Give the people what they want, feedback: Older adult perceptions of cognitive training features
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Purpose According to Temporal Self-Regulation Theory (TST; Hall & Fong, 2007) the capacity to engage in behavior in accordance with long range interests arises from a complex com-bination of biological, cognitive, and social factors. Consistent with other theories of human behavior, TST holds that motivation to engage in any behavior is primarily a function of the perceived likelihood of expected outcomes and the values attached to them (Hall & Fong, 2007). In cases where older adults may not perceive the impact that an intervention or treatment might have immediately, the phenomenon of temporal discounting may pose an additional challenge to treatment adoption and adherence. Temporal discounting refers to the phenomenon that future rewards are perceived as less valuable than immediate rewards (Green et al., 1994). In a sense, users of cognitive training are giving up time now (engaging in cognitive training) for time later (extended functional independence), and they must weigh this trade-off (Harrell et al., 2019). In fact, temporal discounting was used by Toril et al. (2014) to explain why in their meta-analysis of cognitive training, shorter training durations appeared to produce larger cognitive effects. They proposed that the more limited required investment increased older adults' motivation to train, producing better outcomes. While TST provides a framework for understanding the role of motivation in behavior change, motivation to facilitate adherence can be driven by both positive and negative emotional reactions in which adherence is viewed in relation to gains versus losses. **Method** In a sample of 100 older adults (Mean age = 69.9, SD = 4.4), we explored participant-provided feedback related to intervention and game elements that participants perceived would increase their adherence across five domains: (1) ability to adjust difficulty; (2) ability to change game framing (instead of the administered American Western theme); (3) cognitive performance feedback; (4) ability to unlock extra game features (e.g., more levels); and (5) other elements. **Results and Discussion** Ranked in order of frequency of endorsement, 53% endorsed interest in cognitive performance feedback; 47% of participants endorsed wanted to adjust difficulty; 27% endorsed the 'Other' option; 28% endorsed the ability to unlock new features; and 20% endorsed changing the game's theme. This work has implications for models of adherence - particularly considering the role that expectations of later cognitive feedback might play. Future work may consider various approaches to participant feedback including: relative feedback (e.g., you are in the top X percent of participants); normative feedback (e.g., this is how you compare to participants in your demographics); and ipsative feedback (e.g., you completed X sessions this week; that is x assessments more than last week).

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