This study examines the role of framing and empathy in persuasive messages. Twenty professionally produced traffic safety public service announcements (PSAs) were used as stimuli in a 2 (frame: gain v. loss) x 2 (empathy: high v. low) x 5 (message) repeated measure experiment. The 53 participants were instructed to watch each PSA presented in a random order while psychophysiological measures were recorded to index real-time cognitive and emotional processes engaged while viewing the messages along with various self-report items. Results show that viewers allocate the most cognitive resources to gain-framed high empathy messages followed by loss-framed high empathy messages. Loss-framed high empathy messages are the most arousing, while gain-framed high empathy messages are the least arousing suggesting a difference in how these types of messages are processed. Implication for the study of mediated empathy and the construction of traffic safety messages are discussed.

Title: Emotional and cognitive processing of traffic safety messages