“I” and “We” Give Differently: Examining the Impact of Self-Construal and the Time-Ask Effect

by

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ABSTRACT

“I” AND “WE” GIVE DIFFERENTLY: EXAMINING THE INTERACTION OF SELF-CONSTRUAL AND THE TIME-ASK EFFECT

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The objective of the present research is to examine the interaction of self-construal, or the way that individuals think of themselves as separate from or connected with others, and the donation request type, or whether individuals are asked to donate their time or money to a charitable cause, and the impact this interaction has on empathic emotion and subsequently donation behaviour. We propose a mediated moderation model, with self-construal as the independent variable, donation request type as the moderator, empathic emotion as mediators, and donation amount as the dependent variable. The results indicated no significant mediated moderation relationship, but main effects of self-construal and donation request type were confirmed. An additional relationship of age and attention on affect and donation, consistent with extant emotional regulation literature, is explored. The findings identify important consideration for academics and managers in the charity fundraising sphere.
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LIST OF ABBREVIATIONS

ANCOVA: Analysis of Covariance
ANOVA: Analysis of Variance
CRM: Cause Related Marketing
EC: Empathic Concern
IND: Independent
INT: Interdependent
IRI: Interpersonal Reactivity Index
NSR: Negative State Relief
PANAS: Positive and Negative Affect Schedule
PD: Personal Distress
R-EC: Response Empathic Concern
R-PD: Response Personal Distress
Chapter 1. Introduction

A survey by the Charities Aid Foundation (2018) of charitable giving worldwide lists top countries for charitable giving based on a Giving Index comprised of measures examining helping a stranger, donating money, and volunteering time. Two thought-provoking observations can be made from the list of top giving countries. First, the top giving countries consistently score higher on measures of donating money than measures of donating time. A multitude of reasons could underlie this discrepancy, with a different reason in each country. However, it highlights a distinction recently made in the academic literature between the effects of the concepts of time and money on thoughts and behaviours and sets it in a charitable giving context. A prior examination of the differential effects of time and money in the context of charitable giving was conducted by Liu and Aaker (2008). The findings of their study reveal that activating the concept of time—activated explicitly by asking about time donations or implicitly by asking about volunteering—rather than money, makes donors more charitable (Liu & Aaker, 2008). The authors argue that this effect is caused by time, rather than money, activating an emotional mindset which allows individuals to relate charitable giving to personal happiness, and in turn being more willing to donate (Liu & Aaker, 2008).

This explanation for increased charitable giving motivated by anticipated happiness is in line with the negative-state relief model, which posits that individuals behave prosocially in order to reduce their own negative emotions (Cialdini, Baumann, & Kenrick, 1981; Manucia, Baumann, & Cialdini, 1984). Indeed, research supports the idea that spending money or time on others, such as through charitable giving or volunteering, makes individuals happy (Borgonovi, 2008; Dunn, Aknin, & Norton, 2008, 2014; Thoits & Hewitt, 2001).
The second observation gleaned from the Charities Aid Foundation’s (2018) survey is that the top giving countries are an interesting combination of collectivistic and individualistic cultures; the list is spearheaded by Indonesia, a 14 (low) on Hofstede’s individualism dimension, followed by Australia, New Zealand, United States of America, Ireland, and United Kingdom—the second, fifth, first, eleventh, and third most individualistic countries in the world, respectively. This would suggest that some of the most individualistic countries in the world are also the most charitable. While economic factors may be at play—in terms of gross domestic product at purchasing power parity per capita, Indonesia ranks 66th in the world, Australia 22nd, New Zealand 31st, USA 31st, Ireland 6th, and the United Kingdom 26th (GDP per Capita, n.d.)—such a trend puts into question findings indicating positive correlations between interdependence (related to collectivism, as discussed later) and charitable behaviours (Moorman & Blakely, 1995; Skarmeas & Shabbir, 2011; Swaminathan, Page, & Gürhan-Canli, 2007) and highlights a need for more studies that seek to characterize the conditions under which self-construal translates into prosocial behaviour. Self-construal and its relationship to prosocial behaviours, including charitable giving, has been explored in various contexts, including preference for donation-based promotions (Winterich & Barone, 2011), visibility of donation (Simpson, White, & Laran, 2018), and perceived group membership of donation recipients (Duclos & Barasch, 2014). The latter study, by Duclos and Barasch (2014), found that individuals who are interdependently self-construed believe that donations to in-group members will increase their personal happiness. This finding suggests that the happiness anticipated from a charitable act can vary depending on one’s self-construal.
Given that self-construal is associated with differential motivations (Hong & Chang, 2015; Yang, Stamatogiannakis, & Chattopadhyay, 2015), the purpose of the present study is to examine the relationship between self-construal and the emotional mindset produced by the activation of time concept (Liu & Aaker, 2008). The objective of the present research is to determine whether the empathic emotions produced by a charitable appeal differ for differently self-construed individuals, how the time-ask influences those emotions, and what effects they have on donation behaviour.

The implications of this research pertain to the targeting of charitable requests, as well as charity and consumer well-being. With regard to charity advertisements, research suggests that framing messages to match appeal types to viewer’s self-image concerns increases donation support (White & Peloza, 2009). Similarly, direct inquiries about time donations result in more monetary donations (Liu & Aaker, 2008). If charities’ requests to donors can be tailored to increase donations, perhaps the combination of time-activation and self-construal would provide for a more effective approach than either construct alone. As far as charity and consumer—in this case, donor—well-being, understanding how framing donations can influence the donor’s emotions could not only result in increased inclination to donate in the future (Aknin, Dunn, & Norton, 2012) but also reduce potential post-donation negative feelings that may remain after viewing an emotionally-charged charity advertisement (Merchant, Ford, & Sargeant, 2010; Wang, 2008).

The present literature review will discuss research about the factors that influence prosocial behaviour (including charitable giving), as well as the topics of self-construal and time
vs. money, with particular focus on their relationship with prosocial behaviour. After a review of the three streams of research, the rationale for the present study is addressed.

Chapter 2. Literature Review

2.1 Prosocial Behaviour

2.1.1 What is Prosocial Behaviour

Prosocial behaviour is an umbrella term for actions that are “defined by society as generally beneficial to other people and to the ongoing political system” (Piliavin, Dovidio, Gaertner, & Clark, 1981, p. 4). It encompasses such actions as sharing, comforting, and helping. Helping behaviour specifically has been distinguished from the broader concept of prosocial behaviour and is defined as behaviour that provides benefit or aid to another individual (Baumeister & Vohs, 2007).

Pearce and Amato (1980) categorized helping behaviour based on three dimensions: 1) level of planning and formality, 2) directness of help (in terms of helping the recipient directly vs. through a mediating organization), and 3) seriousness of the need. Acts of helping vary greatly depending on where they fall on these three dimensions. For instance, weekly volunteering at an animal shelter is quite formal and direct but medium in seriousness; helping a child that fell in a lake is unplanned, direct, and high in seriousness; and donating a few dollars to keep Wikipedia running is unplanned, indirect, and low in seriousness. Another classification of helping behaviours comes from McGuire (1994), who describes four types of helping. Casual helping, such as lending someone a pencil, involves doing small favours for casual acquaintances. Substantial personal helping, such as helping a friend study for their finals, describes helping that requires a lot of effort, for an extended period, and results in the
recipient’s benefit. Emotional helping, like listening to a partner complain about a bad day, involves providing personalized care and emotional support. Last, emergency helping, such as providing CPR to a person in need, describes aiding someone with an acute problem.

The present study will utilize donations of time or money to a formal organization. It can be argued, therefore, that each kind of helping (monetary or temporal) could be classified as informal, serious, and indirect.

2.1.2 Theories of Prosocial Behaviour

There are two dominating theories of individual-level motivations for engaging in prosocial behaviours: the empathy-altruism hypothesis and the negative-state relief model. The two theories represent the ongoing debate in social psychology about whether humans are capable of acting altruistically.

One of the key theories of prosocial behaviour is the empathy-altruism hypothesis (Batson, 1987; Batson et al., 1988). The empathy-altruism hypothesis describes the way in which empathetic individuals are more likely to be altruistically motivated to behave prosocially (Baumeister & Vohs, 2007). The empathy component refers to feelings of compassion and sympathy—essentially, the ability to be emotionally moved by what another person is experiencing. The altruism component refers to the motivation to help another person, wherein the helping is both the means and the end to the goal—in other words, helping for the sake of helping, rather than gain. The empathy-altruism hypothesis predicts that individuals who experience high levels of empathy are more likely to behave prosocially toward someone in need than individuals who experience low levels of empathy (Baumeister & Vohs, 2007).
On the other side of the debate, the negative-state relief (NSR) model offers an alternative explanation for why individuals might want to help others who are in distress (Cialdini, Baumann, & Kendrick, 1981; Manucia, Baumann, & Cialdini, 1984). The NSR model describes the way in which negative mood (e.g., sadness) increases one’s willingness to help others, at least in certain circumstances (Baumeister & Vohs, 2007). The theory explains this behaviour by identifying one’s anticipated mood improvements as a result of helping as the motivation behind the increase in willingness to help. Simply put, because individuals find helping others rewarding, they use this behaviour to make themselves feel better when they experience negative mood. As discussed in the next section, the positive feelings experienced as a result of prosocial acts is indeed motivating—however, this effect is not limited to individuals experiencing negative mood.

The two theories of prosociality correspond to two views of what motivates individuals to behave prosocially, according to the archaic view of vicarious emotion (McDougall, 1908 as cited in Batson, Fultz, & Schoenrade, 1987). The archaic view describes two streams of emotional and motivational influences of prosociality in response to others’ distress. In one stream, corresponding to the empathy-altruism hypothesis (Batson, 1987; Batson et al., 1988), individuals experience empathy in response to others’ distress, which leads to an altruistic motivation to reduce said distress, which results in a prosocial behaviour in order to accomplish this reduction. The second stream, corresponding to the NSR model (Cialdini et al., 1981; Manucia et al., 1984), posits that the emotion experienced in response to others’ distress is personal distress, which leads to an egoistic motivation to reduce one’s own distress, which results in a behaviour, possibly helping, to achieve reduction of one’s personal distress.
Researchers have accepted the pluralistic nature of prosocial behaviour (Batson & Shaw, 1991), and the literature acknowledges that either or both motivations—altruism and egoism—can play a role in prosocial acts.

### 2.1.1.1 Empathy

Altruistic and egoistic motivations are preceded by the experience of an affective response broadly classified as empathy, which entails the understanding of another’s emotion and experiencing a similar emotion to the other person (Eisenberg, Shea, Carlo, & Knight, 1991). Empathy can further evolve into empathic concern (also called sympathy) and personal distress (Batson, 1991; Eisenberg et al., 1991).

Empathic concern and personal distress differ in terms of the emotional experience associated with each. While both originate from the observation of another’s distress, they take different forms. Empathic concern consists of sorrow or concern for the other person (Eisenberg et al., 1991). Personal distress, on the other hand, is an aversive reaction to another’s distress and leads to a desire to alleviate one’s own (but not the other’s) distress (Batson, 1991). Researchers argue that empathic concern and personal distress both originate from empathic arousal—empathic concern from optimal, moderate levels of vicarious emotion, and personal distress from overarousal and poorly regulated, intense vicarious emotions (Decety & Jackson, 2004; Eisenberg & Fabes, 1992; Eisenberg, Fabes, & Spinrad, 2006). This dispositional inclination toward empathic concern or personal distress most likely results from one’s capacity for emotional regulation. Empathic concern and personal distress are not two sides of the same coin—rather, they are two different levels of intensity of the same vicarious emotions. Fundamentally, empathic concern is other-focused and leads to altruistic motivations, while
personal distress is self-focused and leads to egoistic motivations (Batson, O’Quin, Fultz, Vanderplas, & Isen, 1983). A key difference between personal distress and empathic concern in terms of motivating prosocial behaviour is that personal distress tends to be negatively related or unrelated to prosociality if the stimulus causing personal distress can be avoided or escaped (Batson, 1991; Eisenberg et al., 2006).

2.1.1.2 Self vs. Other Orientation

In the context of promoting donations, egoistic and altruistic motivations have been conceptualized as self-benefit versus other-benefit orientations of donation appeals (e.g., White & Peloza, 2009). The effectiveness of each type of appeal, as well as influencing factors, has been explored, with mixed findings. Holmes, Miller, and Lerner (2002) found that donations increase when the act of donating money is positioned as an exchange (i.e., egoistically) rather than more altruistically. On the other hand, Fisher, Vandenbosch, and Antia (2008) found that other-oriented appeals are more effective at generating donations at public television station funding drives compared to self-benefit appeals. Likewise, self-benefit appeals can backfire, as in the case of providing monetary incentives (i.e., self-benefits) in combination with other-benefit appeals for organ donations, which leads to reduced donation intentions (Pessemier, Bemmaor, & Hanssens, 1977). The conditions under which self-benefit or other-benefit appeals are more effective have also been examined. White and Peloza (2009) examined each appeal type in public versus private conditions. They found that self-benefit appeals are more effective in private donation contexts while other-benefit appeals are more effective in public donation contexts, and that this effect is moderated by norm salience as it relates to the desire for impression management (White & Peloza, 2009). Furthermore, Kim (2014) investigated how the
type of resource requested—time or money— influences the effectiveness of self-benefit versus other-benefit appeals. Kim (2014) found that donations of time are better motivated by other-oriented (i.e., altruistic) appeals, while donations of money are more motivated by self-oriented (i.e., egoistic) appeals, and suggests that this is due to the different levels of effort required for each type of donation. Taken together, these findings suggest that the best appeal orientation—self-benefit or other-benefit—is unclear and can depend on context and request type.

2.1.2 Influences on Prosocial Behaviour

The extant literature has identified a number of factors that influence prosociality, and the present discussion will focus on two types: emotional and social.

2.1.2.1 Emotional Influences on Prosocial Behaviour

Insofar as emotional motivations of prosocial behaviour, the literature is mixed on whether positive or negative emotion promote charitable giving. On the positive side, individuals are more likely to help others if they are in a positive, compared to neutral, mood, even if the cause for positive mood is unrelated to the task, such as listening to pleasant music (Greitemeyer, 2009; North, Tarrant, & Hargreaves, 2004). Just as the causes of positive mood can be varied, so are the ways in which individuals in a positive mood can behave prosocially. Carlson & Miller (1987) found that donating to charity, helping someone search for a lost contact lens, helping colleagues at work, and making blood donations can be the result of positive mood. The reason for this effect of positive mood on prosocial behaviour is argued to be positive moods’ ability to promote attention to one’s own feelings and values, one of which is helping others, which serves to increase helping behaviour (Berkowitz, 1987). In fact, Aknin, Dunn, and Norton (2012) found that prosocial spending and happiness produce a feedback loop: the recollection of happiness
from having spent money on someone else increases happiness, which increases the likelihood of spending prosocially again. As a result, spending money prosocially could be a method of sustaining happiness long-term, as long as the instances of spending provide happiness. Of note in this study is the observation that simply recalling an instance of prosocial spending increased participants’ happiness, without necessitating the act of spending (Aknin et al., 2012).

Conversely, negative mood states have also been demonstrated to increase prosocial behaviour. In line with the NSR model, Wegener and Petty (1994) find that when individuals are sad, they are motivated to make themselves feel better. Accounting for the motivations of negative mood relief, the positive effects of prosociality on mood are well documented (e.g., Aknin et al., 2012). Dietrich and Berkowitz (1997) found that individuals rely on prosocial behaviours to improve their negative mood because of prosocial behaviours’ ego-enhancing effects. However, the NSR model will apply to helping primarily under conditions of favourable cost vs. benefit valuation of the helping act. Specifically, Niesta Kayser and colleagues (2010) found that individuals in a negative mood are willing to help more than those in a neutral mood if there is a net benefit to be gained from helping, but not if there is high cost and little benefit (e.g., social benefit). Participants in a positive mood, on the other hand, are willing to help more regardless of costs and benefits. This finding suggests that the extent to which the prospective reward of improved mood may be motivating has boundary conditions depending on the circumstance of the helping instance. Furthermore, this research, along with the NSR model, point to the importance of a donor’s recognition of the mood-enhancing effects of prosocial acts as a prerequisite for such acts to be considered motivational.
2.1.2.2 Social Influences on Prosocial Behaviour

2.1.2.2.1 Social Influences Overview

In addition to emotional factors, research has also identified several social factors that influence prosocial behaviour. Firstly, peer effects exert an influence on charitable giving. Examining online fundraising pages, Smith, Windmeijer, and Wright (2015) found that donations respond to changes in the mode of earlier donations. Increases in the average of previous donations (mode) resulted in increases in giving, suggesting that donors use information about others’ earlier donations to determine an appropriate donation amount (Smith et al., 2015). Further, the donation amount can also be influenced by the visibility of donation (i.e., public vs. private). Generally, research on charitable giving finds that individuals are inclined to donate more in public rather than in private contexts, and identifies the desire to present oneself in a positive light to others as the primary motive for this behaviour (Ariely, Bracha, & Meier, 2009). Moreover, characteristics of the individual can influence how prosocially they behave. Social status (i.e. reputation in the eyes of others) has been found to modulate prosocial behaviour in both children and adults (Guinote, Cotzia, Sandhu, & Siwa, 2015). Researchers found that individuals with low social status displayed more communal and prosocial behaviours, and held more egalitarian life goals and values, compared to individuals of high social status (Guinote et al., 2015), suggesting that prosocial behaviours can be motivated by social dynamics. The divide between low and high social status individuals appeared as early as 4-5 years of age (Guinote et al., 2015). Similarly to social status, individuals disadvantaged in terms of social class (i.e. socioeconomic status) also behave more prosocially (Piff, Kraus, Côté, Cheng, & Keltner, 2010). One line of research finds that individuals of lower class (i.e. low socioeconomic status) are more generous, charitable, trusting, and helpful compared to upper class individuals (Piff et al.,
This effect is explained by lower class individuals’ greater commitment to egalitarian values and increased feelings of compassion (Piff et al., 2010). Finally, social exclusion, or the experience of rejection by peers or anticipation of future loneliness, has also been found to lead to a decrease in prosocial behaviours (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). Twenge and colleagues (2007) found that after experiencing social exclusion participants made smaller donations of money, were less willingness to volunteer in future experiments, and displayed less helpfulness and less cooperation with a peer. This effect of social exclusion on prosociality was found to be mediated by empathy, but not by mood, state self-esteem, belongingness, trust, control, or self-awareness (Twenge et al., 2007). The authors argue that this finding demonstrates that rejection temporarily interferes with emotional responses, in turn negatively affecting one’s ability for empathetic understanding of others, which results in a decline in willingness to act prosocially (Twenge et al., 2007). Similarly, Kothgassner and colleagues (2017) found that virtual social exclusion can carry over into decreased prosociality in real life, suggesting that the effects of social exclusion are deeply ingrained and not limited to the environment of the exclusion.

2.1.2.2 Social Closeness

Research on prosocial behaviour and social exclusion segues into an examination of a construct on the other end of the spectrum: social closeness. Winterich, Mittal, and Ross (2009) examined how moral identity and gender identity interact to influence prosociality toward in-group/out-group members. They found that the importance of one’s moral identity tends to increase charitable giving toward out-groups but not in-groups, but only among participants with a feminine gender identity (Winterich et al., 2009). For participants with a masculine gender
identity, moral identity importance had a positive effect on charitable giving toward the in-group but not the out-group (Winterich et al., 2009). The authors explain that the inclusion of other in the self mediates this moderating effect of gender identity and moral identity, although it is most likely not the only mediator (Winterich et al., 2009). Inclusion of other in the self is defined as one’s “sense of being interconnected with another” (Aron, Aron, & Smollan, 1992, p. 598). In this sense, this concept is closely related to interdependence (Ashmore, Deaux, & McLaughlin-Volpe, 2004). Furthermore, Waugh and Fredrickson (2006) found that positive feelings make individuals more inclined to help close others, specifically referring to psychological closeness (e.g., family members, neighbours, local community). Building on the psychological distance caveat of prosociality, Cavanaugh, Bettman, and Luce (2015) found that prosocial behaviour toward distant others is only induced by love, but not other positive emotion (e.g., hope, pride, and compassion). The authors argue that this is due to love’s broadening effect, wherein the feelings of social connectedness are extended to be more inclusive. In addition to support for negative mood promoting self-awareness and thus prosociality, Carlson and Miller (1987) also found that attentional focus on another individual as the target of a negative event helps promote prosociality. Taken together, these findings suggest that social closeness plays a part in prosocial behaviours, in that individuals will prioritize helping those whom they perceive to be closest to themselves.

2.2 Consequences of Prosocial Behaviour: Time vs. Money Effects

2.2.1 Time vs. Money Overview

While primarily monetary donations are studied in the charitable giving literature, it is also an ideal context for examining time versus money effects. The concepts of time and money
have been paralleled in marketing literature in the last couple decades (e.g., Leclerc, Schmitt, & Dubé, 1995; Reed, Aquino, & Levy, 2007; Saini & Monga, 2008). Presently, this parallel is integrated into the review of the literature as the two concepts correspond to volunteering and monetary donations, respectively. First the cognitive, emotional, and prosocial effects of activating time versus money are reviewed, followed by an examination of the positive emotional effects of spending time and money prosocially.

2.2.1 Cognitive and Emotional Effects of Time and Money

While time versus money is a false dichotomy, as the constructs are not symmetrical due to their differing cognitive consequences, the two have frequently been compared in terms of their effects. Extant research delineates the distinct ways in which people engage with time and money cognitively. For example, individuals are more effective at accounting for money than for time (Soman, 2001) and are more likely to suffer from planning fallacy when making plans for time than for money (Spiller & Lynch, 2010). Further, people feel less accountable for how they spend their time, despite losing time being more painful than losing money, and find it more difficult to budget time with greater temporal distance (Leclerc et al., 1995), including assuming they will have more time in the future (Zauberman & Lynch, 2005). Time and money are also differentially construed. Money has a more concrete construal than time, which has a more abstract construal (Macdonnell & White, 2015).

In addition to distinct cognitive effects, research suggests time and money have distinct emotional effects. For instance, activating time (versus money) can positively influence consumer’s product attitudes and evaluations (Mogilner & Aaker, 2009). Activating time through priming improves attitudes and evaluations because consumer reflect on the experience
of using the product, which in turn makes them feel more connected to the product (Mogilner & Aaker, 2009). This effect does not occur for product categories where just possessing the product is the objective (e.g. luxury goods) or for individuals who are materialists. In such cases, the feeling of connectedness with the product stems from possessing it rather than experiencing it, so the idea of time has no effect, but the idea of money leads to more favourable outcomes (Mogilner & Aaker, 2009).

2.2.2 Prosocial Effects of Time and Money

The concepts of time and money have differential effects on the prosocial behaviours of individuals who are primed with them. Money, in particular, has been widely explored. With respect to prosociality, individuals primed with money (i.e., exposed to the idea of money) are more self-sufficient (less likely to seek out others’ help) and less prosocial (less likely to act helpfully towards others; Vohs, Mead, & Goode, 2006). This disinclination toward assisting others was tested across 3 experiments (experiments 3 to 6), testing different operationalizations of helping and methods of priming money. Priming money also resulted in participants’ desire to be physically farther away from others and to engage in individual (rather than group) activities. Taken together, these findings demonstrate that money orientation distances individuals from others by promoting the idea of self-sufficiency, and in turn diminishes social connectedness (Vohs et al., 2006). Moreover, charitable giving can be influenced by the congruity (or lack thereof) between the marketing message (money vs. time, which are argued to have different levels of construal; Macdonnell & White, 2015), and consumer mindset (concrete vs. abstract), resulting in more positive behaviours and intentions for congruent message framing and individual construal orientation (Macdonnell & White, 2015).
2.2.3 Effects of Prosocial Behaviours Through Time and Money

Having reviewed the effects of thinking about time or money on cognitions, emotions, and prosocial behaviours, the present discussion will aim to return to the NSR model and explore the positive emotional consequences of spending time and spending money prosocially.

2.2.3.1 Emotional Effects of Giving Money

Neither time nor money inherently make people happy—happiness is derived from spending time or money in a particular way. In the case of money, research suggests that spending money on other people, or prosocial spending, makes people happier than spending money on themselves (Dunn, Aknin, & Norton, 2008; 2014). This effect of giving on happiness occurs regardless of income level or country (Aknin et al., 2013), and is observed at as young as two years of age (Aknin, Hamlin, & Dunn, 2012). The happiness associated with prosocial spending is moderated by a number of factors. First, emotional ties between the spender and receiver moderate the degree of happiness derived from prosocial spending. Aknin, Dunn, Sandstrom, and Norton (2013) compared the happiness derived from spending money on individuals to whom one has strong versus weak emotional ties, and found greater happiness associated with strong emotional ties. Similarly, Aknin, Sandstrom, Dunn, & Norton (2011) found that spending money face-to-face, as opposed to anonymously, is also associated with greater happiness. Second, the happiness of giving can be moderated by one’s feeling of having a specific impact. In another study, Aknin and colleagues (2013) found that giving to a charity with a specific purpose, as opposed to one with many but imprecise purposes, produces greater happiness. Furthermore, as described above, Aknin and colleagues (2012) posit the prosocial
spending feedback loop, wherein happiness associated with prosocial spending increases the
likelihood of spending prosocially again.

2.2.3.2 Emotional Effects of Giving Time

Happiness can be derived from time if one simply focuses on the idea of time. Mogilner
(2010) found that priming time inclines participants toward social connections and behaviours,
resulting in increased happiness. Priming money, however, motivates participants to work more
and socialize less, which does not result in increased happiness (Mogilner, 2010). These findings
suggest not only that focusing on time, rather than money, is optimal for the pursuit of happiness,
but also that this pursuit is performed through social connections. As well, this research draws a
parallel between a time orientation and a social orientation. Besides increasing sociability and
happiness, focusing on time also increases charitable giving (Liu & Aaker, 2008). Liu and Aaker
(2008) found that asking individuals to donate their time, rather than donate their money,
ultimately resulted in more charitable giving. The authors argue that what they have called “the
time-ask effect,” occurs because the idea of time (activated through the time-donation request)
puts people in an emotional mindset, which in turn helps them anticipate happiness from the act
of donating (Liu & Aaker, 2008). Notably, this emotional mindset is characterized as a shift in
motivational focus from utility goals toward emotional goals. It is not associated with the
induction of any specific emotion, but with a prioritization of existing emotional goals. However,
while thinking about time in general increases happiness, the way in which individuals think
about time can moderate it. Specifically, thinking of life as long and easy generates more
Similarly to spending money, time can be spent as well. Based on a review of the literature, Aaker, Rudd, and Mogilner (2011) made five recommendations on how time should be spent in order to increase happiness. Spending time with the close others (e.g. friends, family, significant others), spending time on socially connecting or positively memorable activities, thinking about enjoyable experiences without spending time, expanding one’s time by being present-focused, and being mindful of happiness changing over time were identified as the five happiness principles of spending time (Aaker et al., 2011). Further, developing on the social component of time utilization, Mogilner, Chance, and Norton (2012) found that spending time with other people increases an individuals’ sense of having more time, or time affluence. This effect was observed when comparing spending time with others to spending time by oneself, wasting time, or unexpectedly gaining free time. The effects of spending time socially on the perception of time is driven by an increased sense of self-efficacy and ability to accomplish much with one’s time (Mogilner et al., 2012). It has also been found that volunteering makes people happy (Borgonovi, 2008; Thoits & Hewitt, 2001). Moreover, happiness can be increased by simply using time ‘doing’ rather than idling. Mogilner and Aaker (2009) found that the valuation of items created by the individual themselves, rather than an expert, is greater—a phenomenon referred to as the “IKEA effect”. Similarly, busy people are happier with their lives than individuals who remain idle (Hsee, Yang, & Wang, 2010). How the specific activity one engages in influences happiness may depend on age. Battacharjee and Mogilner (2014) examined a variety of individuals’ experiences, both real and imagined, and found that age affects whether it is ordinary or extraordinary experiences that bring one more happiness. Younger individuals gained more happiness from extraordinary experiences, while older
individuals benefitted more from ordinary ones. Zhang and colleagues (2014) also found that ordinary experiences recovered from a time capsule, rather than extraordinary ones, brought more happiness to participants. Taken together, the literature on time and happiness suggests that happiness can be derived from spending time, given that the time is spent in a meaningful—often socially connecting—way.

2.3 Self-Construal

The literature on social closeness and prosociality prompts a consideration of the concept of self-construal, of which connectedness (or disconnectedness) with others is a key component.

2.3.1 Self-Construal Overview

The concept of self-construal was first proposed by Markus and Kitayama (1991) and describes the way that individuals think of themselves, distinguishing between self-centric versus relative to others. With the independent self-construal, the individual’s view is of the self as a unique individual, distinguished from others by their own internal characteristics and attributes. With the interdependent self-construal, one’s connectedness to others is emphasized, and the individual considers the self in reference to their social context and relationships. Self-construal is sometimes erroneously equated with cultural dimensions of individualism and collectivism (Cross, Hardin, & Gercek-Swing, 2011). However, as Cross et al. (2011) discusses, the two concepts are different but related, in that different cultures nurture each distinct view of the self. Western cultures are individualistic and thus the independent self-construal is emphasized; in Eastern cultures, the importance of social relationships (collectivism) results in a cultivation of the interdependent self-construal (Markus & Kitayama, 1991). Although chronic self-construal is
culturally determined, contextual self-construal can also be temporarily manipulated (Gardner, Gabriel, & Lee, 1999).

2.3.2 Self-Construal on Decision-Making

Inherently, self-construal involves a redirecting of attention, either to the self and one’s own needs and wants in the independent self-construal (Singelis, 1994), or toward the social environment and social connections in the interdependent self-construal (Markus & Kitayama, 1991). As a result of this differential focus, self-construal affects the ways in which individuals make decisions. Hong and Chang (2015) conducted a series of 6 studies to examine the differences in decision-making between individuals with independent and interdependent self-construals. They found that independents are more likely to focus on the self and base their decisions on their own affective feelings, whereas interdependents, who are motivated by social approval, are more likely to make easily justifiable, reason-based decisions. The authors also determined that need for justification to others underlies these effects, and that they are moderated by the decision focus (i.e., whether the decision is being made for oneself or for someone else). The need for justification explanation is consistent with previous research, which suggests that when faced with potential public scrutiny, people tend to favour options that are more justifiable in order to minimize threat (Larrick, 1993). Similarly, when people are held accountable for their decisions, compared to when they are not, they are more likely to choose avoidant options that are easier to justify (e.g., status quo options; Tetlock & Boettger, 1994). These findings suggest that the interdependent self-construal, more than the independent self-construal, is characterized by a drive to maintain consistency with one’s social environment. This idea is further supported by research that demonstrates that people with interdependent self-
construal are also more motivated by and likely to set maintenance goals (e.g., to maintain one’s bodyweight), unlike people with independent self-construal who are more likely to pursue attainment goals (e.g., to reduce one’s bodyweight; Yang et al., 2015). As well, those with interdependent self-construal are less likely than those with independent self-construal to take social risks (Mandel, 2003). Collectively, these findings point to the interdependent self-construal being linked to a need to maintain the existing state of one’s social context, and a disinclination to pursue change or oppose the status quo.

2.3.3 Self-Construal and Prosocial Behaviour

Research has examined the relationship between self-construal and prosociality in several ways. For instance, self-construal has been found to influence the way that others’ prosociality, including firms’ cause-related marketing, is perceived. Chen and Huang (2016) find that the influence of cause-related marketing (CRM; i.e., connecting marketing activities to a meaningful cause, such as environmental efforts) compared to that of corporate philanthropy (e.g., donations made by firms to charitable organizations) on brand image, consumer self-brand connection, and purchase intention is moderated by self-construal. Generally, CRM is less effective than corporate philanthropy at positively influencing these outcomes. However, when the interdependent self-construal is activated, people respond to CRM equally favourably as to corporate philanthropy. In fact, the more interdependent the consumer, the less likely they were to prefer corporate philanthropy to CRM (Chen & Huang, 2016). Self-construal also influences one’s own prosocial behaviour. Broadly, interdependently self-construed individuals are more likely to prefer donation-based promotions compared to discount-based promotions (favoured by
independently self-construed individuals), but only for causes that are congruent with their social identity (i.e. causes they care about/identify with; Winterich & Barone, 2011).

Self-construal has been found to play a role in the way that people donate under different circumstances. One factor that influences the charitable giving of differently self-construed individuals is the visibility of the donation (publicly recognized vs. private). Simpson, White, and Laran (2018) find that self-construal and the visibility of donation interact in an unexpected way. Although one might expect that independent self-construal might increase public donations because of the desire to present oneself positively to others (Lalwani & Shavitt, 2009; Wien & Olsen, 2014) through impression management (Ariely et al., 2009), the authors uncover a different pattern of behaviour. They find, instead, that independently self-construed individuals, characterized by a desire for agency (i.e., control of self), are less willing to donate if the instance of giving will be publicly recognized rather than private (Simpson et al., 2018). The authors argue that the condition of public donation makes independent individuals feel that their agency is compromised, thereby leading to decreased desire to donate (Simpson et al., 2018). Furthermore, the in-group/out-group status may play a role in how differently self-construed individuals donate. Duclos and Barasch (2014) examined the interaction of a donor’s self-construal and recipient’s group membership. They found that individuals whose interdependent self-construal is activated are more likely to donate to victims who are perceived as in-group members than out-group members, whereas those with independent self-construal are equally likely to donate regardless of victim’s group membership. The authors found that this effect is driven by interdependents’ out-group discrimination, rather than in-group favouritism. Furthermore, this relationship is mediated by interdependents’ beliefs that donating to in-group
members (but not outgroup) will increase their personal happiness (Duclos & Barasch, 2014). Collectively, these findings indicate that the relationship between self-construal and charitable giving is not as clear-cut as one might infer. The conditions under which self-construal inclines individuals to donate have yet to be fully delineated. The objective of the present study is to identify an additional factor that may influence the donation behaviours of differentially self-construed individuals: monetary vs. time donations.

2.4 Present Study

The present study has three main objectives. The first is to examine the effect of self-construal on donation behaviour. To the best of our knowledge, no study has investigated the effect so self-construal on donation behaviour in response to a direct request. Similarly, no study to our knowledge has examined the specific empathic emotions associated with each type of self-construal in a donation context—this will be our second objective. Our third objective involves the interaction of self-construal and donation request type, as we aim to determine whether donation request type is a condition under which self-construal affects donation behaviour. In doing so, we hope to elucidate the “emotional mindset” described by Liu and Aaker (2008), by examining the interaction between self-construal and donation request type. Specifically, we aim to further explore the idea that the emotional mindset activated by the time-ask amplifies one’s emotional motivations, as posited by Liu and Aaker (2008). The differing self-construal and donation motivations of independently- versus interdependently-oriented individuals present an opportunity to explore such distinct motivations.

The first research objective of the present study is motivated by the question: who is more generous, independent or interdependent individuals? While the self-construal literature
reports overall positive correlations between interdependent self-construal and prosociality, evidence is mixed (Duclos & Barasch, 2014; Moorman & Blakely, 1995; Skarmeas & Shabbir, 2011). One of the integral studies linking self-construal and donation behaviour examined the choice of a donation-promotion compared to a discount-promotion (Winterich & Barone, 2011). However, we have been unable to identify a study that aims to answer this question using a direct request and donation measure, and therefore we aim to address this gap. Understanding direct requests is important because most charitable organizations solicit donations directly—that is, through telephone, mail, or in-person contact, but the solicitation is typically a “donate now” or “would you like to donate?” type of request. Confirming that differently self-construed individuals differ in charitableness in the context of direct requests, rather than promotions, would allow this finding to be generalized to this common application.

Furthermore, for our second objective, we examine not only differences in donation behaviour between the two self-construal groups, but also the underlying empathic emotions experienced by each group. Specifically, we chose to examine personal distress and empathic concern in this study because they map on to unique motivations of each self-construal. In short, because interdependent individuals display a preference for situations that are advantageous to others rather than to themselves (Swaminathan et al., 2007; Zhang & Shrum, 2009), their motivations correspond to empathic concern, which is associated with altruistic motivation (Batson et al., 1983). Conversely, because independent individuals prefer instances of personal gain (Barone & Roy, 2010), their motivations correspond to personal distress, which is associated with egoistic motivation (Batson et al., 1983). As noted, however, a key difference between personal distress and empathic concern is that personal distress tends to be negatively
related or unrelated to prosocial behaviour when the personal distress-inducing situation can be escaped (Batson, 1991; Eisenberg et al., 2006). This is aligned with egoistic motivation, which will influence prosociality on the condition of difficult escape (Batson et al., 1983; Toi & Batson, 1982). We investigate whether, and to what extent, each type of self-construal is associated with a different type of empathic experience, and how that experience influences willingness to donate.

The third objective focuses on an additional condition under which self-construal can influence donation behaviour—namely, the type of donation request made. As Liu and Aaker (2008) note, charities often request monetary donations but scarcely donations of time. And yet, it is the latter that has the potential to lead to increased charitable giving (Liu & Aaker, 2008). Presently, we explore the question of how requests for time donations (i.e., time-asks) interact with self-construal to influence charitableness. Several studies have explored the conditions under which differently self-construed individuals do or do not make donations, including victim group membership (Duclos & Barasch, 2014) and donation visibility (Simpson et al., 2018). The primary study often used to support the claim that interdependent individuals are more inclined toward donations is Winterich and Barone’s (2011) examination of differently self-construed individuals’ preferences for donation-based versus discount-based promotions. Indeed, the researchers found that interdependent individuals prefer the donation-based promotion, but only if the charity/cause was congruent with their social identity—otherwise there was no difference between interdependents and independents in terms of preference for donation-based promotions (Winterich & Barone, 2011). Overall, most studies find that the difference in prosocial behaviours between independent and interdependent individuals is accentuated by an additional
condition, such as donation visibility or victim group membership. The present study aims to provide another condition under which a distinct pattern of donation may be observed, namely the donation request type. In order to understand the potential influence of the donation request, we examine how the time-ask influences the unique empathic response associated with different self-construal. This stream of our research intends to elucidate the nature of the emotional mindset described by Liu and Aaker (2008) insofar as it will provide an opportunity to determine whether the emotional mindset does indeed serve to amplify one’s emotional motivations, as manifested by changes in the levels of the experienced emotions. To this end, we will observe the difference in donation behaviour associated with different self-construal and empathic motivation (personal distress and empathic concern) between the different donation request conditions (time-ask, money-ask, and no ask).

2.4.1 Hypotheses

Four hypotheses are posited for the present research. The first and second describe the main effects of key constructs on the donation measure. Hypothesis 1A, which describes the main effect of self-construal, relies on extant research that suggests that interdependence is more closely linked to prosociality than interdependence (Winterich & Barone, 2011). Hypothesis 1B, which describes the main effect of donation request type, is based on Liu and Aaker’s (2008) finding of the time-ask effect. The first two hypotheses are as follows:

H1A: Self-construal will have an effect on donation amount, such that interdependently self-construed individuals will donate more than interdependently self-construed individuals.
H$_{1B}$: Donation request type will have an effect on donation amount, such that the time-ask will result in more donations than the money-ask.

The third hypothesis pertains to the mediated moderation of the focal relationship between self-construal and donation behaviour, specifically that the interaction of self-construal and donation request type will influence the experienced emotions and subsequently donation amount. This hypothesis is based on the congruity between the self-construal and empathic emotion, that is, interdependence and empathic concern compared to independence and personal distress. Specifically, we posit that independently self-construed individuals, motivated by one’s own needs (Barone & Roy, 2010; Singelis, 1994), will experience self-focused emotions, while interdependently self-construed individuals, motivated by social connections (Markus & Kitayama, 1991; Swaminathan et al., 2007; Zhang & Shrum, 2009), will experience other-focused emotions—in the instance of responding to a charity description, these will be personal distress and empathic concern, respectively (Davis, 1980). To clarify, we do not expect that only personal distress or only empathic concern will be present in independently or interdependently self-construed individuals, but that each type of emotion will be experienced more by the respective groups and mediate the donation behaviour. Moreover, following the idea that the emotional mindset induced by the time-ask is an amplification of emotional motivations (Liu & Aaker, 2008), we expect that the time-ask, compared to the money-ask, will interact with self-construal and serve to amplify the respective empathic emotions, resulting in differential effects on donation. Specifically, we expect that the amplified empathic concern will serve to increase donation amount compared to the no-ask control, while the amplified personal distress, because
of the easy-to-escape nature of the helping request, will result in decreased donations compared to the no-ask control (Batson et al., 1983). The following formal hypothesis is posited:

H₂: Self-construal and donation request type will have an interaction effect on donation, such that:

H₂ₐ: For interdependently self-construed individuals, the time-ask will lead to greater empathic concern compared to the money-ask, resulting in increased donations.

H₂ₐ: For independently self-construed individuals, the time-ask will lead to greater personal distress compared to the money-ask, resulting in decreased donations.

The proposed relationships are illustrated in the conceptual model in Figure 1.

**Figure 1. Conceptual model**
Chapter 3. Methodology

3.1 Design

The objective of the present study was to test the interaction of self-construal and donation request type, as well as to measure the mediating emotional mechanism underlying this effect. The present study was a 2 (self-construal: independent vs. interdependent) by 3 (request type: time-ask-first vs. money-ask-first vs. control no-ask) between-subjects design.

3.2 Participants

Participants were recruited through Amazon’s Mechanical Turk and compensated $0.75 for their time. Based on calculations in G*Power, to run an ANCOVA with an effect size of 0.25, alpha level of 0.05, and power of 0.8, and three covariates, the 6-cell design required a total sample size of 211. For convenience, that number was rounded up to 216, or 36 participants per condition.

3.3 Procedure

Participants completed the consent form and were randomly assigned to one of six conditions. Participants were told that the study was examining how the language used in charity descriptions influences judgments. In line with this cover story, participants were told that first two tests of literacy would be administered to confirm their reading and writing skills, corresponding to the self-construal manipulation. First, participants’ self-construal was manipulated using the story manipulation created by Trafimow, Triandis, and Goto (1991). To ensure that the self-construal manipulation was effective, an additional manipulation task was administered using a ten statement writing procedure (Wang & Ross, 2005). Subsequently, participants read the charity description for Start2Finish, followed by one version of the donation
request type manipulation in the form of donation-intention questions (time-ask-first, money-ask-first, or no-ask) following Liu and Aaker (2008). After reading the charity description and answering the donation-intention questions, participants answered questions about their empathic concern and personal distress in response to the charity description, as well as their emotional state. After completing the questions, participants were informed that they would be entered to win one of five $20 Amazon gift cards, and a behavioural donation measure was administered by asking participants to indicate what amount of their potential winnings they would like to donate to Start2Finish, following Liu and Aaker (2008). After responding, participants were debriefed as to the true nature of the study, asked to provide their consent again, and thanked for their time.

3.3.1 Stimuli

Participants were exposed to a description of the Start2Finish Running and Reading Club Program, which describes the problem that the charity addresses (school drop out among at-risk youth) and the efforts undertaken by the program. Notably, some researchers contend that a key antecedent of empathic concern is the perceived innocence of the other, or their lack of responsibility for the distress or need (Weiner, 1980; as cited in Batson, 2011). Children are an exemplary innocent other—they are often perceived to be at a stage in their life where they cannot be held responsible for their need or distress. For this reason, the selected charity is appropriate—it addresses the needs of children, and particularly needs that were brought on by socioeconomic factors out of the children’s control. The full charity description is presented in Appendix A.
3.3.2 Manipulations

3.3.2.1 Self-Construal Manipulation

Self-construal was manipulated using a story manipulation developed by Trafimow, Triandis, and Goto (1991) and validated by Gardner, Gabriel, and Lee (1999). The story begins with the same introduction describing a warrior choosing a general to send to an ally’s aid but has two conclusions depending on the self-construal being primed, wherein the warrior chooses a skilled general who will advance his self-interest (independent prime) or a member of his family who will strengthen his family’s loyalty (interdependent prime). The full story is included in Appendix B.

Following the self-construal story manipulation, self-construal was further manipulated using a self-priming procedure described by Wang and Ross (2005) and similar to that used by Trafimow, Triandis, and Goto (1991). In line with the writing portion of the literacy check, participants were instructed to write ten statements describing how they are unique individuals (independent prime) or similar to their social groups (interdependent prime; Wang & Ross, 2005). The specific prompts used are presented in Appendix C.

3.3.2.2 Donation Request Type Manipulation

Donation request type was manipulated following Liu and Aaker’s (2008) procedure. Immediately after reading the charity description, participants were asked the donation intention questions. In the time-ask condition, participants were asked to indicate 1) “How interested are you in volunteering for the Start2Finish?” and 2) “How interested are you in making a monetary donation to the Start2Finish?” (1 = Not at all; 7 = Very much). In the money-ask condition, the question order was reversed, with participants asked about monetary donations first, followed by
volunteering. In the control condition, participants were not asked any donation intention questions.

### 3.3.3 Measures

#### 3.3.3.1 Empathic Concern and Personal Distress

In order to further examine the emotional mindset described by Liu and Aaker (2008), an adapted version of Davis’ (1980) Interpersonal Reactivity Index (IRI) was utilized. Specifically, statements from the empathic concern (EC) and personal distress (PD) scales were adapted to reflect stimulus responses rather than trait empathy measures. The response empathic concern (R-EC) statements included 5 statements that convey one’s feelings of compassion and concern for others (e.g. “While reading about the kids, I had concerned feelings for them”). The response personal distress (R-PD) statements included 5 statements that address one’s own negative feelings in response to other’s negative experiences (e.g. “While reading about the kids, I felt helpless”). Agreement with all statements was indicated on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). The full list of statements used is included in Appendix D.

#### 3.3.3.2 Positive and Negative Affect

In addition to the IRI scales, participants completed the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Given that, in addition to the focus of emotion, personal distress and empathic concern are differentiated by the experienced level of negative emotion (Eisenberg et al., 2006), this measure was included to validate any findings pertaining to personal distress and empathic concern, as well as to ensure that the charity description is eliciting different levels of the two emotional responses depending on self-construal. Positive affect items were also measured as the relative levels of both positive and
negative affect items indicate the directionality of emotional experience. A measure of attention was included as well, in the form of two items ("alert" and "attentive"), to confirm the general level of participants’ attentiveness to the stimulus. Attention levels were measured because research has suggested that controlling attention away from emotionally evocative stimuli is a form of emotion regulation (for a review, see Ochsner & Gross, 2005). The PANAS items were administered with moment instructions ("you feel this way right now, that is, at the present moment"; Watson et al., 1988). The PANAS is comprised of a list of positive and negative emotions, and participants indicated the extent to which they are experiencing the emotion on a 7-point Likert scale (1 = not at all; 7 = extremely). The full list of PANAS emotions is included in Appendix E.

3.3.3.3 Behavioural Donation Measure

Following Liu and Aaker (2008), a behavioural measure of donation was incorporated into the study. The participants were informed that they would be entered into a draw for one of three $20 Amazon gift cards. They were asked to indicate what amount, if any, of the dollar amount they would like to donate to Start2Finish.

Chapter 4. Results

4.1 Participants

Two-hundred and thirteen subjects (41.8% female, \(M_{age} = 36.84, SD_{age} = 11.56\)) participated in the study through Amazon’s Mechanical Turk. The majority of respondents had completed college/university (34.7%), followed by those who completed graduate education (22.1%), and those who completed some college/university (17.8%). The respondents’ ethnic background was primarily white/European (61.5%), followed by South Asian (18.3%) and
Southeast Asian (6.1%). Additional details on the sample’s employment, household income, and marital status characteristics are presented in Appendix F.

4.2 Factor Analysis

To ensure that all of the scales used were properly represented by the items used to measure them, a factor analysis was conducted prior to hypothesis testing. Initial Eigen values indicated that the first five components accounted for 32.57%, 16.27%, 11.33%, 4.80%, and 3.66% of the variance, respectively. A factor analysis with varimax rotation was conducted to identify the optimal distribution of items. Of the 32 items examined, 13 items were eliminated because of cross-loading of 0.3 or above and 1 item because of primary loading below 0.7 (Appendix G). The number of items cross-loading is not surprising, as we anticipated much overlap between the Personal Distress scale and both the Empathic Concern scale and Negative Affect scale. The five factors are identified as follows: Negative Mood (8 items), Positive Mood (4 items), Empathic Concern (3 items), Attentiveness (2), and Personal Distress (1 item).

Internal reliability of the factors was confirmed using Cronbach’s alpha. The alphas were as follows: 0.93 for Negative Mood, 0.90 for Positive Mood, 0.85 for Empathic Concern, and 0.73 for Attentiveness. Cronbach’s alpha was not calculated for the Personal Distress factor as it consisted of only one item. Composite scores for each factor were created based on the means of the items that had their primary loadings on each factor and used as indices for all subsequent analyses. Table 1 below shows the items included for each construct.
Table 1. Factors and corresponding items.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
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<tbody>
<tr>
<td>Negative Affect</td>
<td>Afraid</td>
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<tr>
<td></td>
<td>Scared</td>
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<td></td>
<td>Nervous</td>
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<td>Ashamed</td>
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<td>Guilty</td>
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<td>Irritable</td>
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<td></td>
<td>Jittery</td>
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<td>Hostile</td>
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<td>Positive Affect</td>
<td>Proud</td>
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<td></td>
<td>Excited</td>
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<tr>
<td></td>
<td>Enthusiastic</td>
</tr>
<tr>
<td></td>
<td>Inspired</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>While reading about the kids, I did not feel much pity for them. (Reverse coded)</td>
</tr>
<tr>
<td></td>
<td>While reading about the kids, I did not feel sorry for them having problems. (Reverse coded)</td>
</tr>
<tr>
<td></td>
<td>While reading about the kids, I found it difficult to see things from their point of view. (Reverse coded)</td>
</tr>
<tr>
<td>Attentiveness</td>
<td>Alert</td>
</tr>
<tr>
<td></td>
<td>Attentive</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>While reading about the kids, I remained calm. (Reverse coded)</td>
</tr>
</tbody>
</table>

4.3 Descriptive Statistics

Descriptive statistics were run for key continuous variables of the study. The results are presented in Table 2. Notably, TimeWorth, or the valuation of one hour of the respondent’s time, was examined for outliers, given that the question had a write-in response with no limit. To identify outliers, the TimeWorth variable was standardized based on z-scores. One response was removed prior to standardization as it was extreme (most likely a typing error). Following standardization, all responses that had a z-score greater than absolute 3.29, which corresponds with an alpha level of 0.05 (Kim, 2013), were removed, resulting in six responses being
removed. The means and standard deviations of the key outcome variable, Donation Amount, for each experimental condition are presented in Table 3 and Figure 2.

**Table 2. Descriptive statistics, continuous variables.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donation</td>
<td>213</td>
<td>0</td>
<td>20</td>
<td>6.18</td>
<td>6.59</td>
</tr>
<tr>
<td>Time Worth</td>
<td>206</td>
<td>1.0</td>
<td>64.0</td>
<td>18.18</td>
<td>11.63</td>
</tr>
<tr>
<td>Age</td>
<td>213</td>
<td>18</td>
<td>72</td>
<td>36.84</td>
<td>11.56</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>213</td>
<td>1</td>
<td>7</td>
<td>2.57</td>
<td>1.40</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>213</td>
<td>1</td>
<td>7</td>
<td>5.18</td>
<td>1.48</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>213</td>
<td>1</td>
<td>7</td>
<td>3.29</td>
<td>1.66</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>213</td>
<td>1</td>
<td>6.13</td>
<td>1.94</td>
<td>1.23</td>
</tr>
<tr>
<td>Attentiveness</td>
<td>213</td>
<td>1</td>
<td>7</td>
<td>5.07</td>
<td>1.40</td>
</tr>
</tbody>
</table>

**Table 3. Mean and standard deviation of donation amount, by condition.**

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND/Time</td>
<td>33</td>
<td>7.06</td>
<td>5.722</td>
</tr>
<tr>
<td>INT/Time</td>
<td>37</td>
<td>8.89</td>
<td>8.116</td>
</tr>
<tr>
<td>IND/Money</td>
<td>35</td>
<td>3.63</td>
<td>4.851</td>
</tr>
<tr>
<td>INT/Money</td>
<td>30</td>
<td>7.47</td>
<td>7.537</td>
</tr>
<tr>
<td>IND/Control</td>
<td>44</td>
<td>3.45</td>
<td>3.830</td>
</tr>
<tr>
<td>INT/Control</td>
<td>34</td>
<td>7.41</td>
<td>7.312</td>
</tr>
</tbody>
</table>

**Figure 2. Mean of donation amount, by condition.**

![Figure 2. Mean of donation amount, by condition.](image)
4.4 Correlations

A Pearson correlation analysis was performed to gain a preliminary understanding of the relationships between the measured variables. The correlation output is presented in Table 5, and significant correlations are denoted by a single (p < 0.05) or double (p < 0.01) asterisk.

Table 4. Correlations.

<table>
<thead>
<tr>
<th></th>
<th>Positive Affect</th>
<th>Empathic Concern</th>
<th>Attentiveness</th>
<th>Personal Distress</th>
<th>Donation Amount</th>
<th>Age</th>
<th>Time Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Corr.</td>
<td>.271**</td>
<td>-.220**</td>
<td>.141*</td>
<td>.233**</td>
<td>.305**</td>
<td>-.323**</td>
<td>-.263**</td>
</tr>
<tr>
<td>Affect Sig.</td>
<td>.000</td>
<td>.001</td>
<td>.040</td>
<td>.001</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Positive Corr.</td>
<td>.008</td>
<td>.371**</td>
<td>-.099</td>
<td>.321**</td>
<td>-.160*</td>
<td>-.039</td>
<td></td>
</tr>
<tr>
<td>Affect Sig.</td>
<td>.905</td>
<td>.000</td>
<td>.151</td>
<td>.000</td>
<td>.019</td>
<td>.574</td>
<td></td>
</tr>
<tr>
<td>Empathic Corr.</td>
<td></td>
<td>.165*</td>
<td>.068</td>
<td>-.021</td>
<td>.124</td>
<td>.189**</td>
<td></td>
</tr>
<tr>
<td>Concern Sig.</td>
<td></td>
<td>.016</td>
<td>.323</td>
<td>.765</td>
<td>.071</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td>Attentiveness Corr. Sig.</td>
<td></td>
<td>-.054</td>
<td>.186**</td>
<td>.137*</td>
<td>-.089</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Corr.</td>
<td></td>
<td>.432</td>
<td>.007</td>
<td>.046</td>
<td>.206</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distress Sig.</td>
<td></td>
<td></td>
<td>.072</td>
<td>.023</td>
<td>.201</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donation Corr.</td>
<td></td>
<td></td>
<td></td>
<td>-.148*</td>
<td>-.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age Sig.</td>
<td></td>
<td></td>
<td></td>
<td>.030</td>
<td>.701</td>
<td>.099</td>
<td>.157</td>
</tr>
</tbody>
</table>

Notably, the Negative Affect index is significantly correlated with all of the measures. Further notable correlations are the negative relationships between age and negative affect, positive affect, donation measure, and personal distress, and positive relationship with attentiveness. The extant literature around age, empathy, and charitable behavior will be examined in the discussion section.
4.5 Hypothesis Testing

4.5.1 The Combination of Money-Ask and No-Ask Conditions

After considering the nature of the sample used in the present study, we identified the possibility that the participants may have a preexisting “utility mindset”, identified by Liu and Aaker (2008) as a consequence of the money-ask, which suppresses emotional motivations and activates goals of economic attainment. This may be because the workers on Amazon’s Mechanical Turk are primarily motivated by monetary gain (Litman, Robinson, & Rosenzweig, 2015). Therefore, we first conducted analyses to confirm that the money-ask and control groups did not differ. For this, we utilized an analysis of variance (ANOVA). Consistent with our expectation, there was no significant difference between the money-ask ($M_{money} = 5.93, SD = 6.78$) and control conditions ($M_{control} = 4.86, SD = 5.72, F[1, 141] = 1.02, p > 0.05$). Therefore, for subsequent analyses, the money-ask and control conditions are combined. That being said, results replicated if the control condition was excluded from analyses.

4.5.2 Mediated Moderation

To examine the mediated moderation predicted by hypothesis 2, Hayes’ (2018) Process model 7 was utilized. Model 7 is a mediated moderation model, with self-construal as the independent variable, donation amount as the dependent variable, empathic concern and personal distress as mediators, and donation request type as the moderator. We expected that the interaction of self-construal and donation request type would be such that for interdependent individuals, the time-ask would lead to greater empathic concern and thus increased donations, while for independent individuals, the time-ask would lead to greater personal distress and thus decreased donations. There was no significant mediated moderation ($\beta_{index} = -0.13, se = 0.29$, ...
95% CI = -0.87, 0.27), meaning that self-construal and donation request type do not interact to affect donations through either empathic emotion (see Appendix H). Therefore, hypothesis 2 is not supported.

4.5.3 Main effects

Given that no interaction effect was found in model 7, a two-way analysis of covariance (ANCOVA) was conducted in order to determine if the main effects of self-construal and donation request type can be observed on donation amount, consistent with hypotheses 1A and 1B, as well as to account for the effects of potential covariates. Following Liu and Aaker (2008), age, gender, and valuation of time (TimeWorth) were used as covariates. Differences in emotional responding have been documented as functions of both age (Williams & Drolet, 2005) and gender (Eisenberg & Lennon, 1983). The time valuation measure is included as a covariate to account for an innate perception of the value of one’s time.

Confirming model 7 findings, the ANCOVA indicated no significant interaction effect between self-construal and donation request type ($F[1, 199] = 0.64, p > 0.05$). The ANCOVA did reveal a main effect of self-construal ($F[1, 199] = 12.23, p < 0.01$), with significantly greater donations in the interdependent condition ($M_{INT} = 7.84, SD = 7.55$) than in the independent condition ($M_{IND} = 4.51, SD = 4.99$). The analyses also revealed a main effect of the time-ask ($F[1, 199] = 10.85, p < 0.01$), with significantly greater donations in the time-ask condition ($M_{time} = 8.19, SD = 7.12$) compared to the other two conditions combined ($M_{combined} = 5.04, SD = 5.96$). ANCOVA results are provided in Appendix I. Given significant main effects of self-construal and donation request type, hypotheses 1A and 1B are supported.
Similarly to Liu and Aaker’s (2008) experiments 2 and 3, our analysis revealed age as a significant covariate ($F[1, 199] = 7.29, p < 0.01$). No significant effects of gender ($F[1, 197] = 0.71$) or time valuation ($F[1,99] = 0.01, p > 0.05$) were observed. To explore the relationship between age and donation amount, a separate regression analysis was conducted and found that the donation amount decreased for older participants ($\beta_{\text{age}} = -0.09, t(212) = -2.18, p < 0.05$).

### 4.6 Additional Analyses

The relationship between age and prosocial behaviour was not hypothesized as part of this study, but has been documented in the prior literature (Matsumoto, Yamagishi, Li, & Kiyonari, 2016). Prior literature indicates that older adults are more motivated to engage in emotional regulation, specifically in processes that function to reduce negative emotional experiences (Gross et al., 1997). One of these processes is an attentional bias, which serves to shift attention away from negative stimuli (Mather & Carstensen, 2003; Mather, Knight, & McCaffrey, 2005). Based on these findings, we can expect that even at high levels of attention, older adults will experience less negative affect because they attend to differently valanced stimuli. Given the notable relationships uncovered in prior analyses, such as the significant impact of age on donation and strong presence of negative affect and attentiveness constructs, the relationships between these elements were examined further. For this purpose, Hayes’ (2018) Process model 7 was applied, which is a mediated moderation model with age as the independent variable, donation amount as the dependent variable, negative affect as the mediator, and attentiveness as the moderator (see Appendix J). The results indicated that the mediated moderation is significant ($\beta_{\text{index}} = -0.01, se = 0.01, 95\% \text{ CI} = -0.03, -0.004$). Specifically, negative affect mediated the relationship between age and donation at medium ($M_{\text{attention}} = 5.5$;
β_{indirect} = -0.06; se = 0.02, 95% CI = -0.10, -0.03) and high (M_{attention} = 6.5; β_{indirect} = -0.08; se = 0.02, 95% CI = -0.13, -0.04) levels of attention, but not at low levels of attention (M_{attention} = 3.5; β_{indirect} = -0.02; se = 0.01, 95% CI = -0.05, 0.002). The mean values at each attention level represent the 16th, 50th, and 84th percentiles. This effect is a full mediation, as the direct effect is not significant (β_{direct} = -0.02; se = 0.04, 95% CI = -0.10, 0.06). To interpret the model, younger individuals who are more attentive tend to experience more negative affect and in turn donate more, while older individuals experience lower levels of negative affect regardless of attention level and in turn donate less. These findings are visualized in Figures 3 and 4.

**Figure 3. Negative affect, by age and attention.**
Discussion

4.7 Overview of Findings

4.7.1 Main findings

The objective of the present research was to examine the interactions between self-construal and donation requests that contribute to individuals’ willingness to donate to charities through different dimensions of empathy. The results of the study revealed that while the time-ask and self-construal both had main effects on donation amount, there was no interaction between the two. Likewise, we did not find that personal distress or empathic concern mediate the relationship between self-construal and donation amount. Analyses did uncover, however, an effect of age on donation, one that is fully mediated by negative affect—a mediation that is
moderated by attention. This mediated moderation will be discussed further in subsequent sections.

The results supported two out of four hypotheses, namely, the main effects of donation request type and self-construal. The presence of a time-ask request, compared to any other request, served to increase the donation amount. This finding is consistent with Liu and Aaker’s (2008) original report of the time-ask effect. Self-construal was also associated with donation amount, such that the interdependent self-construal resulted in increased donations. As discussed in the literature review, previous research identifying interdependent self-construal as more prosocially-inclined did not contain a direct comparison of the effect of independent and interdependent self-construal in response to a direct request for donation. However, the present finding that interdependence is associated with more donations is consistent with the extant literature (Winterich & Barone, 2011).

However, the mediated moderation predicted in hypothesis 2 was not supported. Specifically, we did not find that the interaction of self-construal and donation request type had an effect on empathic concern or personal distress, nor that these led to different donation behaviours. Given that we confirmed main effects of both self-construal and donation request type, the possible explanation for why this relationship was not observed is that the empathic emotions we selected to serve as mediators in this study were not appropriately induced or not appropriately measured.

The most likely explanation is that the charity description used in the study was not sufficiently negative in order to induce personal distress. We found that the independent and
interdependent groups reported similar levels of empathic concern ($M_{\text{IND}} = 5.14, SD = 1.49$, $M_{\text{INT}} = 5.22, SD = 1.47$, $F(1, 212) = 0.16, p > 0.05$) and personal distress ($M_{\text{IND}} = 2.54, SD = 1.32$, $M_{\text{INT}} = 2.60, SD = 1.48$, $F(1, 212) = 0.10, p > 0.05$). Given that personal distress is thought to be caused by the same vicarious emotions as empathic concern, just at notably heightened levels, it is conceivable that the stimulus used in the study did not achieve those heightened levels because it was not sufficiently negative. The charity description used concerned an important issue, but a relatively mild one (i.e., children dropping out of school) compared to potential others (e.g., human trafficking). It also included a section that could be perceived as positive, which described the work that Start2Finish does and with which it has had success. Cumulatively, the charity description was concerning, but not drastically so. Therefore, while the stimulus did induce negative emotions, it is possible that it did not lead to overarousal, which would have prevented the empathic emotions from evolving into personal distress. This is also most likely why we did not find that empathic concern, although elicited, mediated the relationship between interdependence and donations—because both groups, independent and interdependent, experienced similar levels of empathic concern.

An alternate explanation relates to the way in which empathic concern and personal distress were measured. To measure these empathic emotions, we utilized the Interpersonal Reactivity Index (Davis, 1980), which is a measure of trait empathic dimensions, adapted to reflect situational empathic emotions in response to the stimulus. Previous research has utilized single-adjective emotion descriptors as a measure of personal distress or empathic concern (referred to as empathy; Batson et al., 1983). For example, “alarmed”, “grieved”, or “disturbed” for personal distress, and “sympathetic”, “moved”, and “warm” for empathic concern. Although
the items used in the present study refer to similar emotions (see Appendix D), they are more descriptive and identify the charity description as the source of these emotions. This could have led participants to focus on evaluating the content of the charity description with respect to these emotions, rather than focusing internally to determine whether they are experiencing the specific emotion. While this explanation is unlikely, given that both types of measures are similar, it is possible.

4.7.2 Additional Findings

The relationship between age and donation amount was not hypothesized as part of the present study. Nevertheless, given the extant literature on emotion regulation and aging, this relationship was examined further. We identified a mediated moderation relationship between age (independent variable), attention (moderator), negative affect (mediator), and donation amount (dependent variable). The relationship is visualized in Figure 3. Based on this model, we can infer that younger adults experience more negative affect than older adults, which leads to increased donations, but this difference is only observable at medium-to-high levels of attentiveness.

Figure 5. Mediated moderation model.
Within this model, two key relationships arise: (1) the joint effect of age and attention on negative affect, and (2) the effect of negative affect on donation.

### 4.7.2.1 Age and Attention on Negative Affect

The present finding that, at higher levels of attentional focus, an age-related difference in negative affect is apparent such that older adults experience less negative affect than younger adults is consistent with literature on emotional regulation and aging.

In general, although cognitive abilities tend to decline with age, emotional regulation is reported to improve. In self-report measures, older adults report more focus on self-control of their emotional responses compared to younger adults, and they classify their emotional regulation skills as better than those of younger adults (Gross et al., 1997; Lawton, Kleban, Rajagopal, & Dean, 1992). One mechanism that is suggested to underlie this age effect is selective attention exercised by older individuals when faced with negative stimuli. Several studies have suggested that older adults may display an attentional bias against negative stimuli (Mather & Carstensen, 2003; Mather et al., 2005). For example, a study by Mather and Carstensen (2003) found that older adults take longer to identify the location of a dot that appears behind a negative face than a neutral face, and do so faster when it appears behind a positive face than neutral face, suggesting that they tend to shift attentional focus away from negative stimuli and toward positive stimuli. Such findings, however, raise the question of detection versus sustained attention: do older adults not attend to negative stimuli, or are they simply not noticing it? An eye-tracking study by Rösler et al. (2005) found that both younger and older adults glance at a negative stimulus, but younger adults look at it longer than older adults. No age difference in sustained attention was found for positive or neutral stimuli. Similar patterns of negativity-
aversion can be observed in older adults’ recollections (for a review, see Mather & Carstensen, 2005). Therefore, in the present study, it is possible that older adults attended to the charity description but focused on different elements of the stimulus, such as the positive aspect of a charity helping kids in need, rather than the negative aspect of kids needing help.

An alternate explanation is that the stimulus used in the study exerted a greater effect on younger adults because it resonated more with this population. It is important to note that the distribution of age among the present study’s participants is moderately skewed, with skewness of 1.006 (se = .167, $M_{age} = 36.84$, $SD_{age} = 11.56$) and kurtosis of .358 (se = .332), as depicted in the frequency histogram in Appendix K. This suggests that our findings are most likely derived from differences between the young adult and middle-aged adult populations, rather than the older adult population. The charity description used in the study describes a charity focused on helping children and adolescents who were at risk of dropping out of school. Given that younger adults would be closer to school-age, with some potentially still in school (although not high school), it is possible that a charity promoting education was more salient to them, either because their educational experience was more recent or because they consider the recipients of the donation to be more similar to themselves. However, without a measure of perceived salience or similarity this interpretation is only speculative. As well, the age-related difference in negative affect identified in the present study should be examined with alternate stimuli.

4.7.2.2 Negative Affect on Donation

As discussed in the literature review, findings indicate that both positive and negative mood can serve to increase prosocial behaviour (e.g., North et al., 2004; Wegener & Petty, 1994). In the case of negative affect, the Negative State Relief Model (Cialdini et al., 1981;
Manucia et al., 1984) would suggest that prosocial behaviours serve as a means of improving one’s negative mood. Indeed, Wegener and Petty (1994) find that this is one of the motivations for making donations. However, behaving prosocially when in a negative mood is conditional—namely, if there is a net benefit to the act (Niesta Kayser et al., 2010). If the cost of helping, however, exceeds the perceived benefit, individuals in a negative state will be less inclined to help. In the case of our study, the cost of helping is quite low: the loss of a portion of one’s hypothetical winnings. If respondents did not believe that they would win (or that they had good chances of winning, at the very least), then the cost of a hypothetical donation would be low but the ego-enhancing benefits (Dietrich & Berkowitz, 1997) remain. To confirm the influence of perceived cost of helping, however, it would be necessary to assess respondents’ belief that they would win the prize or to perform the procedure with an actual monetary donation, rather than a hypothetical one.

4.8 Implications and Contributions

The present study contributes knowledge in both academic and managerial spheres. Academically, it highlights the cumulative effects of age and attention on the mediating role of negative affect in age-related differences in prosocial behaviour. More than any implications the findings may suggest about negative affect and prosociality, the interaction effect of age and attention on negative affect and donation is notable. Research has explored age-related changes in emotional regulation in terms of both situational attention and memory (Mather & Carstensen, 2005), but to our knowledge no study has explored the implications of these changes in a prosocial behaviour context. While deeper investigation is necessary to understand the relationship, the interaction has significant managerial implications. The age-related differences
in responsiveness to negatively valanced messaging could be indicative of a need to differentiate the type of appeals used for different populations. Age-based targeting could be an effective strategy employed by charitable organizations when addressing appeals, especially if it is combined with appropriate tactics (e.g., attention-grabbing negatively valanced ones for younger adults). Further research will be required to understand what, if not negative emotions, can motivate older adults to donate.

4.9 Limitations

The present study is not without limitations. The self-report nature of the empathy and affective scales is one source of concern. Not only are they susceptible to typical inaccuracies of self-report measures, but because the study deals with a socially desirable behaviour (i.e., donating to a charity), the measures are also susceptible to social desirability bias. The empathy scales used were also adapted versions of Davis’ (1980) Interpersonal Reactivity Index, which is meant to measure trait, rather than situational, empathic dimensions. This could explain why the factor analyses did not identify the expected items as components of key factors. A measure of situational empathic experiences would have been more suitable to the present purposes, especially one that was able to distinguish more effectively between empathic and affective responses.

Another limitation is the content of the charity description. In order to avoid inducing too much distress in participants, charities that address more severe issues (e.g., human trafficking) were not used in the study. As discussed, this may have led to insufficient negative content to induce personal distress. As well, while the charity description used did induce negative affect in younger adults, we did not observe the same response in older adults. As mentioned, it is also
possible that the content of the charity resonated more with younger participants, and that was why an effect of age was observed.

Finally, the recruitment of participants through Amazon’s Mechanical Turk may be considered a limitation of the present study. While the platform has received criticism primarily centred around data quality (e.g., Goodman, Cryder, & Cheema, 2013), other research has suggested that it is a sufficiently reliable method of recruitment (Paolacci, Chandler, & Ipeirotis, 2010), especially if certain precautions are taken (Peer, Vosgerau, & Acquisti, 2014). The present study did indeed follow these precautions, including integrating attention check questions and recruiting from a pool of workers who held a Master qualification (high approval rating). The primary criticism of Mechanical Turk pertaining to the present study may be that the experimental manipulations employed in the study did not execute as intended (Lee, Seo, & Siemsen, 2018). While main effects of self-construal and request type were reported, the manipulations—especially of self-construal—may not have had the same intensity as they would have had in the lab. Also, compared to a community sample, it is possible that the Amazon’s Mechanical Turk sample is more monetarily-motivated, although this assertion would need to be empirically investigated.

4.10 Future Directions

The present study left many questions to be answered, and as a result many avenues that can be pursued in future research. Foremost, the questions that the present research set out to answer still remain mostly unanswered: what underlies the relationship between self-construal and prosocial behaviour, and what is the nature of the time-ask activated emotional mindset? Research examining these questions should embrace a more exploratory approach, as the effects
of self-construal tend to be highly conditional and the emotional mindset a highly abstract concept. Empathic concern and personal distress did not provide a foothold in this investigation, but other elements related to prosociality might, such as guilt or social desirability.

Another, more specific, direction of exploration can be the age-related differences in donation behaviour. While the present study suggests that negatively valanced emotional stimuli are effective for younger adults (as long as they are attending to them), we observed no changes in the emotional responses of older adults. Which means that the question still remains: how can charities appeal to older adults? Furthermore, the identification of this age-related difference in the context of prosocial behaviour begs the question of what other contexts can such a difference be observed. A possibility could be other forms of individual-level helping, or even societal-level prosocial behaviours such as sustainability-focused behaviours (e.g., recycling). Given the growing population of older adults (US Census Bureau, 2018), it may be increasingly necessary to understand what behavioural differences can be expected between age groups.

**Chapter 5. Conclusion**

The present study set out to understand two complex mechanisms involved in prosocial behaviour, and while it did not succeed in accomplishing the specific objectives outlined, our findings did bring to light two important caveats for soliciting donations: first, that young adults will only experience negative emotions in response to a charity description if they are attentive, and, second, that negatively valanced emotional appeals may not work on older adults, regardless of their attentiveness. Much is still left to be understood about why individuals donate or volunteer, and about how charities can encourage more donor support, monetary or otherwise. Nevertheless, the finding of the present study contributes to this exploration by highlighting an
important element that may be overlooked when creating donation appeals: age. With greater understanding of the conditions under which different age groups become more generous, charities will be able to seek support more effectively.
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APPENDICES

Appendix A. Start2Finish charity description

THE PROBLEM
Each year, thousands of kids will drop out of high school. This seemingly simple and personal act alters the course of their lives forever. It’s a move that costs them their education and future earning potential. Taken collectively, it costs their community by ingraining a culture of failure. Nationally, it costs our economy through a reduced employment pool and tax base, and an enormous strain on public expenditures.

Tens of thousands of kids in lower-income neighbourhoods have the potential to succeed in school but are unable to overcome the barriers to education that are created by poverty. Low literacy as early as grade 1 increases the risk of a child dropping out of school by 134%. Insufficient financial means, lack of positive role models in the community, absence of parental support, and integration into a new country and culture, are all barriers that can make high school graduation seem like an impossible dream.

Start2Finish’s mission is to break the cycle of child poverty by providing ongoing educational support to at-risk children throughout their school years, nurturing mind, body and social health so they are empowered to succeed and become role models for change.

THE RUNNING & READING CLUB PROGRAM

The Start2Finish Running & Reading Club after-school program helps make the dream of graduation a reality. The program addresses the need for enhanced literacy and physical activity among children experiencing poverty/deprivation in the communities it services. S2F currently has Running & Reading Club programs successfully operating from coast to coast, and just achieved our strategic goal of being in 50 communities!

The Running & Reading Club Program takes place directly within local schools and runs for two hours one day per week from October to June. The program culminates in the Start2Finish 5K Running & Reading Challenge and an awards ceremony recognizing each child’s achievement at the end of the school year.

The Running & Reading Club is one of the elements of the Pathway of Success, which creates a cycle of success and stands as a testament to the reality that no child goes off the rails when someone has cared about his or her wellbeing. The Pathway is providing building blocks to help kids graduate and succeed. Everyday at Start2Finish, stakeholders, staff, donors and volunteers work hard to help kids create their cycle of success.
Appendix B. Self-construal manipulation story.

Adapted from Trafimow et al. (1991)

Vostoras, a warrior in ancient Sumer, was largely responsible for the success of Sargon I in conquering all of Mesopotamia. As a result, he was rewarded with a small kingdom of his own to rule. About 10 years later, Sargon I was conscripting warriors for a new war. Vostoras was obligated to send a detachment of soldiers to aid Sargon I. He had to decide who to put in command of the detachment. After thinking about it for a long time, Vostoras eventually decided on Tiglath who was a ….

**Independent prime:** … talented general. This appointment had several advantages. Vostoras was able to make an excellent general indebted to him. This would solidify Vostora’s hold on his own dominion. In addition, the very fact of having a general such as Tiglath as his personal representative would greatly increase Vostora’s prestige. Finally, sending his best general would be likely to make Sargon I grateful. Consequently, there was the possibility of getting rewarded by Sargon I.

**Interdependent prime:** … member of his family. The appointment had several advantages. Vostoras was able to show his loyalty to his family. He was also able to cement their loyalty to him. In addition, having Tiglath as the commander increased the power and prestige of the family. Finally, if Tiglath performed well, Sargon I would be indebted to the family.
Appendix C. Self-construal manipulation, adapted TST

TST adapted from Kuhn and McPartland (1954)

Instructions adapted from Wang and Ross (2005)

Independent:

How would you define yourself as a unique individual? List ten personal traits, attributes, beliefs, values, behaviors, abilities, and preferences that do not relate to others and make you unique. For example, “I am smart” (attribute), "I can run 10 km" (ability), or "I like butter pecan ice cream” (preference).

Interdependent:

How would you define yourself as a member of a social group? List ten memberships of social groups with which you are likely to be experiencing a “common fate”. Consider groups such as your family, friends, community, workplace, religious organization, sports, hobby groups. For example, “I am a Catholic” (membership in religious group), "I play on a football team" (membership in a sports group), or “I am a daughter” (membership in a family group).
Appendix D. Adapted IRI

IRI adapted from Davis (1980)

Please indicate to what extent you agree or disagree with each of the following statements (1 = strongly disagree; 7 = strongly agree).

Response Empathic Concern (R-EC)

While reading about the kids, I felt kind of protective toward them.

While reading about the kids, I did not feel much pity for them. (-)

While reading about the kids, I had tender, concerned feelings for them.

While reading about the kids, I did not feel sorry for them having problems. (-)

While reading about the kids, I was quite touched.

Response Personal Distress (R-PD)

While reading about the kids, I felt very upset (changed from “go to pieces”)

While reading about the kids, I felt helpless

While reading about the kids, I felt in control (-)

While reading about the kids, I felt apprehensive and ill-at-ease.

While reading about the kids, I remained calm. (-)
**Appendix E. PANAS**

<table>
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<th></th>
<th>1 – Not at all</th>
<th>2 – Very slightly</th>
<th>3 – A little</th>
<th>4 – A moderate amount</th>
<th>5 – Quite a bit</th>
<th>6 – Mostly</th>
<th>7 – Extremely</th>
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(Watson, Clark, & Tellergen, 1988)
Appendix F. Frequency and percentage of nominal variables.

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Appendix G. Factor analysis, rotated component matrix.

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Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.\(^a\)
Appendix H. Model 7 output.

*******************************************************************************
OUTCOME VARIABLE:
ECIndex2

Model Summary
R  R-sq  MSE  F  df1  df2  p
.1607  .0258  2.1683  1.8479  3.0000  209.0000  .1396

Model
constant  4.7033  .3790  12.4084  .0000  3.9560  5.4505
SCcondit  .3854  .2476  1.5561  .1212  -.1028  .8736
Time  1.0494  .6820  1.5388  .1254  -.2950  2.3939
Int_1  -.8653  .4309  -2.0083  .0459  -1.7147  -.0159

Product terms key:
Int_1  :  SCcondit x  Time

Test(s) of highest order unconditional interaction(s):
R2-chng  F  df1  df2  p
X*W  .0188  4.0332  1.0000  209.0000  .0459

----------
Focal predict: SCcondit (X)
Mod var: Time (W)

Conditional effects of the focal predictor at values of the moderator(s):

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<th>Time</th>
<th>Effect</th>
<th>se</th>
<th>t</th>
<th>p</th>
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<th>ULCI</th>
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<td>.1212</td>
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*******************************************************************************
OUTCOME VARIABLE:
PIndex2

Model Summary
R  R-sq  MSE  F  df1  df2  p
.0451  .0020  1.9774  1.418  3.0000  209.0000  .9348

Model
constant  2.3817  .3620  6.5800  .0000  1.6682  3.0953
SCcondit  .1373  .2365  .5804  .5623  -.3290  .6035
Time  .3169  .6513  .4866  .6271  -.9670  1.6008
Int_1  -.2298  .4115  -.5585  .5771  -1.0409  .5813

Product terms key:
Int_1  :  SCcondit x  Time

Test(s) of highest order unconditional interaction(s):
R2-chng  F  df1  df2  p
X*W  .0015  .3120  1.0000  209.0000  .5771
OUTCOME VARIABLE:
Donation

Model Summary
\[
\begin{array}{cccccccc}
R & R^2 & MSE & F & df1 & df2 & p \\
.2861 & .0818 & 40.4864 & 6.2096 & 3.0000 & 209.0000 & .0005 \\
\end{array}
\]

Model
\[
\begin{array}{ccccccc}
\text{coeff} & \text{se} & t & p & \text{LLCI} & \text{ULCI} \\
\hline
\text{constant} & .5667 & 2.1302 & .2660 & .7905 & -3.6327 & 4.7660 \\
\text{SCcondit} & 3.3781 & .8736 & 3.8668 & .0001 & 1.6559 & 5.1004 \\
\text{ECIndex2} & -.1599 & .2958 & -.5405 & .5894 & -.7430 & .4232 \\
\text{PDIndex2} & .5694 & .3135 & 1.8165 & .0707 & .0707 & -.0486 & 1.1873 \\
\end{array}
\]

******************************************************************************

DIRECT AND INDIRECT EFFECTS OF X ON Y  ***************

Direct effect of X on Y
\[
\begin{array}{ccccccc}
\text{Effect} & \text{se} & t & p & \text{LLCI} & \text{ULCI} \\
3.3781 & .8736 & 3.8668 & .0001 & 1.6559 & 5.1004 \\
\end{array}
\]

Conditional indirect effects of X on Y:

INDIRECT EFFECT:
\[
\begin{array}{ccccccc}
\text{SCcondit} \rightarrow \text{ECIndex2} \rightarrow \text{Donation} \\
\text{Time} & \text{Effect} & \text{BootSE} & \text{BootLLCI} & \text{BootULCI} \\
.0000 & -.0616 & .1371 & -.3678 & .2063 \\
1.0000 & .0767 & .1946 & -.2305 & .6027 \\
\end{array}
\]

Index of moderated mediation (difference between conditional indirect effects):
\[
\begin{array}{cccc}
\text{Time} & \text{Index} & \text{BootSE} & \text{BootLLCI} & \text{BootULCI} \\
\text{---} & .1383 & .3007 & -.3928 & .8607 \\
\end{array}
\]

INDIRECT EFFECT:
\[
\begin{array}{ccccccc}
\text{SCcondit} \rightarrow \text{PDIndex2} \rightarrow \text{Donation} \\
\text{Time} & \text{Effect} & \text{BootSE} & \text{BootLLCI} & \text{BootULCI} \\
.0000 & .0782 & .1807 & -.2247 & .5464 \\
1.0000 & -.0527 & .2060 & -.5707 & .2636 \\
\end{array}
\]

Index of moderated mediation (difference between conditional indirect effects):
\[
\begin{array}{cccc}
\text{Time} & \text{Index} & \text{BootSE} & \text{BootLLCI} & \text{BootULCI} \\
\text{---} & -.1308 & .2864 & -.8740 & .2726 \\
\end{array}
\]
Appendix I. ANCOVA output.

Tests of Between-Subjects Effects
Dependent Variable: DonationMeasure

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1343.317&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6</td>
<td>223.886</td>
<td>6.036</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>1611.080</td>
<td>1</td>
<td>1611.080</td>
<td>43.434</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>270.228</td>
<td>1</td>
<td>270.228</td>
<td>7.285</td>
<td>.008</td>
</tr>
<tr>
<td>Gender</td>
<td>26.287</td>
<td>1</td>
<td>26.287</td>
<td>.709</td>
<td>.401</td>
</tr>
<tr>
<td>TimeWorth</td>
<td>.181</td>
<td>1</td>
<td>.181</td>
<td>.005</td>
<td>.944</td>
</tr>
<tr>
<td>Time</td>
<td>402.539</td>
<td>1</td>
<td>402.539</td>
<td>10.852</td>
<td>.001</td>
</tr>
<tr>
<td>SCcondition</td>
<td>453.620</td>
<td>1</td>
<td>453.620</td>
<td>12.229</td>
<td>.001</td>
</tr>
<tr>
<td>Time * SCcondition</td>
<td>23.851</td>
<td>1</td>
<td>23.851</td>
<td>.643</td>
<td>.424</td>
</tr>
<tr>
<td>Error</td>
<td>7381.440</td>
<td>199</td>
<td>37.093</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16334.000</td>
<td>206</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>8724.757</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix J. Model 7 output, additional analyses.

*****************************************************************************
OUTCOME VARIABLE: NegInd_1
*****************************************************************************

Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>R-sq</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>.4010</td>
<td>.1608</td>
<td>1.2908</td>
<td>13.3467</td>
<td>3.0000</td>
<td>209.0000</td>
<td>.0000</td>
</tr>
</tbody>
</table>

Model

<table>
<thead>
<tr>
<th>coef</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>.1400</td>
<td>1.0723</td>
<td>.1306</td>
<td>.8962</td>
<td>-1.9739</td>
</tr>
<tr>
<td>Age</td>
<td>.0277</td>
<td>.0289</td>
<td>.9595</td>
<td>.3384</td>
<td>-.0292</td>
</tr>
<tr>
<td>Attentio</td>
<td>.6012</td>
<td>.1966</td>
<td>3.0573</td>
<td>.0025</td>
<td>.2135</td>
</tr>
<tr>
<td>Int_1</td>
<td>-.0120</td>
<td>.0052</td>
<td>-2.3114</td>
<td>.0218</td>
<td>-.0222</td>
</tr>
</tbody>
</table>

Product terms key:
Int_1 : Age x Attentio

Test(s) of highest order unconditional interaction(s):

<table>
<thead>
<tr>
<th>R2-chng</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>X*W</td>
<td>.0215</td>
<td>5.3426</td>
<td>1.0000</td>
<td>209.0000</td>
</tr>
</tbody>
</table>

---
Focal predict: Age (X)
Mod var: Attentio (W)

Conditional effects of the focal predictor at values of the moderator(s):

<table>
<thead>
<tr>
<th>Attentio</th>
<th>Effect</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5000</td>
<td>-.0142</td>
<td>.0120</td>
<td>-1.1823</td>
<td>.2384</td>
<td>-.0380</td>
<td>.0095</td>
</tr>
<tr>
<td>5.5000</td>
<td>-.0382</td>
<td>.0068</td>
<td>-5.5932</td>
<td>.0000</td>
<td>-.0517</td>
<td>-.0247</td>
</tr>
<tr>
<td>6.5000</td>
<td>-.0502</td>
<td>.0088</td>
<td>-5.6760</td>
<td>.0000</td>
<td>-.0676</td>
<td>-.0327</td>
</tr>
</tbody>
</table>

*****************************************************************************
OUTCOME VARIABLE: Donation
*****************************************************************************

Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>R-sq</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>.3094</td>
<td>.0957</td>
<td>39.6846</td>
<td>11.1139</td>
<td>2.0000</td>
<td>210.0000</td>
<td>.0000</td>
</tr>
</tbody>
</table>

Model

<table>
<thead>
<tr>
<th>coef</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>4.3690</td>
<td>1.8732</td>
<td>2.3324</td>
<td>.0206</td>
<td>.6763</td>
</tr>
<tr>
<td>Age</td>
<td>-.0318</td>
<td>.0395</td>
<td>-.8038</td>
<td>.4224</td>
<td>-.1097</td>
</tr>
<tr>
<td>NegInd_1</td>
<td>1.5359</td>
<td>.3713</td>
<td>4.1369</td>
<td>.0001</td>
<td>.8040</td>
</tr>
</tbody>
</table>

****************** DIRECT AND INDIRECT EFFECTS OF X ON Y ******************

Direct effect of X on Y

<table>
<thead>
<tr>
<th>Effect</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.0318</td>
<td>.0395</td>
<td>-.8038</td>
<td>.4224</td>
<td>-.1097</td>
<td>.0462</td>
</tr>
</tbody>
</table>
Conditional indirect effects of X on Y:

**INDIRECT EFFECT:**  
Age $\rightarrow$ NegInd_1 $\rightarrow$ Donation

<table>
<thead>
<tr>
<th>Attentio</th>
<th>Effect</th>
<th>BootSE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5000</td>
<td>-.0219</td>
<td>.0139</td>
<td>-.0526</td>
<td>.0020</td>
</tr>
<tr>
<td>5.5000</td>
<td>-.0587</td>
<td>.0178</td>
<td>-.0975</td>
<td>-.0269</td>
</tr>
<tr>
<td>6.5000</td>
<td>-.0771</td>
<td>.0237</td>
<td>-.1273</td>
<td>-.0356</td>
</tr>
</tbody>
</table>

**Index of moderated mediation:**  
<table>
<thead>
<tr>
<th>Index</th>
<th>BootSE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attentio</td>
<td>-.0184</td>
<td>.0077</td>
<td>-.0358</td>
</tr>
</tbody>
</table>
Appendix K. Frequency histogram, age.

![Histogram]

- Mean = 36.84
- Std Dev = 11.56
- N = 273