

Dirty Dishes and Disturbances: Can AI Keep the Peace?

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Abstract

Expressing disagreement or distress to others can be challenging and may lead to conflict if not handled thoughtfully. To explore how AI can support interpersonal conflict management, we designed a mobile application with three core features: seeking advice, practising approaches in simulated conflicts, and rephrasing emotionally charged messages. We evaluate the application with ten individuals who currently live or have previously lived with roommates and interview them about their experience. Our results indicate that AI holds potential in supporting users in, for example, distancing from or creating strategies for managing interpersonal conflicts. Concretely, AI could support in the form of practising conflict resolution as well as receiving advice on how to handle a conflict and how to best communicate the intended tone.

Keywords

Roommates, Interpersonal Communication, Conflict Management, AI-Mediated Communication,

1. AI-Mediation and Conflict Management

Today, a significant portion of interpersonal communication takes place through computer-mediated communication (CMC) [1]. Within the HCI community, there is a growing interest in understanding and facilitating conflict resolution through CMC, especially within private messaging platforms [2, 3, 4]. The recent development of AI has propelled CMC into a new stage known as AI-mediated communication (AIMC) [5], where AI is actively involved in users' interpersonal communication [6], such as writing emails, messaging, or even attending a meeting on a users' behalf [7]. This type of AI usage presents unique opportunities to understand how AI can aid individuals in managing interpersonal conflicts and relational distress [8].

However, despite these promising developments, there remains limited understanding of how users perceive AI systems designed for conflict mediation and support. Open questions include identifying beneficial design affordances, understanding user perceptions of AI involvement in interpersonal conflict management, and a better understanding of the opportunities and risks these technologies introduce.

To address these questions, we designed and implemented a mobile application for conflict resolution with roommates. The application incorporates three distinct AI-driven features: AI Advice (providing targeted recommendations for conflict handling), AI Practice (facilitating roleplay-based conflict resolution training), and AI Rephrasing (assisting users to constructively reframe emotionally charged messages). We evaluated the application through qualitative interviews with ten participants with roommate experiences, gathering feedback into their experiences and perceptions of AI-mediated conflict management.

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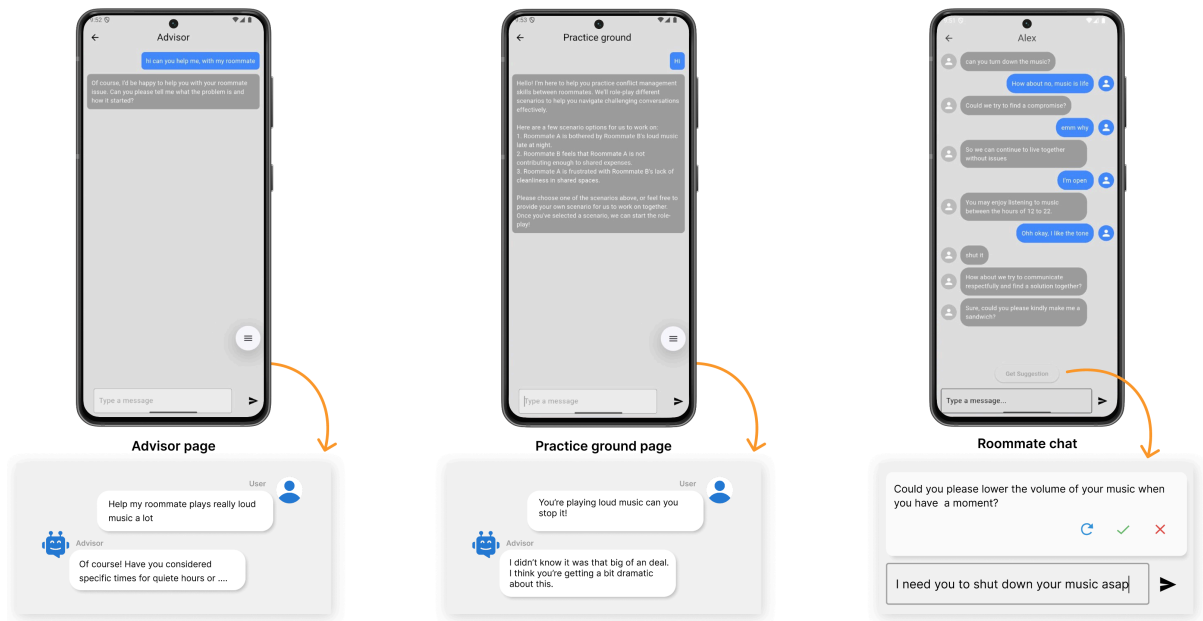


Figure 1: Illustration of the three AI 'rooms'. From left: Advice; Practice; and Rephraser.

2. Application and Evaluation

2.1. Overview

This application revolves around three AI features: the (1) AI Advice feature that provides advice on how to handle conflicts; the (2) AI Practice feature where the user can practice their conflict resolution skills with simulated conflicts before handling the real conflict, and (3) the AI Rephraser feature that transforms messages to be more constructive in regards to interpersonal conflict.

Next, we describe these three features in more detail (see Figure 1 for an illustration of the features).

2.1.1. AI Advice

The first feature serves as a source of advice, designed to offer advice to the user and encourage reflection on a given situation or conflict. The goal is to help users consider the various dimensions of a conflict and, with the support of AIMC, reduce miscommunication and unintended emotional reactions.

2.1.2. AI Practice

The second feature revolves around a practice ground and serves as a safe space where users can engage in roleplay with a fictional roommate. The AI introduces three different conflict scenarios that users can choose from, or they can propose their own. The purpose of the practice ground is to train skills such as active listening, effective communication, and maintaining focus on reaching a common goal—all important steps in constructive conflict resolution.

2.1.3. AI Rephraser

Lastly, in the Rephraser feature, users can utilise AI-generated suggestions on how to rephrase their tone or message more constructively and appropriately. This allows users to steer away from sending emotionally charged messages, where their intended message can get lost in the heat of the moment. Instead, they get the opportunity to express their thoughts and feelings more clearly, reducing the risk of miscommunication and potentially preventing unnecessary conflict.

2.2. Evaluation

We recruited ten participants who live with, or have experience with, roommates. Prior to using the application, participants are given the following scenario:

You live with your roommate, Alex. However, the past few days have been a bit tense because Alex often plays loud music late at night, which has been disturbing your sleep. You've tried to bring it up to him in a friendly way, but he hasn't taken it seriously and has continued. You're starting to feel frustrated and stressed about the situation.

Following reading the scenario, participants were instructed to seek advice on how to handle the conflict with the (1) Advice feature, followed by practising handling the conflict in the (2) Practice feature, and finally, message a 'roommate' using the (3) Rephraser feature. Upon completion of the task, we conducted semi-structured interviews.

3. Roommates' Perceptions of AI for Conflict Management

Most participants could see themselves using elements of the application, be it the (1) Advice feature, (2) Practice feature, or (3) Rephraser feature. Next, we report initial results generated by a thematic analysis.

Several participants expressed that getting another perspective or hear an external voice to be useful for stepping away from one's own experience. For example, P7 said: *"I thought it was good that it... that it told me to describe how I was feeling, instead of just saying what the problem was"*. Most participants expressed that the (1) Advice feature were helpful because the AI tried to focus on guiding the participant to express themselves clearly and constructively, and encouraged them to find a solution that potentially could work for both parties, where P7 said: *"It might be something we sometimes forget, to actually explain to others why we think something is frustrating, instead of just saying that it is frustrating."* They found that it was a good reminder of how to effectively handle a conflict, which several participants expressed as something they valued and liked. A reason could be, as several talked about it sometimes being hard to look outside one's own emotions, and as a result, their attempt at handling the conflict might end up reflecting that, by coming across as escalating. For example, P9 said: *"[...] usually if I'm frustrated with an issue, then I'm really focused on the frustration [...] So, I might be focused on just the conflict or having a conflict rather than looking for more options and solutions"*.

Some participants liked the review option in the (2) Practice feature for similar reasons, as it functions to review the conversation the participant had with the AI, as well as giving advice for how to improve. P8 said: *"I think it's nice because it's analysing how my style of writing and how I could be more kind or kindly, how to explain it without attacking"*. P3 also mentioned that the review could also help the participant take a step back, and take a few deep breaths before actually handling the real conflict: *"But that it kind of de-escalates your own anger, maybe. Like, you have to take a moment to think back, like, okay, I've stepped away from it—breathe, kind of thing"*.

Another aspect appreciated by several participants regarding the (2) Practice feature was the trial and error approach to practising their conflict management. P4 said: *"Being able to actually test things out and see what kinds of responses I can expect—it also gives me some insight into what I, as a person, should say and what I can pay attention to in my messages"*. Several participants also described their experience as a learning one, where P10 laid out the learning process as they saw it between (1), (2), and (3): *"[...] first with (1), it suggests that I could maybe try this or that [...]. And then I could combine that with using (2), writing things myself and doing a self-review [...]"*.

Regarding (3), participants liked the idea that they could write what they wanted to say and get a more de-escalating version of that message. P8 said: *"[...]sometimes when I'm angry, I don't want to write a direct message that might escalate the situation. It would be nice to rephrase it and still achieve the same goal, just with less conflict."* Another positive aspect mentioned by participants regarding (3) was that suggestions could be accepted, edited, refreshed, and declined. P4 said: *"You can quickly tap, see a*

suggestion, but also because you don't necessarily have to accept the suggestion. You can just read it and be inspired by it".

Participants expressed concerns around the risk of becoming dependent on AI when dealing with interpersonal relationships, such as those with roommates. Several also described that conflict resolution should be handled face-to-face, as such interactions are considered more natural and humanistic. P2 stated: *"It would feel a bit unnatural to start texting with my roommate (...). Even if there is an AI that can help, it would feel more natural for me to handle it personally"*, with P6 similarly saying: *"If you have a roommate, then personally, just as a human being, you have to learn to communicate"*. These statements suggest a fear that involving AI could minimize important interpersonal skills that are learned through direct face-to-face confrontation.

Furthermore, some participants struggled to use the (2) Practice Room, where conflicts are role-played for learning conflict resolution. The fictional AI character felt too fake and not like a real human. P6 expressed: *"The Practice feature is nothing like interacting with real people. The feedback it gives is very AI-like, you know. Like, it's either too quick to apologize, or too quick to get angry, or too quick to do something (...)"*. Another challenge was that using AI as a conversation partner was unfamiliar to participants. P10 said: *"Practice feature isn't... bad, but I don't know, I think I'm just more used to asking AI for advice. Not engaging in a back-and-forth conversation simulation (...)"*.

Finally, participants questioned whether the role of AI in conflict resolution was truly helpful or was making it worse. P4 said: *"You could say it wants to avoid conflict, and it's not that I want conflict, but maybe it's being too nice in a way. And I don't know if that will solve the conflict or just sweep it under the rug"*. This illustrates a concern that if the AI always compromise and have a polite tone, the AI might prevent effective conflict resolution. It can fail to express the frustration a participant feels or cannot push back. The frustration and depth of the emotion can be lost when everything is framed in very formal and compromise-seeking ways.

3.1. Summary and Future Directions

Our findings suggests that participants saw potential in AI's involvement in conflict resolution. They appreciated features such as getting a new perspective, practising conflict scenarios, and receiving constructive suggestions and feedback. However, participants also expressed concerns. Some participants felt that AI could threaten authenticity, as they preferred to express themselves in their own words as to reflect their personality. Overall, the findings indicate that participants held the opinion that AI should have a supportive role to encourage reflection without taking over the conversation, balancing that AI augments rather than overrides participants' reflections in conflict management. Based on our findings, we establish two discussion points relevant to the workshop topic *"Design patterns that support or hinder the cultivation of phronesis and other virtues in work or personal contexts"*:

- **Practising and Reflecting on Core Values with AI**—A majority of participants responded positively to being prompted into a more reflexive mode. Across all three features, participants described introspection as a consequence of, for example, asking the AI for advice. In situations where one's values may be less clearly formed, these interactions offered a clear opportunity to explore what they find important and wish to pursue. This potential is further substantiated by recent research focused on user interface [9] or chatbot design [10] for reflective practices.
- **Outsourcing Social Responsibilities to AI**—While several participants appreciated the presented application, several raised concerns about how it might bypass social responsibilities that are typically unavoidable in human-human interaction. By allowing AI to mediate or absorb these challenges, some worried that they might lose opportunities to practice empathy, negotiate tensions, or take responsibility for difficult conversations in real life—challenges also highlighted in recent HCI work (e.g., on mental health chatbots [11] or robot health mediators [12]).

Together, these two points highlights pros and cons around **Long-Term Learning** in contrast to **In-the-Moment Support** for AI-mediated conflict management. On the one hand, AI systems can offer

immediate assistance, such as checking the tone of communications, suggesting appropriate wording, or rephrasing emotionally charged messages. On the other hand, beyond momentary assistance, AI also presents valuable learning affordances, enabling users to gradually improve their communication and conflict resolution skills over time. Dhiman et al. emphasise that learning is tightly coupled with motivation [13]. From this perspective, exploring AI for conflict management highlights a research opportunity: designing systems that balance immediate support during conflicts with longer-term learning goals.

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