

The current study looked into empathy for others' pain, as a function of dispositional empathy and whether the target is experiencing physical or social pain. Participants took the short form of the Emotional Quotient test (Wakabayashi et al., 2006), a self-report assessment of participants' tendency to empathize with others. Participants were then shown a social pain video or a physical pain video (Atkins, Uskul, & Cooper, 2016; actor describing a romantic breakup, or having their hand punctured by a needle). Participants rated the actors' pain level on a 0-10 scale. Participants also read four short scenarios which were equated in pilot testing for rated severity such that one depicted a high level of social pain; one depicted high physical pain; and two others represented low levels of social or physical pain. A 5-minute Stroop test was given between administration of the EQ and exposure to one of the two pain videos, and again between the pain video and the four written pain scenarios.

We predicted that participants responses to physical and social pain would differ and that dispositional empathy scores would predict reactions. Results were somewhat consistent with expectations, but several surprising findings emerged. Although female participants had higher EQ scores, it was the males who showed a correspondence between EQ and perceived pain ($r = .27$, vs. $-.06$ for females). Across both written and video exposures, participants responded with much higher perceived pain for social than physical pain. This difference was more pronounced for participants with high EQ, resulting in an EQ by pain type interaction, $F(1, 131) = 4.13$, $p < .05$, $\eta^2 = .031$. Although the third order interaction with gender did not reach significance, an examination of cell means made apparent that the interaction was driven by the male respondents.