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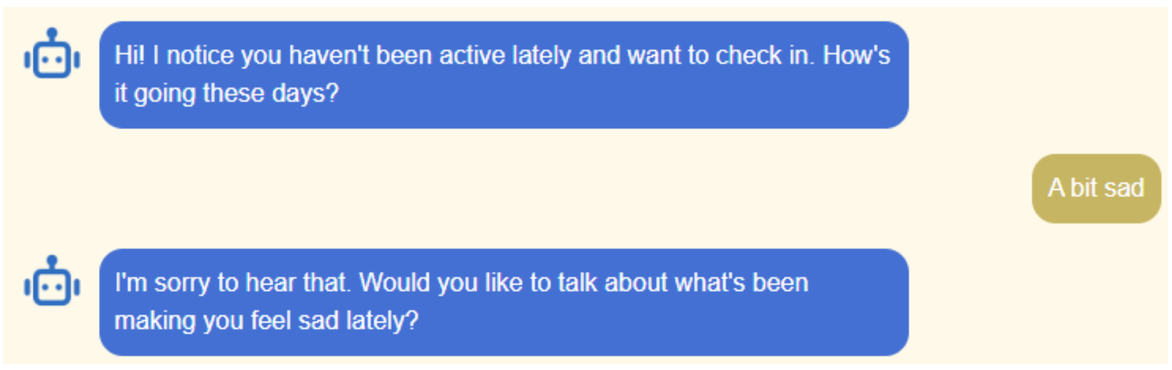
Conversational Intelligent Agents for Peer Support

Background

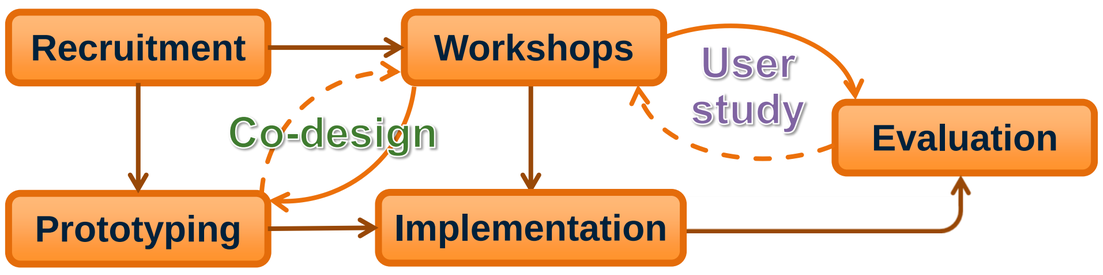
Peer support is widely recognized as a beneficial, therapeutic approach, in which participants have safe and empathetic conversations to share experiences and support each other [1]. However, Peer Support Organizations (PSOs) are burdened with extensive infrastructural tasks (e.g. coordinating activities and discussions or proactive caring for participants) to ensure the safety and effectiveness of their programs [2]. With the advent of digital technology, more PSOs developed digital strategies and shifted to online operation [3], which was accelerated during the COVID-19 pandemic. Post-pandemic, most of them follow hybrid models, leveraging digital tools to organize and expand both offline and online activities [2].

Project Aim

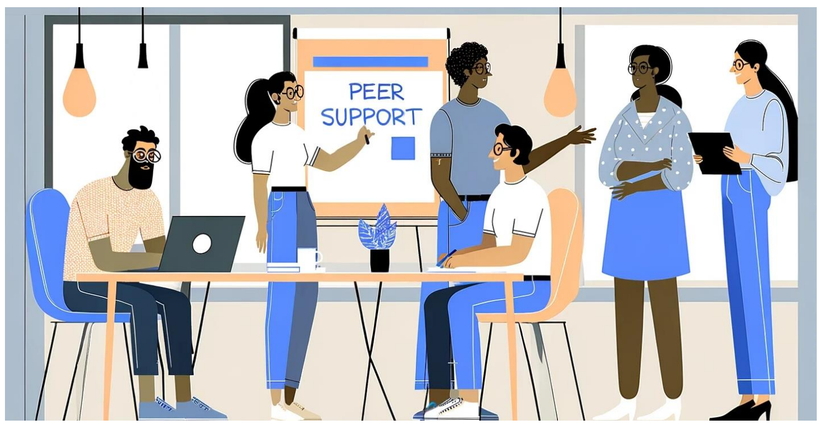
This research aims to enhance digital support for PSOs with hybrid peer support programs by developing a conversational intelligent agent. The chatbot acts as a mediator in support groups to alleviate the workload on volunteers and staff and promote higher quality engagements and personalized interaction. Our objective is not to replace the role of a human with a robot but to have it facilitate the work behind the scene, enabling people to concentrate more on providing essential emotional support to a unique and diverse populations.



Co-design Methodology



In this project, we adopt the co-design methodology, also known as participatory design, because it centers on the experiences and insights of actual users, thereby enhancing the effectiveness and acceptance of the solutions we create. This approach involves all stakeholders – users, partners, employees, etc. – in the design process to ensure that the outcomes meet their needs and are practical [4]. It fosters inclusivity, innovation and leads to more sustainable and creative results by involving a diverse range of voices in the process.



MAKE PEOPLE HEARD!

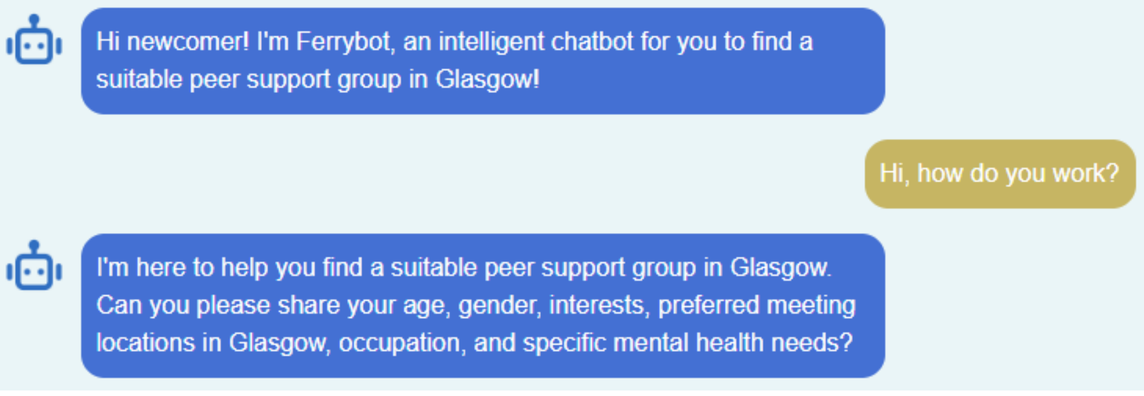
Ferrybot Prototype

Ferrybot is an intelligent chatbot designed for peer support, named from the concept of a “ferry boat”. It facilitates communications between participants and managers, helping managers with their tasks and offering guidance and support to members anytime they need it. Powered by state-of-the-art LLMs, Ferrybot can understand specific scenarios, interpret user inputs, and respond in a natural way.

To show the functioning of Ferrybot, we developed a web prototype with six specific conversation scenarios –

1. Check in with inactive users on their wellbeing.
2. Match newcomers with suitable support groups.
3. Coordinate group availability and preferences for next event.
4. Active member engagement training.
5. Empathic care by simulation training.
6. Conflict management training in group chats.

You could scan the QR code at the bottom or via *ferrybot.eu.pythonanywhere.com/* to try out.



Bringing People to Co-design and User Study

Employing participatory design methodology, we have been desiring to engage with PSOs to explore the practical roles a chatbot could play in their work. Conducting workshops, interviews, and survey questionnaires with peer support practitioners is the core of our design process, and based on the findings, we develop iterative prototypes for final implementation and evaluation.

To date, seven PSOs have shared their unique and invaluable perspectives with us, and we are continuing to seek further collaborative opportunities. If you are or know anyone who is involved in related work, we'd love to talk to you. We also prepared an online questionnaire to find out your views, accessible via the QR code at the bottom or via *forms.office.com/e/YXY5DfdjY3*.

References

[1] Mead, S., Hilton, D., & Curtis, L. (2001). Peer support: a theoretical perspective. Psychiatric rehabilitation journal, 25(2), 134.
[2] Ding, X., Tran, L., Liu, Y., O’Neill, C., & Lindsay, S. (2023). Infrastructural Work Behind The Scene: A Study of Formalized Peer-support Practices for Mental Health. In Proc. of the 2023 CHI Conference on Human Factors in Computing Systems (pp. 1-14).
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[4] Sanders, E. B. N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. Co-design, 4(1), 5-18.

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