

Prior research has established that in the absence of an absolute standard, people depend on reference points when making evaluations. Studies on the anchoring effect have shown even arbitrary numbers can bias estimates (Furnham & Boo, 2011; Tversky & Kahneman, 1974), while it is an accepted aspect of behavioural economics that the value of gains and losses is determined by one's current assets (Kahneman & Tversky, 1979; Schmidt 2003). The current study examined whether this phenomenon extends to judgments of morality. Though past work has shown the prevalence of a behaviour may increase perception of its acceptability (Cialdini et al., 2006; Cialdini, Reno, & Kallgren, 1990; Erikson, Strimling, & Coultas, 2014; Lindstrom, Jangard, Selbing, & Olsson, 2018), little attention has been directed at the standards set for individuals. The purpose of the current study was twofold. First, I examined whether the prevalence of prosocial and freeriding behaviours in a public goods game acted as a reference for the judgment of individual players. Second, I used the same manipulation to attempt to replicate the findings of Lindstrom et al. (2018) by showing prevalent behaviours are seen as more moral.

Undergraduate students were randomly assigned to either a high moral reference ($n = 54$) or a low moral reference ($n = 53$) group. All were told they were going to be shown the results of a public goods game, with an explanation of the rules given beforehand. In this variant, the same four players remained together for five rounds, with an allotment of \$20 for each round. Every round, players could contribute any amount of the \$20 to a common pool, where it would be doubled and distributed evenly among all players. This situation allowed for some players to be prosocial and add most of their own money to the commons, while some profit off the goodwill of others without contributing. In the scenario presented to participants, Player A would always freeride and Player B would always act prosocial. The contributions of Player C and Player D varied by condition. In the high moral reference condition, they would both contribute most of their money each round. In the low moral reference condition, both would contribute very little. Participants were then asked to rate the morality of each of the players as well as the acts of contributing and freeriding using a single Likert item each.

As predicted, both the freeriding player (A) and the prosocial player (B) were seen as significantly less moral when Player C and D set a high standard by consistently giving large contributions compared to when they set a low standard by contributing little ($M_{\text{difference}} = 0.37$, on 9 point scale), $F(1, 105) = 4.85, p = .030, d = 0.41$. Contrary to my second set of predictions, the act of contributing a large amount was rated marginally less moral under a high moral standard compared to a low moral standard ($M_{\text{difference}} = 0.57$ on a 9 point scale), $t(104) = -1.66, p = .100, d = 0.33$. The act of freeriding showed a similar effect, with the behaviour rated marginally less moral with a high reference than with a low reference ($M_{\text{difference}} = 0.62$), $t(105) = -1.78, p = .077, d = 0.35$.

The current findings demonstrate that individuals appear more moral when compared to immoral peers rather than moral peers, who collectively act as points of reference. Preliminary evidence also suggests the acts of contributing and freeriding in themselves may be seen as more virtuous when lower standards are set. This is in contrast to Lindstrom et al. (2018), who found that actions were seen as more moral when they were *more* common. For judgments of both actors and actions, the issue is likely more complicated. In an unfamiliar social environment, it may be prudent not to act too differently for others. But when a social norm is already established, the prevalence of others upholding the norm may serve to set a standard.