Response to Ethical Meta Review

We thank for reviewers' careful ethical review of our paper, and have addressed all the ethical concerns in the section of Ethics Statement in final version. Here is our response to related Legal/Privacy/Ethical considerations. All statements below are included in our paper.

Legally qualified to be used our data collection falls under the Personal Information Protection Law of the People's Republic of China. In the phase of portrait collection, the collection application was developed as a WeChat mini program[1], which complied with the privacy protection agreement and passed the security and privacy check of WeChat mini program before releasing on the platform. Furthermore, all the portrait providers signed an informed consent form to give permission to collect their anonymous information for research purposes.

In the phase of the dialogue collection process, all the workers and annotators are informed about the purpose of our data collection and equally paid for their workload. In the phase of the dialogue examination process, the psychiatrists and psychotherapists are licensed to practice and paid equally for their workload.

We will also require the users of D^4 to comply with a data usage agreement to prevent the invasion of privacy or other potential misuses. All of our data can only be used for research purposes.

Private information of individuals is excluded To protect users' privacy, we anonymized the portraits by storing them without a one-to-one correspondence between the identification information required for user login and the data we use in research. Therefore, all the information that could uniquely identify individual people is excluded from our dataset and research process. Regarding offensive content, we rigorously filtered the dataset manually to ensure that it did not contain any offensive content or words encouraging patients to self-harm and commit suicide.

Ethics approval of the study This research study has been approved by the Ethics Review Board at the researchers' institution (Ethics Approval No. I2022158P). Different stages in data collection comply with corresponding ethical requirements and we endeavour to protect privacy and respect willingness of our data providers and annotators.

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[1] https://developers.weixin.qq.com/miniprogram/en/dev