

LETTER OF INFORMATION / CONSENT



Title: Investigating the Experience of AI-mediated Journaling

Principal Investigator

Dr. Swati Mishra
Assistant Professor
Computing and Software Department
McMaster University, Hamilton, Ontario, Canada
Contact: mishrs23@mcmaster.ca

Students Investigators

Daye Kang (dk564@cornell.edu), Wenhan Dong (dongw17@mcmaster.ca)

What is the study about: The study investigates how AI-enhanced therapeutic journaling affects mental well-being through two interventions: AI-generated images visualizing journal content and AI-generated narrative therapy responses. It aims to measure how these technologies impact participants' reflection, self-expression, and mental well-being compared to traditional text-only journaling.

What would you be expected to do: Participants will engage in a one-week study with two daily activities: writing a journal entry (20 minutes) using a system designed by the researchers followed by completing a survey (10 minutes). This will be done online through a provided system URL where participants create an account. Participants will need to write their journal at a set time each day. Participants will be randomly assigned to one of three groups: standard text-only journaling (control), journaling with AI-generated visual representations, or journaling with AI-generated narrative therapy responses. At the end of the study, participants will complete an exit survey about their experience. The total time commitment is approximately 30 minutes per day for 7 days, plus a final exit survey that will take 10 minutes. Participants will be screened for eligibility – must be over 18 years of age, fluent in English, and have an interest in journaling. Additionally, participants must not have any major mental disorders, depression or anxiety.

Protecting your privacy: Your information, including your name and email contact information, will be kept private and confidential and will only be used to coordinate a study time with you. You will be assigned a unique ID, which will be used to refer to your responses and analyze all the data. This unique ID cannot be used to link your data to your personal information like name and email. No one will know you participated in this study unless you choose to tell them. All your data will be stored on a private and secure server – MacDrive, server that is encrypted and only accessible internally through secure access and complies with McMaster's Data Storage and Security Guide. We will share the journal entries you write with AI model service providers (Stable Diffusion and OpenAI) to generate visuals, without any of your personal identifiers linked to the entry. While the data we send to these servers cannot be linked to you, you must also avoid disclosing any personal identifiers in your journal entries. We will share your name and email id with McMaster Accounts Payable to process the incentives.

Potential Harms, Risks or Discomforts: The study identifies a potential risk of harmful AI-generated text and images, though chances are deemed low. To mitigate this, all AI content undergoes a comprehensive human filtering process before reaching participants. Researchers review generated materials using standardized criteria to assess for triggering content and appropriateness. Content failing these standards is regenerated until suitable materials are produced, ensuring all AI-generated content meets safety standards before participant exposure.

There is also a potential risk of experiencing emotional discomfort from reflective journaling, privacy risks related to the disclosure of personal narratives or images, and the possibility of biased or inaccurate AI outputs. If you feel distressed at any moment, please contact any of the services listed in the mental health support document shared with you. While our research team will ensure to remove any biased or inaccurate AI outputs, you have the agency to not press the button and stop AI generation in case you feel uncomfortable with generated output. Please inform us under those circumstances of your decision, without any negative impacts on the outcome.

Incentive/Payment or Reimbursement: Participants will receive a \$59 gift card as compensation: \$5 per day for completing the 20-minute journaling exercise (totaling \$35 over 7 days), \$2 per day for the 10-minute daily survey (totaling \$14), a \$5 bonus for completing all activities without missing entries, and \$5 for completing the final exit survey. The actual amount will vary depending on individual completion rates. Compensation will be distributed as gift cards at the end of the study. The amounts will be prorated based on the number of days you participate.

Are there any potential benefits for participating in the study: Participants may experience improved mental well-being through engaging in journaling, which the document notes can provide space for self-expression and reflection, help clarify thoughts and emotions, and reduce stress. Participants will contribute to research that aims to understand how AI-mediated journaling might serve as an effective self-reflection and self-expression tool.

What if I change my mind about being in the study: Participation in this study is completely voluntary. You may leave the study at any point during the study session. If you decide to withdraw, there will be no consequences to you. In cases of withdrawal, you will be compensated with the amount corresponding to your participation level. If you do not want to answer some of the questions, you can exit the study. You can click exit and leave the study when completed. However, you cannot withdraw from the study after the study is complete, since the data is being collected anonymously and we have no way to identify your information in the database. Therefore, you may withdraw up until your data have been de-identified or uploaded in the system, after which withdrawal is not possible.

How do I find out what was learned in this study: A summary of the results will be published in a paper at potential scientific venues, without any personal identifiers of the participants. If you would like to receive the summary personally, please leave your email id. You can access the papers via the lab website hosted on McMaster webpage. We will use the email id for only communicating the results of the study. Please provide your consent by clicking on the below checkbox. The study results will be made available approximately by December 2026.

Questions about this study: If you have questions or need more information about the study please email at mishrs23@mcmaster.ca

This study has been reviewed by the [McMaster Research Ethics Board](#) and received ethics clearance under project (MREB#). If you have concerns or questions about your rights as a participant or about the way the study is conducted, please contact:

McMaster Research Ethics Office
Telephone: (905) 525-9140 ext. 23142
E-mail: mreb@mcmaster.ca

Consent

Having read the above preamble, I understand that by clicking the “Yes” button below, I agree to take part in this study.

- ☐ **YES**, I agree to participate in this study.
- ☐ **NO**, I do not agree to participate in this study.

Please select the below check box to provide your consent to using your data for this research.

- ☐ I agree to allow my study data to be stored and used for this research as described in the Informed Consent

Please select the below check box, if you wish to receive the results via email:

- ☐ I agree to allow the researchers to personally send me the results of the study via email.
- ☐ I do not wish to receive the study results via email