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Designing Virtual Content to Increase Empathy and Reduce Obesity Stigma: Lessons Learned from an Online Pilot

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We investigated two strategies for reducing weight stigma: education about the genetics of eating behaviors and prompting perspective-taking. These strategies were piloted using simple video stimuli to inform the design of a future virtual reality (VR) intervention. VR may be effective at prompting empathy because it allows users to embody another persons’ perspective. In particular, the use of first-person perspective should lead to higher feelings of embodiment, similarity, and ultimately improved attitudes compared to third-person perspective (Brunye et al., 2009; Myers et al., 2014). We conducted a randomized control trial using a 2x2 between-subjects design. Participants were randomly allocated to watch an educational video about gene-by-environment interaction concepts or a control video. Participants then watched a set of video scenarios that depicted what it is like to have a predisposition towards obesogenic eating behaviors from either a first-person or third-person perspective. Participants then completed a knowledge check and a battery of empathy and weight-stigma questionnaires. Participants’ genetics knowledge significantly improved after watching the educational video compared to watching the control video. In addition, participants who watched the educational content reported higher empathy towards the characters in the video scenarios and lower weight stigma. However, contrary to our expectations, there was no effect of video perspective on empathy or stigma. Perspective-taking may have been ineffective because the first-person perspective may have been too subtle or unclear. Conducting future interventions in virtual reality may offer a unique opportunity to place participants in a convincing first-person scenario, but this requires further empirical exploration.