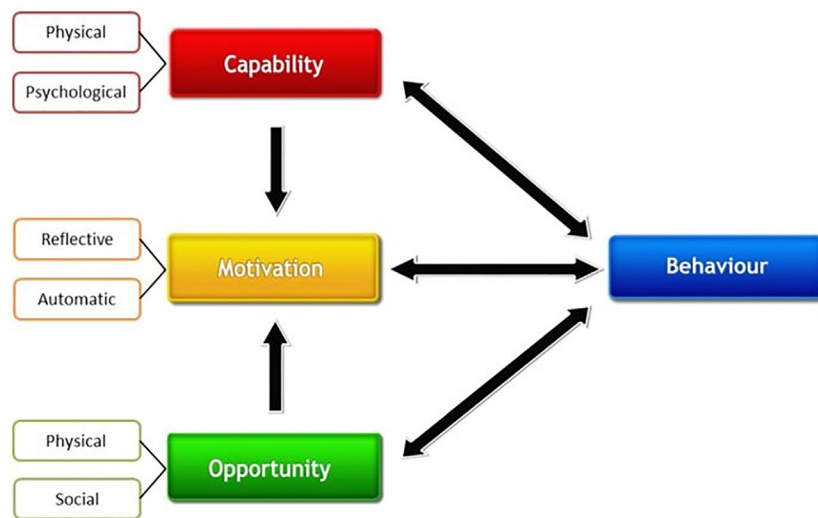**Fig. 1.** Behaviour change wheel [22].

Fig. 2. The COM-B Model [23]. *Note. Physical Capability* involves a person's physique, and musculoskeletal functioning (e.g., balance and dexterity). *Psychological Capability* involves skills involving personal mental functioning (e.g., memory and understanding). *Physical Opportunity* involves inanimate parts of the environmental system and time (e.g., financial resources). *Social Opportunity* involves other people and organizations (e.g., culture and social norms). *Reflective Motivation* involves conscious thought processes (e.g., evaluations and plans). *Automatic Motivation* involves habitual, instinctive, drive-related, and affective processes (e.g., desires and emotions).

2. Based on the BCW and BCTT, what are possible strategies that could be implemented to improve the delivery of email communication?

2. Methods

2.1. Ethical approval

The study was approved by UCL Research Ethics Committee (04/06/2021).

2.2. Participants and recruitment

Volunteers, called Digital Connectors, were approached via email by one of the helpline team leaders and asked whether they would be interested in participating in the research. Those interested were requested to contact the researchers via email to schedule a date and time to conduct the interview. Participants had to sign a digital consent form before the interview. The interviews were conducted via video-call on Microsoft Teams. Volunteers were offered a £25 voucher as a symbol of appreciation for their time to participate in the study.

Of the approximately 50 Digital Connectors, 11 showed interest in the study but only 10 were interviewed as one did not have experience in answering emails for the service. This sample size was sufficient to reach data saturation as, throughout the initial analysis, no additional themes emerged after the seventh interview. Eight out of 10 were females, and all were between 18 and 35 years old. Eight participants were volunteers (V1 to V8). Most had at least one year of experience volunteering for the service, except for one who started three months ago. Two participants were part of the helpline staff (S9; S10); their role was to supervise the helpline and to answer emails received from users.

2.3. Volunteers' training and helpline process

Before becoming Digital Connectors, volunteers go through an initial training. The training spans across four weeks and it includes one 3-hour introduction session, three 3-hour evening sessions, and one 3-hour 'listening in' session. Once completed, volunteers participate in a 4-week induction period where they receive regular support and feedback before becoming full volunteers.

The email sessions are conducted via Salesforce, a customer relationship management platform. Each volunteer has an account which gets activated by the staff before the shift. The volunteers work remotely, and they communicate with each other through MS Teams. Young people seeking support can contact the service via email. Usually, the user and the volunteer exchange up to three emails. Once the volunteer understands the issue, they send a final email in which they offer the users three different external services relevant to their problem from which the user can choose.

2.4. Procedure

Semi-structured interviews were conducted using a qualitative exploratory design. This was considered a more suitable technique compared to, for instance, focus groups as it allowed individuals to describe their feelings and opinions without being influenced by other volunteers' beliefs. Additionally, this approach enables the comparison of similarities and differences among group members, potentially highlighting factors such as age, gender, and experience, that might influence participants' views, and which might not emerge when discussed in a group. Before data collection, the interview guide was piloted with two postgraduate students to assess its flow, identify potential ambiguities, and ensure it would not exceed 45 minutes. The interview guide was then revised based on the pilot interviews.

Although the interviews were conducted by the first author (MC), the second author (AB) was also present to mitigate any technical issues and to ensure that the recordings were successfully retained for accurate transcription. Interview questions were based on the TDF. Each domain had an open question, usually followed by a series of prompts (see Table 2 for examples).

2.5. Data analysis

The interviews were recorded through MS Teams and transcribed by MC and AB. Any identifying information was removed from the transcript. Interview data were analysed following Braun and Clarke's (2006) guidelines for thematic analysis [31]. The interviews were first analysed deductively and then inductively [32]. During the deductive analysis, the TDF was used as a framework to categorise the interviews. Throughout the process, a TDF codebook specific to the behaviour was developed and iterated when needed (available from the authors upon request).

Data were next coded inductively. Within each domain, data were further analysed and organised in themes which were consistently added to the codebook. These were developed according to quotes that reflected volunteers' similar impressions and opinions about answering emails. Often,

Table 1
TDF domains, categorized by COM-B components

COM-B Component	TDF component	Definition*
Physical Capability	Skills (Physical)	An ability or proficiency acquired through practice.
Psychological Capability	Knowledge	An awareness of the existence of something.
	Memory, Attention, and Decision processes	The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives.
	Behavioural regulation	Anything aimed at managing or changing objectively observed or measured actions.
	Skills (Cognitive and Interpersonal)	A set of skills that can involve skills competence/ability/skill assessment, practice/skills development, interpersonal and cognitive skills, and coping strategies.
Physical Opportunity	Environmental context and Resources	Any circumstances of a person's situation or environment that discourage or encourage the development of skills and abilities, independence, social competence, and adaptive behaviour.
Social Opportunity	Social influence	Those interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviours.
Reflective Motivation	Social/Professional role and Identity	A coherent set of behaviour and displayed personal qualities of an individual in social or work settings.
	Believes about capabilities	Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use.
	Optimism	The confidence that things will happen for the best or that desired goals will be attained.
	Beliefs about consequences	Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation.
	Intentions	A conscious decision to perform a behaviour or a resolve to act in a certain way.
	Goals	Mental representations of outcomes that an individual wants to achieve.
Automatic Motivation	Reinforcement	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a givens stimulus.
	Emotion	A complex reaction pattern, involving experiential, behavioural, and physiological elements by which the individual attempt to deal with a personally significant matter or event.

Note. Adapted from Atkins, L., Francis, J., Islam, R., O'Connor, D., Patey, A., Ivers, N., ... & Michie, S. (2017). *A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems. Implementation Science, 12*(1), p. 11.
* TDF definitions adapted from *The Behaviour Change Wheel: A Guide to Designing Interventions* (p. 88), by S. Michie, L., Atkins, R. West, 2014, London: Silverback Publishing.

broader themes could be further categorised in sub-themes referring to more specific concepts.

To ensure the reliability and validity of the coding, themes were compared between MC and AB. The first two transcripts were coded by both researchers and the agreement rate was then calculated by dividing the number of agreed themes by the total number of themes across the two manuscripts. This allowed the researchers to discuss whether each theme was clear and was accurately allocated to a TDF domain. An agreement rate of 79% was achieved which, following Guest and colleagues' (2012) guide, was considered acceptable [33]. From the analysis, 30 themes emerged initially, but only core themes were explored. Consistent with previous studies e.g., [34,35], a theme was classified as "core" based on (1) its frequency (i.e., more than 5 interviewees mentioned it), (2) contrasting beliefs and (3) evidence of strong beliefs (determined by consensus between MC and AB). Based on these conditions, ten core themes were retained.

Table 2
Examples of interview questions based on TDF and COM-B model.

TDF domain, COM-B component	Question
Knowledge, Psychological capability	What knowledge do you need to provide support to young people via email?
Environmental context and resources, Physical opportunity	What working environment factors influence the quality of the delivery of the service being provided?
Social influence, Social opportunity	What kind of social support do you get when replying to an email?
Emotion, Automatic motivation	How does providing support via email make you feel?
Professional/Social role and identity, Reflective motivation	How would you describe your role in offering support via email?

Lastly, TDF domains were mapped to BCTs using the Theory and Techniques Tool [36]. Using the APEASE criteria (Affordability, Practicability, Effectiveness/cost-effectiveness, Acceptability, Side-effects/safety, and Equity [12]), the most suitable BCTs for optimisation were identified. These criteria are used to determine which BCTs are most feasible and more likely to be implemented in the context of an intervention [37]. For example, in the context of this study, the BCT '*restructuring the physical environment*' could be considered. This could involve advising the charity to change and optimise the user interface to facilitate the delivery of email for the volunteers. However, this might not be cost-effective as these changes might require an upgrade of the software currently used, which could exceed the budget available to the charity.

3. Results

3.1. Barriers and enablers to answering emails for the helpline service

Ten core themes were identified from the interviews. These were barriers or enablers, or a mixture of both depending on the volunteers' level of experience with the email service (see Fig. 3).

Note. Overarching COM-B themes are indicated by shaded boxes and TDF secondary themes by bold, underlined text. Inductive themes are indicated by bold text and corresponding sub-themes by bullet points. Letters in brackets indicate whether each sub-theme was identified overall as an Enabler (E), a Barrier (B) or a combination of Enabler and Barrier (E/B). Arrows show COM-B interactions. The number in brackets indicates the theme number, which follows the order in which the themes are explained in the Results section.

3.1.1. Helpline skills (Psychological capability/Skills)

The "helpline skills" theme falls under the *Psychological capability's* COM-B domain, as this refers to an individual's knowledge and skills to answer emails. This was divided into two sub-themes, questioning and signposting skills, both considered enablers.

Questioning skills are the ability to explore the issue experienced by the user and were considered crucial to answering emails effectively. Given the asynchronous nature of emails and the limited interaction between the user and the volunteer, volunteers need *"[…] to be really clear about what questions [are] most effective at that moment"* (S10). One challenge is being able to choose the most appropriate questions: *"You don't wanna overwhelm in an email with many, many questions, and so it's just kind of picking and choosing which question is maybe the best time to ask for that email […]"* (V4).

Signposting skills, i.e., a volunteer's ability to offer correct signposts to external services, were also considered critical. More experienced volunteers felt they mastered this skill: *"[…] at this stage I feel really confident signposting, so it's really quick for me"* (S9). Volunteers with less experience, however, saw their lack of this skill as a barrier: *"Sometimes it's a little bit difficult and I kind of just signpost them to more general services"* (V5).

3.1.2. Less intention to answer emails (Reflective motivation/Intentions)

Theme number 2 pertains to the *reflective motivation* COM-B domain and the *intentions* TDF domain which concerns an individual conscious
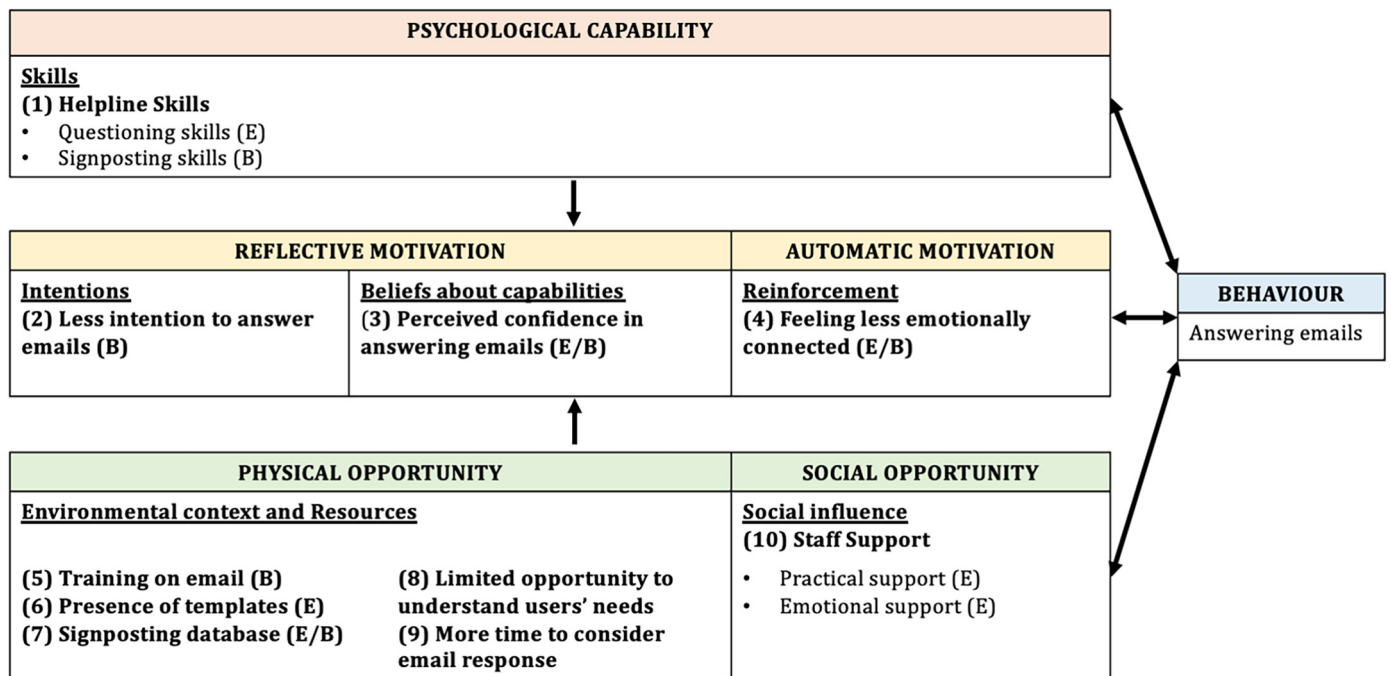
Fig. 3. Map of the 10 themes, indicating COM-B (overarching) themes, TDF (secondary) themes and inductive sub-themes.

intention and motivation to answer emails. Volunteers reported having fewer intentions to answer emails compared to other communication tools, which was a barrier. Being aware that other volunteers will eventually answer emails, tended to delay their responses. For example, *"Sometimes I won't be - sounds bad - but not as bothered maybe. And I know other people are picking up the emails after me and I know someone at the end is gonna give [the user] the organisations"* (V8). Similarly, another volunteer explained: *"I do kind of put them on …. on the back … cause it's just like … they can be answered whenever really."* (V3).

3.1.3. Perceived confidence in answering emails (Reflective motivation/Beliefs about capabilities)

The theme "Perceived confidence in answering emails" pertains to the *reflective motivation* COM-B domain and the *beliefs about capabilities* TDF domain which refers to the individual's perceived ability in answering emails. This theme was both an enabler and a barrier, dependent on volunteers' experience with the service. Volunteers with two or more years of experience felt very confident to answer emails. In contrast, others were not as confident as with other communication tools such as webchat: *"I think that because I don't do it as regularly, I'm not as confident with the emails as I am with the webchats"* (V5). The lack of confidence seemed to be rooted in the familiarity with email service, specifically: *"I'm not as confident with the emails. […] I think in some ways I'd probably like to answer more emails, so I get more experience of it"* (V6).

3.1.4. Feeling less emotionally connected (Automatic motivation/Emotion)

Theme number 4 relates to the *automatic motivation* COM-B domain and the *emotion* TDF domain. Volunteers felt less emotionally connected to email communication, which was a barrier to answering emails. For example, *"It's definitely a lot more disconnected so I'm not as motivated and when I get an email alert, I'm like, oh no, I don't want to do an email"* (V2). One volunteer further explained: *"If I get an email up, I'm less excited by it than a chat because it's like … much more mechanical than a conversation which you don't know how it's gonna go"* (V6). On the other hand, this feeling of emotionally disconnection was less stressful compared to the other helpline modes: *"[the a-synchronicity] does make it feel more like work than it does something different which I actually don't mind. […] I don't come away with needing a lot of self-care or support… which in some ways is quite nice"* (S9).

3.1.5. Physical opportunity/Environmental context and resources

In the following sections, the themes described concern the *physical opportunity* COM-B domain and the *environmental context and resources* TDF domain. These refer to any external opportunities, such as time, resources and tools, that enable or hinder answering emails.

3.1.5.1. Training on email.
Most volunteers considered the compulsory training to be inadequate for email communication: *"The training was very focused on webchats and emails weren't really mentioned much at all. […] I feel like I might need a bit more kind of training on it there"* (V2). One volunteer mentioned to not *"even remember being trained on [emails]"* (V8) and that the first time they received an email, they did not know how to answer it. Others suggested further practice on email communication was needed (e.g., *If they did like a mock young person emailing in and they answered the email like in front of you, like sharing the screen, that would definitely help 'cause no one has obviously spoken it through* (V6)).

3.1.5.2. Presence of templates.
The email templates are standardised emails offered by the helpline that volunteers can edit and personalise depending on the specific enquiry received (templates available upon request). All the participants considered this subtheme an enabler. For example, *"They give you a sort of template on how to structure [emails], which is really helpful"* (V5) and were extremely grateful to have these with one volunteer stating: *"[…] if I didn't have those, I'd probably have to form my own templates"* (V4).

3.1.5.3. Signposting database.
The signposting database, referred to as "the Red Book" by the participants, is a document that volunteers can access, containing all the national services and resources they can use when referring young people to external services (document available upon request). This theme was generally seen as an enabler e.g., *I'd say of the national services we've got a really good understanding of what they are and we're really good at redirecting to those* [S1]. However, some participants found it challenging to answer enquiries effectively as the database seems focused on counselling rather than other services e.g., *[the database is] too kind of focused on counselling"* (V3). Participants also reported difficulties in finding a range of signposts when users live either in rural parts of the UK or have specific accessibility needs such as disabilities.

3.1.5.4. Limited opportunity to understand users' needs. The email system's structure, which does not facilitate continued email communication between the volunteer and user, was seen as a barrier. Volunteers discussed how the asynchronous nature of email communication limited their understanding of the users' needs. One volunteer explained that email communication prevents them from exploring issues thoroughly: *"with emails, we don't really get to talk with them and explore more."* (V3). Another volunteer also noted that the asynchronous communication negatively impacts their signposting: *"[…] You can't have that conversation to find out what's going on. So sometimes it's a little bit difficult and you kind of just signpost them to more general services* (V5)".

A complementary factor limiting volunteers' ability to understand users' needs is the current system which allows volunteers only three email exchanges with the user: *"We have about 3 emails back and forth […] yeah, we have a template 1, 2 and 3 and like a closing one"* (V4). Because of this, volunteers are not able to evaluate how beneficial their support is for the user: *"I like when it's a conversation … You can tell if you've helped someone, right … They finished the conversation being like - thank you so much, you've really helped me blah blah - On the emails, you just don't really know what happens"* (V6).

3.1.5.5. More time to consider email response. Volunteers also viewed having more time to respond to email communication as an enabler. The nature of emails allows volunteers to examine the requests more thoroughly: *"It just gives you a bit more time to think about your phrasing, how you're structuring it, what questions you want to ask"* (V4). To illustrate, another volunteer explained: *"Once I couldn't really understand what they were saying, so I had to sit and read it, but then I knew there was no pressure 'cause I didn't have to reply straight away, 'cause it's an email"* (V8)).

3.1.6. Staff support (Social opportunity/Social influences)

Theme number 10 pertains to the *social opportunity* COM-B domain and the *social influences* TDF domain, concerning factors such as cultural norms and social cues which influence the behaviour. Both the sub-theme "practical support" and "emotional support" were considered important enablers to email communication. Practical support was offered to volunteers when more challenging emails come through: *"We always have a supervisor allocated to us for each shift. So, if you have any questions, queries … you just message him"* (V1). This was especially important in the first months of the volunteers' experience: *"The helpline support team are brilliant. They're constantly like talking to you for the first, I think, three months"* (V6).

Some attention was also given to the emotional support offered after emotionally intense conversations. Volunteers were grateful for the constant emotional support: *"[...]the thing that I've also been very grateful for is that if you have a bad conversation, they will always get in touch saying - how are you? do you want to decompress? like should we talk it through? - which is very important …"* (V6). However, volunteers noted not needing significant emotional support after responding to emails: *"Yeah, I think we do have a lot of support, but I don't think you need it as much as you think you do"* (V7).

3.2. Recommendations and BCTs

Overall, the analysis revealed various barriers and enablers to answering emails. Using the Theory and Techniques Tool together with the APEASE criteria, the most appropriate BCTs to address each individual barrier were identified. These were further developed considering the context as well as any previous evidence on their effectiveness in tackling the barrier. For instance, based on research showing the benefits of practice hours at increasing counselling self-efficacy [21], the BCT *'behavioural practice/rehearsal'* could be effective at improving volunteer's perceived confidence in answering emails by allowing volunteers to practice answering mock-up emails during the training period (see Discussion for elaboration on the evidence supporting each BCT). Table 3 describes the final BCTs identified, their description based on the corresponding barrier, and APEASE criteria.

4. Discussion and conclusion

4.1. Discussion

The present study identified ten core themes, considered enablers or barriers often depending on the participants' level of experience. The main enablers focus on the volunteers' skills, resources, and support offered to them. As summarised below, the main barriers relate to the asynchronous nature of emails, volunteers' lack of motivation and confidence in responding to emails and the need for additional training.

Despite the positive aspects of the asynchronous nature of email, such as having time to reflect on one's response, it can also inhibit volunteers' understanding of the user's needs compared to other communication tools,

Table 3
Possible intervention strategies based on the behavioural diagnosis and APEASE criteria.

TDF domain	Barrier	BCT Suggested	Strategy description	APEASE
Skills	Signposting skills	Instruction on how to perform a behaviour	Introduce training on the best strategies to use when signposting to external services.	This is affordable, practicable, and acceptable as the volunteers already go through a 4-week training period.
Beliefs about capabilities	Perceived confidence in answering email	Behavioural practice/rehearsal	Implement email training sessions where volunteers practice answering emails using mock-up examples.	This is affordable, practicable, and acceptable. In terms of resources, previous emails received by users could be anonymised and used as mock-ups.
Emotion	Feeling less emotionally connected	Information about Emotional Consequences	Volunteers may receive a regular newsletter that showcases positive feedback from users.	This is considered acceptable and affordable. Volunteers already receive a regular newsletter which can be updated including positive feedback specifically on the email service
		Restructuring the physical environment	Advise both the users and the volunteers to use emojis when writing and responding to emails.	This is considered acceptable and practicable. Emojis are already incorporated into email systems. A message suggesting the use of emojis can be added to the portal used by both the users and volunteers when sending emails.
Intentions	Less intention to answer emails	Goal setting	Volunteers set or agree on a goal in terms of how many emails they will answer during each shift.	This is deemed affordable, practicable, and acceptable.
Environmental Context and Resources	Training on email	Restructuring the physical environment	Introduce at least one training session dedicated solely to the email service and the strategies to answer emails.	This is deemed affordable, practicable, and acceptable.
	Limited opportunity to understand users' needs	Restructuring physical environment	A single volunteer will interact with an individual user until their needs are met.	This might not be practical as it would require the volunteer to commit to replying to emails from the same users even outside of their allocated shifts.
		Restructuring the physical environment	Increase the number of emails allowed to exchange, which might help volunteers to understand the issue better and give more accurate signposts.	This BCT is considered affordable, practicable, and acceptable as no major complications are foreseen with its implementation.

such as webchat. This was compounded by the current email system that restricts the volunteer to three email exchanges with the same young person. To address these barriers, the BCT *restructuring the physical environment* could be implemented; particularly to increase the number of email exchanges permitted and encourage interaction with a single user, whenever possible. This might somewhat recreate the working alliance (i.e., a relationship in which both parties work collaboratively, connect emotionally, and strive to achieve positive change [38]) that counsellors aim to achieve when giving counselling. This strategy, however, might not always be feasible in a helpline environment where volunteers take different shifts depending on their availability, preventing them from answering emails consistently. Nevertheless, volunteers involved can receive an update on the young person. This will ensure that volunteers know how a specific situation with a user ended which, as seen previously [39,40], could improve the volunteers' motivation to answer emails as their efforts might feel more purposeful.

Further barriers relate to volunteers' motivation, particularly having less intention to respond to emails and feeling emotionally disconnected from the email communication, which seems to be partly caused by the lack of immediacy of emails. The first barrier can be tackled with the BCT *goal setting*, by ensuring that volunteers agree on a goal in terms of how many emails they will answer during each shift. This technique has been previously considered effective in achieving behaviour change [41].

Focusing on the barrier *'feeling emotionally disconnected',* two BCTs were considered. First, the BCT *information about emotional consequences* could be utilised by including positive feedback from users in a regular newsletter. Sharing positive feedback has been shown to be helpful in boosting motivation and ensuring volunteers' retention [42]. In this study's setting, feedback would emphasise the importance of volunteers' email service in supporting the mental health of young people, which might improve their motivation. Additionally, the BCT *restructuring the physical environment* could be operationalised by encouraging both the users and the volunteers to use emojis when writing emails. The use of emojis has been seen to help supplement the lack of cues when expressing emotions and to aid human relations and interactions [43]. Indirectly, this BCT might also facilitate better understanding of the users' needs (theme 8) as research is starting to show the benefits of using emojis to facilitate the mutual understanding of a message [44].

Finally, similar to previous studies [20,21], less experienced volunteers were less confident in answering emails than more experienced volunteers. Confirming previous research [45], the importance of training to strengthen skills was also emphasised. Introducing training sessions, through the BCT *restructuring the physical environment*, might alleviate both these barriers, increasing volunteers' skills and their confidence in answering emails. Recent studies, for example, found that offering training on specific helpline skills improves volunteers' ability to offer support [19], as well as acting as a motivational factor promoting volunteers' retention [46]. Additionally, the BCT of *behavioural practice/rehearsal*, operationalised through email exercises, seems feasible to target the lack of confidence in answering emails of new volunteers. This is supported by earlier research showing that more practice hours achieved through internships were associated with higher counselling self-efficacy [21].

4.1.1. Limitations

This study's findings need to be considered in light of two limitations. First, their generalisability is constrained by the restriction to one helpline focusing on the mental health of youth. Future research could investigate influences on the delivery of email communication in helplines across different contexts. A second limitation is the potential of social desirability bias. Volunteers might have underreported elements that they did not feel comfortable sharing, such as negative aspects of the helpline or personal opinions.

4.2. Innovation

Despite its increasing popularity [11], this is the first study aiming to investigate the barriers and facilitators to the use of emails as a communication channel for mental health helpline services. The Behaviour Change Wheel proved to be a useful tool to achieve this objective as well as to advance a range of interventions to optimise this service provision.

The COM-B model and the TDF were instrumental in identifying both the advantages and disadvantages of using email as a communication tool for mental health. Advantages of this service include the lack of time pressure in responding and the emotional disconnection, which might help protect the volunteers' mental health by making the communication less emotionally draining. However, barriers such as equivocality, covered by media richness theory [13], and lack of skills and motivation also emerged.

The BCW and BCTTv1 enabled the identification of practical strategies to improve the email service. These involve introducing a newsletter featuring positive user feedback on the email service, restructuring the email system to create a working alliance with individual users, setting target goals on emails answered per volunteer, and increasing the level of practice in answering emails. Adopting such intervention strategies may improve the delivery of email communication in mental health helplines, leading to increased effectiveness of this provision for young people.

4.3. Conclusion

The internet has witnessed a remarkable increase in helpline services for youths [47]. Given their growing importance in offering mental health support, optimising their provision is crucial to meet young people's needs. This study shows how the BCW can contribute to this area through a systematic analysis of the influences on helpline provision and the corresponding strategies to improve its delivery. Future research is warranted to implement and evaluate the effectiveness of the strategies suggested. Moreover, future studies could implement the same systematic approach to investigate mental health provision within different contexts by, for instance, focusing on different age groups. More targeted approaches can lead to better mental health support and higher quality services.

Declaration of Competing Interest

The authors report there are no competing interests to declare.

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