

**Self-interest without Selfishness:
The hedonic benefit of imposed self-interest**

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ABSTRACT

Despite common sense appeal, the link between self-interest and happiness remains elusive. One reason why individuals may not feel satisfied with self-interest is that they feel uneasy about sacrificing the needs of others for their own gain. We propose that externally imposing self-interest allows individuals to enjoy self-benefiting outcomes that are untainted by self-reproach for failing to help others. Experiment 1 finds that an imposed self-interested option (a reward) leads to greater happiness than choosing between a self-interested and a prosocial option (a charity donation). Experiment 2 finds that this effect is not driven by choice in general; rather, it is the specific tradeoff between benefiting the self and others that inhibits happiness with self-interest. We theorize that the agency inherent in choice reduces the hedonic value of self-interest. Experiment 3 finds support for this mechanism.

Traditional economic theory assumes that human behavior is driven by self-interested pursuits. This assumption appears valid because there is a direct link between outcomes that benefit the self and happiness: simply put, we feel good when our lot in life improves and we feel bad when it worsens. Yet the self-interest assumption, first espoused by Thomas Hobbes (1651/1950), has been repeatedly challenged by empirical findings that people often make self-sacrifices to improve the welfare of others (Batson, 1991; Camerer & Thaler, 1995; Loewenstein & Small, 2007; but see Cialdini, Brown, Lewis, Luce & Neuberg, 1997; Maner, et. al, 2002). Moreover, the relationship between self-interested pursuits and happiness is complicated. Much research in decision-making finds that people often fail to choose what makes them happy, and as a result may not be choosing what is best for them (see Hsee & Hastie, 2006). Furthermore, prosocial behavior has been shown to increase happiness—sometimes even more so than self-interested behavior (Dunn, Aknin, & Norton, 2008; Harbaugh, Mayr, & Burghart, 2007; Meier & Stutzer, 2008).

One reason why the exclusive pursuit of self-interest may not always maximize well-being is that it often entails sacrificing the needs of others along the way. Every dollar spent on oneself could otherwise be donated to someone in need. In many situations opportunity costs are not salient (Frederick, Novemsky, Wang, Dhar & Nowlis, 2009; Spiller, 2011), but when they are, the tradeoff between self and other may foster internal conflict (Mellers, Haselhuhn, Tetlock, Silva & Isen, 2010) that could taint the otherwise pleasurable experience of gaining.

Indeed, the experimental methods used to test the self-interest assumption—such as the dictator game—directly pit helping one's self against helping others (Camerer & Thaler, 1995). If an individual selects an option of self-interest, they may feel guilt, unease, or even reproach for prioritizing themselves above others. If an individual selects a prosocial option, they fail to

reap the benefits inherent in self-interest. Consistent with this view, research has shown that people will avoid making direct tradeoffs between self and other, if they can (Dana, Weber, & Kuang, 2007).

We therefore propose that imposing an otherwise selfish option removes the negative experience that arises when trading off one's own well-being with the well-being others. By removing agency, individuals no longer feel a sense of responsibility over their outcomes, and can enjoy the pleasure inherent in self-interest while avoiding self-reproach for failing to help others. Thus, imposing an option of self-interest can be liberating by allowing individuals to enjoy *self-interest* without feeling *selfish* for doing so.

Choice and Well-being

The research presented in this paper contributes to a broader literature identifying when the provision of choice is beneficial or harmful to well-being (Botti & Iyengar, 2006; Schwartz, 2004). Although more choice options makes economic sense—allowing for preference matching by permitting individuals to select an option they desire the most—sometimes, additional choice hurts. As a decision becomes more complex, people experience choice conflict, thereby inhibiting satisfaction (Iyengar & Lepper, 2000). Increased choice conflict leads decision makers to defer choice, select a default option, and employ heuristics to guide decision-making (e.g., Dhar, 1997; Luce, 1998; Shafir, Simonson & Tversky, 1993).

Taken to the extreme, even removing choice altogether can be beneficial. In particular, choosing amongst relatively undesirable options reduces satisfaction, because individuals tend to blame themselves for making a bad decision (Botti & McGill, 2006). Further, imposing an

outcome alleviates negative emotions that result from making a decision involving highly upsetting trade-offs, such as the decision to terminate life support for a severely ill newborn (Botti, Orfali & Iyengar, 2009).

Choice also hurts well-being when it requires people to make harmful comparisons between alternatives. When options within a choice set have both clear advantages and disadvantages, comparisons often hurt (Brenner, Rottenstreich & Sood, 1999). However, we expect that certain comparisons are more damaging than others. For example, one study found that individuals who select a candy bar (vice) over fresh fruit (virtue) feel worse about their selection than when choosing amongst two different candy bars (Dhar & Wertenbroch, 2011). Whereas choosing a vice over a virtue represents a strong signal to one's self that they are weak willed, choosing amongst two vices does not contain the same diagnostic value.

Similarly, we expect that when individuals select an option of self-interest over a prosocial option, they are likely to feel selfish, which is undesirable. Whereas previous research shows that imposing an option is likely to be beneficial when choosing between undesirable alternatives (Botti & McGill, 2006; Botti et al., 2009), neither self-interest nor prosocial behavior are inherently undesirable. Rather, the meaning of a self-interested outcome is altered by the presence of a prosocial option: self-interest becomes undesirable when chosen over a prosocial option, but not when it is imposed.

Imposed self-interest versus imposed charity

While we expect that imposing self-interest increases happiness, this is not likely to be true of imposing charity. Even though imposing charity likewise removes any internal conflict, it

also removes agency. Individual agency is a key determinant of the pleasure derived from engaging in prosocial behavior: people primarily gain pleasure from helping others when they are personally responsible for it (Andreoni, 1990; Harbaugh et al., 2007; Weinstein & Ryan, 2010). Although some findings point toward imposed prosocial behavior boosting happiness (Dunn, et al., 2008), this may not be true when individuals do not feel ownership over their good deeds.

Overview of studies

The following studies test our hypothesis that removing choice and tradeoffs between benefits to the self and others increases the hedonic value of self-interest. Whereas previous research has emphasized the general benefit of removing choice to alleviate the negative effects of emotionally difficult tradeoffs (Botti, et al., 2009), our theory proposes an asymmetric relationship. Experiment 1 shows that externally imposing an option of self-interest (a reward) increases outcome happiness relative to choice, but externally imposing a prosocial option (a donation to charity) does not.

Experiment 2 provides additional evidence of our hypothesis, showing that tradeoffs between self-benefiting and prosocial options reduce outcome happiness more than tradeoffs that involve the self only. Experiment 3 further reveals the mechanism driving our results by manipulating perceived agency. Participants indicated their preference for either a self-benefiting or a prosocial option, and eventually received their preferred option. However, some participants knew that they would receive their preference, while others were led to believe that the outcome

was externally chosen by a computer. Participants were happier with self-interest when they believed that it was externally chosen.

EXPERIMENT 1

Method

Two hundred sixteen participants (60% female; mean age = 20.2) took part in an hour-long lab session in exchange for payment. At the beginning of the study, all participants read the following: “In this study, some participants will receive \$3.00 to spend on themselves while other participants will donate \$3.00 to UNICEF, a non-profit charity that helps needy children.” Participants were then assigned to either a choice, an imposed self-interest, or an imposed charity condition. In the *Choice* condition, participants read that they have the option to receive \$3.00 to spend on themselves or donate this money to UNICEF, and then selected their choice. Participants in the *Imposed Self-interest* condition read that they would receive a windfall sum of \$3.00 to spend on themselves, and participants in the *Imposed Charity* condition read that they would donate \$3.00 to UNICEF.

Next, participants received an envelope either containing cash or a receipt for their donation. Participants then rated (1) how much they enjoyed receiving (donating) the money and (2) how satisfied they were with their money (donation) on a 7-point scale (1 = “Not at all,” 7 = “An extreme amount”). These items were adapted from Botti and Iyengar (2004), and were averaged to create a two-item outcome happiness measure ($\alpha = .90$).

Results

Among participants in the Choice condition, 43.2% chose to donate to charity. In this condition, there was no difference in outcome happiness between those who chose to take the money ($M = 4.13$, $SD = 1.63$) and those who chose to donate to charity ($M = 4.50$, $SD = 1.34$; $t(72) = 1.04$, $p = .30$) and we collapsed across self-selected outcomes.

Figure 1 displays the main results. A one-way ANOVA confirmed our hypothesis that imposing self-interest increases outcome happiness ($F(2, 213) = 9.08$, $p < .001$, $\eta_p^2 = .079$). Specifically, participants in the Imposed Self-interest condition were happier ($M = 5.13$, $SD = 1.50$) than those in the Choice condition ($M = 4.29$, $SD = 1.51$; $t(143) = 3.38$, $p < .001$) and those in the Imposed Charity condition ($M = 4.11$, $SD = 1.60$; $t(140) = 3.96$, $p < .001$). There was no significant difference in happiness between the Choice and Imposed Charity conditions ($t(143) = 0.72$, $p = .48$).

-----Insert figure 1 about here-----

Discussion

Experiment 1 shows that imposing an option of self-interest increases outcome happiness. However, one question that arises is whether the benefits of imposing an option of self-interest are due to eliminating the conflict inherent in choice or whether there is something more specific to the nature of a choice involving a tradeoff between benefiting the self versus others. In the previous studies, the only choice was between self and other. Therefore, experiment 2 attempts to tease apart the effect of self-other choice conflict from choice in general.

EXPERIMENT 2

Unlike the prior experiment, in this study, participants across all conditions made a choice. Specifically, one group of participants chose between two options of which both are gains for the self, a second group chose between two prosocial options, and a third group had one option of each type.

Method

One hundred thirty-two individuals (63% female; mean age = 20.8) participated in an hour-long lab session in exchange for payment. Because experiment 2 provided everyone with a choice, we conducted a pre-test to determine options of equal attractiveness across conditions. Two gift cards and two charities were selected (see supplemental materials for details).

We randomly assigned participants to one of three conditions. In the *Mixed Choice Set* condition, participants chose between receiving a \$5.00 gift card for themselves (Au Bon Pain or Starbucks) and donating this money to a charity (The Red Cross or UNICEF). They were presented with a choice set consisting of one of the two randomly determined gift cards and one of the two randomly determined charities. In the *Self-interest Choice Set* condition, participants chose between receiving \$5.00 gift cards from Au Bon Pain or from Starbucks. In the *Prosocial Choice Set* condition, participants chose between donating \$5.00 to The Red Cross or UNICEF. After receiving an envelope with either their gift card or donation receipt, participants completed the same outcome happiness items used in the previous study.

Results

Our two-item outcome happiness measure achieved sufficiently high reliability ($\alpha = .89$). Because there were four different gift card-charity pairings in the mixed choice set condition, we first tested and found no significant effect of the specific gift card-charity pairing on choice ($\chi^2(3) = 1.15, p = .76$). We collapsed across pairings to create a single Mixed Choice Set condition with two outcomes (selfish or prosocial). Among these participants, 39.1% chose to donate the money rather than take a gift card. There was also no significant difference in happiness between those who chose to donate ($M = 5.75, SD = 0.97$) and those who chose the gift card ($M = 5.23, SD = 1.43; t(44) = 1.34, p = .19$) and we collapsed across outcomes.

Figure 2 displays the main results. A one way ANOVA showed that that choosing among a self-interest choice set leads to greater outcome happiness ($F(2, 129) = 11.02.07, p < .001, \eta_p^2 = .146$). Specifically, participants in the Self-interest Choice Set condition were happier with their outcome ($M = 5.99, SD = 1.12$) than those in the Mixed Choice Set condition ($M = 5.43, SD = 1.29; t(88) = 2.17, p = .03$) and those in the Prosocial Choice Set condition ($M = 4.76, SD = 1.22; t(84) = 4.84, p < .001$). Participants in the Mixed Choice Set condition were happier with their outcome than those in the Prosocial Choice Set condition ($t(86) = 2.51, p = .01$).

-----Insert figure 2 about here-----

Discussion

The results from experiment 2 provide additional evidence supporting our hypothesis. As

expected, participants who were faced with only self-benefiting options were happiest. It is not merely the presence of choice that reduces happiness, but rather the tradeoff between benefiting the self versus others. Our theory predicts that negative feelings associated with self-benefiting choice are caused by the feelings of agency that result from selecting an option that benefits the self over others. The final experiment examines this mechanism directly by manipulating perceived agency.

EXPERIMENT 3

The present study manipulates perceived agency rather than the actual agency inherent in choice. Participants first denoted their preference to keep or donate money. They were then randomly assigned to a condition where they either received their preference or were told that the computer would choose on their behalf. However, all participants received their denoted preference regardless of condition. Because everyone received their expressed preference, we are able to examine feelings of agency without confounding preference matching. We predicted that lowering perceived agency will increase outcome happiness with the self-interested outcome, but not for the prosocial outcome.

Method

Two hundred fifty-two participants (55% female; mean age = 32.8) were recruited online via Amazon.com's Mechanical Turk in exchange for payment. Enrollment in the study was restricted to the United States.

Participants were told that as part of the study they would either receive a \$0.15 bonus or will donate this money to UNICEF. They were then presented with the following instructions:

“First, you will tell us your preference to keep or donate the \$0.15 bonus money. Again, this money is in addition to the fee you get for participating in the current study.

Next, we will generate a random number between 1 and 10. If the number is even, you will get your preference. If the number is odd, then the computer will make the selection for you. The computer may choose for you to keep the \$0.15 or it may choose for you to donate the \$0.15 to charity.

You will then continue with the survey. After completing the survey you will either receive the \$0.15 bonus in your Mechanical Turk account or it will be donated to UNICEF.”

Participants then denoted their preference for receiving or donating the bonus money, and advanced to the next screen where a random number was displayed. If the number was even, participants were told that they would receive their preference, and they were reminded of what they denoted. If the number was odd, participants were told that the computer will make the decision for them, and were presented with the computer’s choice. The survey was programmed so that the computer simply chose what the participant denoted as their preference so that everyone was given their preference. The only difference between conditions was whether the participants believed they were the agent responsible for their outcome (high perceived agency) or if the computer was responsible for their outcome (low perceived agency).

We again used a two-item outcome happiness measures ($\alpha = .92$) that was adapted to fit this study. Participants were asked (1) “How do you feel about your choice (the computer’s choice for you) to receive (donate) money in this study?” on a scale ranging from 1 = “Not good

at all” to 7 = “Extremely good” and (2) “How satisfied are you with your choice (the computer’s choice for you) to receive (donate) money in this study?” on a scale ranging from 1 = “Not at all satisfied” to 7 = “Extremely satisfied”. As a manipulation check, we measured perceived agency by asking participants (1) how much control they felt over the outcome and (2) how responsible they felt over the outcome using 7-point scales (1 = “Not at all”, 7 = “An extreme amount”).

Results

Overall, 41.3% of participants donated to charity. Participants in the High Agency condition felt more control ($M_{HighAgency} = 4.18$ vs $M_{LowAgency} = 2.83$; $t(250) = 6.46$, $p < .001$) and responsibility ($M_{HighAgency} = 4.48$ vs. $M_{LowAgency} = 3.16$; $t(250) = 5.65$, $p < .001$) over the outcome.

Figure 3 displays the main results. A 2 (Perceived Agency: High vs Low) X 2 (Outcome: Keep vs Donate) ANOVA revealed a significant interaction consistent with our hypothesis ($F(1, 248) = 7.18$, $p = .008$, $\eta_p^2 = .028$). Among those who kept the bonus money—the self-interested outcome—participants felt better when they believed the computer made the choice ($M = 6.33$, $SD = 0.87$) than when they believed that they made the choice ($M = 5.55$, $SD = 1.43$; $t(146) = 3.81$, $p < .001$) even though all of them had stated that they preferred to keep the money. Among those who donated the bonus money—the prosocial option—those who felt that the computer made the choice ($M = 6.16$, $SD = 0.99$) did not feel significantly different from those who felt that they made the choice ($M = 6.17$, $SD = 1.03$; $t(102) = 0.09$, $p = .93$).

-----Insert figure 3 about here-----

Discussion

Experiment 3 shows that perceived agency affects happiness with self-interested behavior. Participants who preferred to receive money for themselves felt happier when they believed that the computer selected this outcome for them than when they believed that they had chosen it.

GENERAL DISCUSSION

A virtually self-evident truth is that people gain happiness from doing what is in their own self-interest. Yet much research casts doubt on this basic assumption. We argue that one reason why people do not feel happier with self-interested behavior is because doing so sometimes involves sacrificing the well-being of others along the way, and individuals often feel uneasy about making this tradeoff. The studies here demonstrate that removing the tradeoff between benefiting the self and benefiting others by imposing self-interest promotes happiness.

Given that individuals sometimes go to great lengths in order to avoid feeling obligated to help others (Dana, Cain & Dawes, 2006; DellaVigna, List & Malmendier, 2011), it may be that individuals would express a desire for imposed self-interest over choice. Yet, when we asked a separate group of 118 students what they would prefer hypothetically: imposed self-interest, imposed charity, or choice, the majority of them preferred to have a choice (63.6%, $\chi^2(1) = 8.68$, $p = .003$)¹. This resonates with previous findings that people prefer the freedom to choose even if it is to their own detriment (Botti & Iyengar, 2004; Botti, et al., 2009).

In our studies, we do not find that imposing prosocial behavior increased happiness. As Weinstein and Ryan (2010) demonstrate, prosocial behavior increases happiness when it

increases feelings of competence and autonomy and promotes positive interpersonal relations. This occurs when individuals feel autonomous motivation in their helping behavior. It is possible that if we provided participants with even greater agency, such as the freedom to choose where to donate, then an imposed prosocial condition could increase happiness over choice. However, such a result would not detract from our main findings that removing self-other tradeoffs increases the hedonic value of self-interest. Further, by providing people with the freedom to choose where to donate, it is possible that their donations would be motivated by self-interest after all. For example, an individual with a family history of cancer may choose to donate to a cancer fund in hopes of finding a cure to help close relatives or her future self.

While the studies here present participants with an explicit tradeoff between the self versus other, many real world decisions are not as explicit. To what extent do people think about helping others when acting in their own self-interest and vice versa? Research on opportunity cost neglect shows that people are highly sensitive to environmental cues and resource constraints that influence the manner in which they attend to alternative uses of their time and money (Frederick, et al., 2009; Spiller, 2011). While this work has focused more on the self, we currently know little about how individuals attend to opportunity costs involving others.

It is likely that environmental cues and resource constraints also have a strong impact on how individuals attend to self-other opportunity costs. For example, we asked 76 online participants to imagine they found a twenty-dollar bill on the ground and spent it that night on a nice dinner. Participants were told that after finding the bill they passed either a shopping center or a homeless shelter on their walk home. Those who were told that they passed a shopping center felt that they would be happier spending this money at the restaurant ($M = 5.95$, $SD = 2.14$) than those who passed a homeless shelter ($M = 4.92$, $SD = 2.15$; $t(74) = 2.08$, $p = .04$).

Walking by a homeless shelter is likely to remind people of the good they could otherwise be doing with their newfound wealth, causing them to feel bad about their own self-interested behavior.

In addition, some people may be chronically attuned to think about the needs of others, and may find it particularly uncomfortable to behave self-interestedly. When they do, these people may fail to find happiness. Just as tightwads experience the pain of paying (Rick, Cryder, & Loewenstein, 2008) and hyperopic individuals eschew indulgence with their eye on the future (Kivetz & Simonson, 2002), individuals with a chronic self-other choice conflict may similarly struggle to feel good from pleasurable experiences. Like with hyperopia, they may find it necessary to pre-commit in order to partake in self-interested behavior. The disconnect between selecting a selfish option in the present while being tied to the outcome in the future may relieve feelings of selfishness. Additional research can test the effectiveness of self-imposition in reducing unease with self-interested behavior.

It is becoming increasingly clear that people sometimes go out of their way to help others, and that helping others can feel good. It is less clear why self-interested behavior fails to show the same benefits. We show that one reason why self-interest does not lead to happiness is because, even though people enjoy self-interested outcomes, they do not like to feel selfish. By imposing a self-benefiting option, an individual is freed to enjoy self-interest without selfishness.

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FOOTNOTES

¹ A total of 29.7% of subjects preferred imposed self-interest and 6.8% of subjects preferred imposed charity.

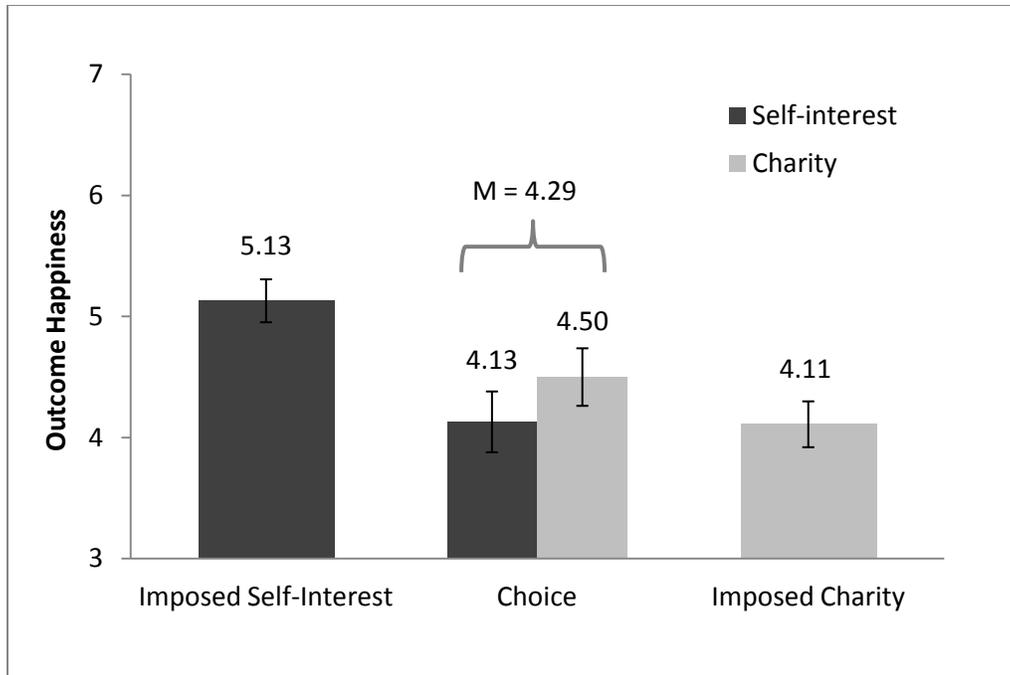


Figure 1: Imposing self-interest increases happiness (experiment 1). Outcome happiness is measured on a 1 to 7 scale. Within the Choice condition, 43.2% of participants donated to charity. Error bars represent ± 1 standard error.

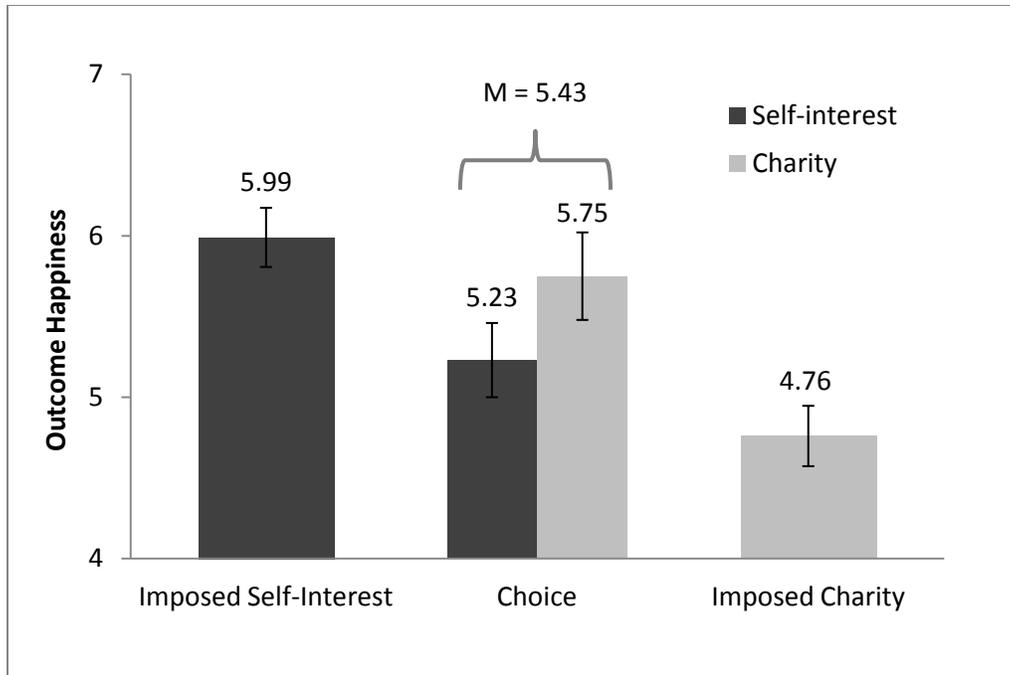


Figure 2: A self-interested choice set is preferred to a mixed choice set, controlling for option desirability (experiment 2). Outcome happiness is measured on a 1 to 7 scale. Within the Mixed Choice Set condition, 39.1% of participants donated to charity. Error bars represent ± 1 standard error.

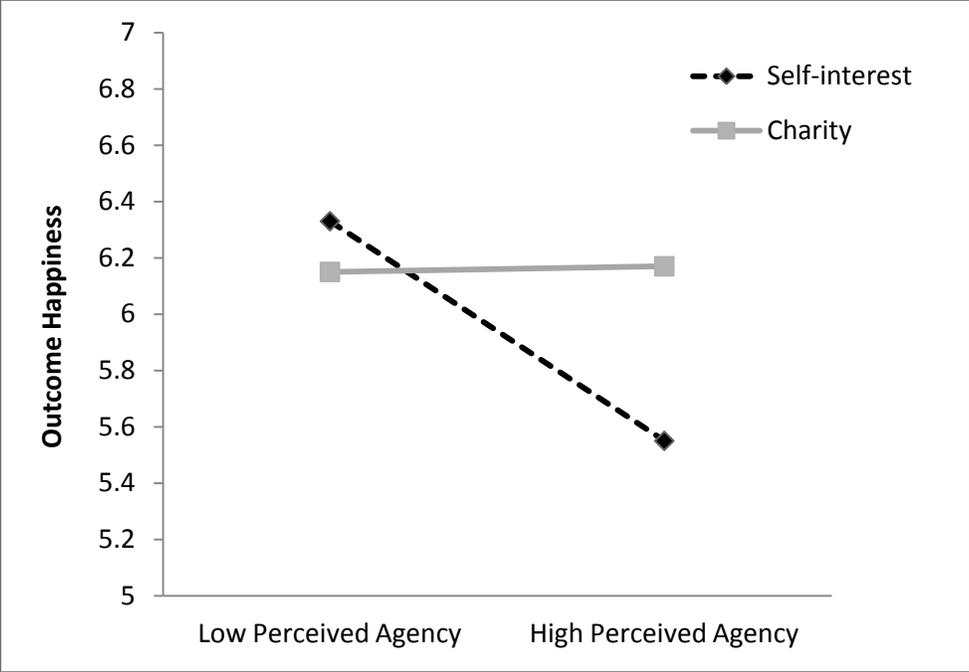


Figure 3: Increasing perceived agency decreases happiness with self-interest (experiment 3).

Outcome happiness is measured on a 1 to 7 scale.