Comments 1: *[*Introduction*] The introduction lacks a clear explication of the direct connection between Socioemotional Selectivity Theory (SST) and the Awareness, Courage, and Love (ACL) model. While both models are described, their interrelation and the suitability of the ACL approach for older adults within the SST context require more explicit logical linkage.*
Response 1: Thank you for your suggestion. We have revised the manuscript accordingly.

Comments 2: *[*Introduction*] SST posits that older adults focus more on emotionally meaningful experiences and relationships; the ACL model provides specific methods for forming and strengthening such meaningful relationships.*
Response 2: Thank you for your comment. We have revised the manuscript.

Comments 3: *[*Introduction*] The 'Awareness' component of the ACL model can be associated with the enhanced emotional regulation abilities of older adults emphasized in SST.*
Response 3: Thank you for your comment. We have revised the manuscript.

Comments 4: *[*Introduction*] The 'Courage' element of ACL relates to the self-disclosure necessary for forming deeper, more meaningful relationships within the reduced social networks of older adults, as mentioned in SST.*
Response 4: Thank you for your comment. We have revised the manuscript.

Comments 5: *[*Introduction*] The 'Love' aspect of ACL directly correlates with the pursuit of emotional satisfaction and well-being in older adults, as proposed by SST.*
Response 5: Thank you for your comment. We have revised the manuscript.

Comments 6: *[*Introduction*] The literature review on the application of the ACL model to older adult populations is limited. A more comprehensive examination and presentation of existing research on the effectiveness, applicability, and potential benefits of ACL interventions for older adults is necessary.*
Response 6: Thanks for your comment. We understand that there is limited research on ACL models for the elderly population. We added a few sentences to state the importance of one-session intervention and the rationale on why we think ACL could be possible to intervene older adults' mental well-being.

We are excited to take the lead in exploring this field.

Comments 7: *[*Introduction*] The cited research on online applications of the ACL model is limited to studies with general adult couples. This paucity of relevant research could be a limitation. It is recommended to include discussions on the effectiveness of online psychological interventions for older adults in general, or the efficacy of similar online intervention programs.*
Response 7: Thanks for your comment. In our current study, the ACL intervention as a positive enhancement intervention would be a great way to help the general elderly population, rather than focusing on specific mental health needs.

Comments 8: *[Study Aims and Hypotheses] It is advisable to include aims or hypotheses that consider the specific characteristics of online interventions. For instance, hypotheses regarding older adults' competency or satisfaction with online platforms could be incorporated.*
Response 8: Thank you so much for your advice. Our current study focuses on how participants' subjective views of "inclusion of others" have improved. We are excited to examine how effective the ACL online intervention has been in achieving this, rather than just looking at their competency or satisfaction with the online platform.

Comments 9: *[Study Aims and Hypotheses] While a hypothesis on the maintenance of effects after one month is present, including aims or hypotheses about more long-term effects could enhance the clinical significance of the study.*
Response 9: We reviewed the single-session intervention studies, most studies were using a one-month follow-up as their common practice, therefore, we adopted a similar approach in our pilot study.

Comments 10: *[Study Aims and Hypotheses] Adding hypotheses directly related to SST or the ACL model could strengthen the theoretical foundation of the research.*
Response 10: We appreciate the reviewer's suggestion to add hypotheses related to SST or the ACL model. However, we would like to clarify that the primary aim of this study is to conduct a pilot trial focused on assessing the feasibility and preliminary efficacy of the ACL intervention. As such, the study is not designed to rigorously test the theoretical foundations of SST or the ACL

model at this stage. The data gathered from this pilot will inform a larger, future study that may address these theoretical constructs in greater depth.

Comments 11: *[Materials and Methods] A more detailed explanation of the sample size calculation rationale and methodology would be beneficial. Including expected effect sizes and power calculations would strengthen this section.*
Response 11: Thank you for your insightful comment. We have revised the manuscript to include a more detailed explanation of the sample size calculation, including the expected effect size, power calculations, and the rationale for the methodology used.

Comments 12: *[Materials and Methods] The recruitment methods and strategies for older participants should be more explicitly described, particularly clarifying how older adults capable of participating in online interventions will be identified.*
Response 12: Thank you for your comment. The manuscript has been revised.

Comments 13: *[Materials and Methods] A more detailed explanation of the specific content and process of the ACL sessions would be valuable.*
Response 13: Thanks for your comment. Because of the limitations of the protocol paper's standardized format, we'll be sure to include the details and process of the ACL session in the final paper.

Comments 14: *[Materials and Methods] Describe plans for supporting older participants' use of online platforms (e.g., technical support, pre-training).*
Response 14: Thank you for your comment. We have revised the manuscript.

Comments 15: *[Materials and Methods] Additional mention of specific ethical considerations related to older adults' online participation (e.g., digital literacy, online fatigue) would be prudent.*
Response 15: Thanks for your advice! To promote digital literacy, we will be covering ethical considerations and group rules in the "welcoming" and "shared agreements" sections of each intervention session.

Comments 16: *[Materials and Methods] Clear delineation of the specific treatment content and schedule for the control group is necessary.*
Response 16: Thank you for your feedback. We have revised the manuscript to

clarify that the waitlist control group will not receive any treatment during the study period. They will participate in data collection at the same time points as the intervention group, and after the final data collection, they will be offered the same intervention. Please refer to the revised section for more details.

Comments 17: *[Discussion] While the main limitations such as potential bias in the randomization process, representativeness issues in sample selection, and imperfect blinding are mentioned, specific concerns about older adults' participation in online interventions are not addressed. Despite the inclusion criterion of "access to the internet and a videoconferencing device," concerns or limitations regarding the application of online interventions to older adults need to be resolved. This could be addressed by considering additional participant selection criteria, such as assessing older adults' digital literacy levels. Alternatively, explicit inclusion of pre-training or support plans for online platform use by study participants should be considered.*
Response 17: Thank you for your comment. The manuscript has been revised.