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ENGAGING IN PROSOCIAL BEHAVIOR: THE ROLE OF RESOURCE
MEANINGFULNESS AND KARMIC BELIEFS

BY

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DISSERTATION

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ABSTRACT

Prosocial behavior, by definition, is the intent to benefit others, such as through helping, donating, or volunteering. Consumers engage in a variety of such activities to benefit others, oftentimes even at the expense of their own resources. It has been estimated that individual donations account for over two-thirds of all donations every year (Charity Navigator 2022). Indeed, marketers and charitable organizations work to further enhance such contributions to enable them to serve their cause. Academic research on prosocial behavior also predominantly focuses on understanding and developing strategies to enhance charitable giving and prosocial behavior in general.

Given the importance of prosocial behavior in our society, this dissertation investigates factors that shape consumers' motivations to engage in prosocial behavior and change the nature of prosocial behavior that may even result in negative consequences. In what follows are two essays regarding each factor associated with engaging in prosocial behavior. The first essay examines the meaningfulness of a resource being donated as a factor that affects individuals' donation allocation decisions. Although prior literature on charitable giving has focused on identifying factors that enhance the quantity of donations, relatively less research has examined factors that influence the allocation of donations, especially studying the type of donation resource as an antecedent to such allocation decisions. It has been demonstrated that consumers tend to allocate the resource associated with higher meaningfulness (sentimental value for the individual) in a more concentrated, rather than distributed, manner, choosing to allocate it among a smaller number of charities. The effect of resource meaningfulness on donation allocations is

mainly driven by individuals' desire to preserve the meaning embedded in the resource and subsequently maximize the marginal utility of the resource.

The second essay of my dissertation focuses on explicating the relationship between karmic beliefs and prosociality and reveals how karmic beliefs, with the salience of karmic rewards, can induce bounded ethicality that highlights conditions under which karmic beliefs lead to ethically constrained decision-making. Karma is a principle associated with positive consequences, such as guiding individuals to be prosocial as a way to do good. However, no research has systematically investigated whether karmic beliefs may, in fact, have a hidden cost. I argue and demonstrate that a higher belief in karma or the salience of the concept of karma induces self-serving altruism when karmic rewards are present, leading to ethically constrained decision-making under the guise of prosociality. However, when karmic rewards are not at stake—that is, the potential for self-benefit is absent—the proposed effect is attenuated. The findings are relevant to the current marketplace practices, such as the use of crowdsourcing platforms and peer-review educational systems, which heavily rely on social interactions among people from different karmic belief systems. In summary, this essay demonstrates how good deeds toward others may have ethically constrained consequences, and how extraordinary beliefs, such as karmic beliefs, may underlie these paradoxical implications.

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ESSAY ONE: Understanding Charitable Allocation Decisions: The Role of Perceived Meaningfulness of Resource

1.1 ABSTRACT

Prior research has primarily focused on understanding how to enhance donations and has predominantly studied the effects for a single charity in isolation. In real life, however, there exist numerous charities that work for the same cause, thereby signifying the importance of understanding the factors that impact consumers' allocation decisions among different charities. The present research investigates one such factor—level of meaningfulness embedded in the resources being donated. The findings demonstrate that consumers tend to allocate the resources associated with higher meaningfulness (sentimental value for the individual) in a more concentrated, rather than distributed, manner, choosing to allocate these resources among a smaller number of charities. This happens because meaningfulness of resource induces a higher desire to preserve such meaningfulness and enhance the impact of one's donation. This heightened impact is then achieved by maximizing the marginal utility of the resource being donated (i.e., each additional unit of the donated resource contributes to further enhancement of the impact), which in turn leads to a more consolidated (i.e., concentrated) donation allocation. By identifying the role of resource meaningfulness in donation allocation decisions, the current research offers insights that will allow charitable organizations to design more effective strategies to achieve their goals. In addition, the findings offer valuable guidance to consumers regarding their allocation decisions compared to more conventional wider distribution patterns.

Keywords: donation, resource, meaning, allocation, decision-making

1.2 INTRODUCTION

Charitable organizations survive and build the capacity to serve through consumers' donations, which come from various sources—from individual donors to corporations and foundations. Historically, individual donations have accounted for over two-thirds of all donations every year (Charity Navigator 2022). Interestingly, recent years have seen further declines in corporate and foundational donations, while individual giving has been on the rise. For example, in 2020, individual donations grew by 2.2% to \$324.10 billion, whereas corporate giving decreased by 6.1% to \$16.88 billion compared to the previous year (National Philanthropic Trust 2022). Consumers donate their precious resources to charitable organizations in the form of not only their money but also in-kind contributions, such as time, physical goods, and intangible assets. For example, individuals in the U.S. alone volunteer for about 8.8 billion hours annually (Giving USA Foundation 2020; National Center for Charitable Statistics 2020).

There are more than 1.54 million charities in the U.S. that compete for resources from individual donors. Many of these charities work for the same cause and have similar needs; thus, they tend to rely on the same donor pool (National Center for Charitable Statistics 2020). As such, individual donors face decisions about how to allocate their resources to various charities, even after choosing a specific cause. For example, they may decide to diversify their allocations, that is, divide up their donations among many charities, or on the opposite extreme, they may simply choose one charity to which to allocate all their donations (i.e., make a more concentrated allocation). The sheer number of charities and decisions consumers face raises important

questions: how do consumers make such allocations decisions, and what factors may impact such donation allocation decisions?

In this essay, I examine a previously overlooked resource characteristic—meaningfulness of resource—as a critical factor that influences individuals’ donation allocation decisions, that is, the extent to which individuals concentrate or distribute their donations among a set of charities working for the same cause. I conceptualize meaningfulness (high personal meaning) as a sentimental value for the individual, which is often derived from associations with significant others or special events in one’s life. Therefore, meaningfulness goes beyond the functional or material features of a resource (Winterich, Reczek, and Irwin 2017; Yang and Galak 2015). I argue that consumers tend to make a more concentrated donation allocation when donating a meaningful resource (a resource with higher meaningfulness associated) than when donating a neutral resource (a resource without any meaningfulness attached). That is, they will choose to donate their resources to a smaller (vs. larger) set of charities. I further suggest that this happens because such an allocation strategy aligns with people’s desire to preserve the meaning embedded in the resource being donated and maximize the marginal utility of the resource.

In the following sections, I first review the existing literature on donation behavior and allocation, followed by the theoretical development of the hypotheses. Next, I present empirical support for the hypothesized effect and the proposed underlying mechanism driving the effect. Finally, I discuss how this work expands the scope of extant research on charitable giving and suggest several ideas for future research.

1.3 CONCEPTUAL BACKGROUND

Donation Behavior

Individual donations play a critical role in the successful functioning of charitable organizations. Most prior work on individuals' donation behavior has primarily focused on understanding the conditions and factors that increase charitable donations (Bekkers and Wiepking 2011; Bendapudi, Singh, and Bendapudi 1996), such as monetary contributions (Briers, Pandelaere, and Warlop 2007; Gourville 1998), volunteering time (Brown, Meer, and Williams 2019; Clary et al. 1998), or physical possessions (Dunn, White, and Dahl 2020; Winterich et al. 2017). Furthermore, prior work in this domain can be categorized according to its examination of factors as they relate to 1) the donation recipient, 2) the donor, 3) social influence, and 4) the resource being donated.

Factors related to the donation recipient

Consumers donate differently depending on how they relate to the donation recipients. The well-known "identifiable victim" effect indicates that people donate more to a single identifiable victim than to a group of unidentifiable or statistical victims (Slovic 2007; Small and Loewenstein 2003; Small, Loewenstein, and Slovic 2007). The most commonly recognized mechanism through which this phenomenon appears is that consumers usually feel more empathy and show stronger emotional reactions toward a single identified victim than statistical victims (Kogut and Ritov 2005). Consumers also feel that their donations will have a bigger impact due to tangible information from an identified victim (Cryder, Loewenstein, and Scheines 2013; Jenni and Loewenstein 1997). In addition, the distance that consumers feel between

themselves and donation recipients has a significant influence on their donation amounts. For example, an important boundary condition of the identifiable victim effect is that the effect primarily works when individuals perceive the victims as belonging to their own ingroup (Kogut and Ritov 2007), as consumers generally donate more when the beneficiary is part of their ingroup (Levine et al. 2005). A sense of connectedness and a categorization of another person as a member of one's group explain such ingroup bias in helping (Dovidio et al. 1997).

Factors related to the donor

The way consumers perceive themselves and their identity in relation to others also influences their donation behavior. Those to whom moral identity is important are more likely to expand their moral boundaries and help those who are members of outgroups than those who have low moral identity self-importance (Aquino and Reed 2002; Reed and Aquino 2003). The positive impact of high moral identity self-importance on helping outgroups appears more strongly for consumers with a feminine gender identity (Winterich, Mittal, and Ross 2009). Consumers are also more likely to donate to a charity when its moral foundations are aligned with their political identities (Winterich, Zhang, and Mittal 2012).

Furthermore, people's connections to a certain group are associated with their charitable giving patterns; consumers are more likely to donate when a previous donor shares their identity (Shang, Reed, and Croson 2008). In addition, consumers' cultural identity influences their donation behavior. For example, those possessing interdependent self-construals tend to prefer donation-based promotions rather than discount-based promotions compared to those possessing independent self-construals (Winterich and Barone 2011). The generosity of those with interdependent self-construals tends to be more pronounced toward ingroups than outgroups,

whereas this difference does not emerge among those with independent self-construals (Duclos and Barasch 2014).

Consumers' social standing also has a significant impact on donation behavior. Those of higher social class standing have been found to undermine prosocial behavior, including offering charitable donations (Piff et al. 2010; Piff and Robinson 2017). Relatedly, those who accept inequality in society and thus hold higher power distance beliefs are less likely to engage in charitable giving (Winterich and Zhang 2014). For those charities targeting affluent donors, one effective strategy is to create charitable appeals focusing on personal agency rather than communion. Prior research found that agency-oriented charitable appeals increased the total amount of donations from affluent individuals by approximately 82% (Whillans, Caruso, and Dunn 2017; Whillans and Dunn 2018).

Factors related to social influence

Social influence from others around the donor has also been shown to have a significant impact on one's donation behavior. Boosting self-esteem, the extent to which one believes that one is valued as a relational partner by others (Leary and Baumeister 2000), by enhancing psychological ownership has been found to increase charitable giving (Jami, Kouchaki, and Gino 2021). Therefore, social exclusion in the form of being ignored tends to decrease charitable giving by decreasing feelings of empathy and threatening efficacy needs (Lee and Shrum 2012; Twenge et al. 2007). However, when individuals confront explicit social rejection, their desire to satisfy their threatened needs and recover a sense of belonging tends to increase charitable giving (Lee and Shrum 2012).

Prior work has provided further evidence of how the desire to be liked and portray oneself as altruistic can be a driver of charitable giving. The presence of an audience when donating leads to larger donations than those made in private settings (Andreoni and Bernheim 2009; Ariely, Bracha, and Mier 2009). Even the perception of an audience created through images of eyes watching the individual donor is effective in facilitating more charitable giving (Bateson, Nettle, and Roberts 2006). Such audience effects are particularly prevalent when benefits to others versus the self are emphasized (White and Peloza 2009), when individuals have high moral identity symbolization and low moral identity internalization (Winterich, Mittal, and Aquino 2013), and when the interdependent versus independent self-construal is activated (Simpson, White, and Laran 2018).

Resource type

Although to a lesser extent, some work has also examined the role of different types of resources in impacting donation behavior, particularly how the salience or availability of the resource type influences the varying amounts of donations. Liu and Aaker (2008) found that when individuals are asked a priori about their intention to donate time versus money, this enhances the amount of their subsequent monetary donations. This happens because the concept of time activates an emotional mindset in which the goals of enhancing emotional well-being are salient, whereas money leads to a value-maximizing mindset in which the link between happiness and giving becomes less relevant.

Most of the work on donation resources has focused on what triggers donations of a certain resource type instead of examining the impact of resource type on donation behavior. For example, when faced with a choice to donate time or money, consumers are more likely to

donate time when their moral identity is salient, whereas they prefer to donate money when they are reminded of their high status (Mogilner and Aaker 2009; Reed, Aquino, and Levy 2007). Relatedly, people are more willing to volunteer their time when they feel grateful (Bartlett and DeSteno 2006) or when they are motivated to strengthen their relationships with others (Clary et al. 1998). People also demonstrate greater interest in volunteering their time when they feel connected to others and perceive a sense of community (Pavey, Greitemeyer, and Sparks 2011). When making monetary donations, those who occupy a prestigious status in the society (e.g., the wealthy) and hence feel a greater sense of social responsibility are more likely to engage in charitable giving (Ostrower 1995). When donating possessions, the extent to which the product is connected to the self influences consumers' donation decisions, which becomes an important factor for practitioners to consider when attempting to increase the amount of donated goods (Dunn et al. 2020; Winterich et al. 2017).

In sum, most work on charitable giving has focused on identifying factors that help increase donation amounts and has primarily examined the factors relevant to donation recipients and donors, especially when there is one charity or recipient in isolation. Not much work has examined allocation decisions in which a number of charities working for the same cause are present. Furthermore, among the many factors that trigger a typical act of donation, resource type has received relatively less attention compared to other factors, such as the characteristics of donation recipients and donors, which have been extensively examined in prior work. Taken together, prior work has been relatively silent on the role of resource type in impacting donation behavior, particularly how it influences consumers' donation allocation decisions when faced with multiple charities at the same time.

Significance of Donation Allocation Decisions

Understanding consumers' allocation decisions is crucial to the functioning of organizations and should be of great interest to donors and charitable organizations alike. Every day, consumers encounter a variety of crises and events that seek their aid. These included natural disasters, wars, and social justice issues, which then lead them to search for ways to offer support that usually ends with them finding a list of charities in the domain of interest. Now, consumers face a decision as to how to allocate their resources across different charities. Besides the fact that it is common for consumers to make such donation allocation decisions, there are three main reasons why studying consumers' donation allocation decisions is important.

First, consumers often feel conflicted over choices, causing them to refrain from donating altogether (Ein-Gar, Levontin, and Kogut 2021). In general, when faced with multiple similar options, consumers find it difficult to make a choice, which subsequently leads them to defer their choice and prefer a no-choice option (Dhar 1997; Dhar and Simonson 2003). In the context of charitable giving, fairness concerns are particularly strong such that people show a general preference for distributing help (Sharps and Schroeder 2019). When consumers need to make a choice between two similarly deserving donation recipients, they experience a conflict between the wish to help and the wish to be fair. This conflict then increases choice aversion in the donation context (Ein-Gar et al. 2021).

Second, when consumers allocate their donations among a set of charities, their decisions ultimately determine the size of the donation each charity receives. Poor allocation of resources is detrimental to the overall performance of charities. Although charities do not stand exclusively to maximize profits, the flow of donations is critical for their growth and success in achieving

goals. Nowadays, many organizations introduce a set of charities from which consumers can choose, making the role of allocation more important. For example, the organization GiveWell presents several charities that they identify as the most effective on their website. A charity assessment organization, Charity Navigator, even provides a service called “Giving Basket,” where donors add and see the charities of their interest before finalizing how to distribute their donations among those charities at the checkout.

Third, understanding the reasons behind resource concentration versus wider distribution can help organizations strategize whether and when to spend resources on retaining repeat donors versus acquiring new donors. For example, charities that observe more concentrated donations than distributed donations may want to consider ways to leverage concentrated donations to increase repeat donors. If increasing awareness of a cause overall is the main goal, charities working toward the same cause may want to target the distributed versus concentrated allocation of donations. In this case, focusing on acquiring new donors rather than retaining existing donors might be a more effective strategy.

In sum, consumers and practitioners can both benefit from a better understanding of donation allocation decisions. Given the importance of donation allocation decisions, researchers have recently started to examine how consumers distribute their resources across different charities in relation to the traditional resource allocation literature and what factors impact such donation allocation decisions.

Diversified donation allocation

In typical consumption situations where consumers’ primary goals are to increase their own utility, consumers are subject to diversification bias, causing them to distribute their

resources across many different options available (Read and Loewenstein 1995). The literature on variety seeking has identified what triggers such bias. Earlier work found that people opt for a wider distribution because they are concerned about satiation (McAlister 1982) and thus look for novelty and change (Venkatesan 1973). Consumers also leverage variety by choosing multiple different items rather than choosing the same item multiple times as a way to hedge the risks from uncertainty (Kahn and Lehmann 1991; Simonson 1990). Variety is seen as socially desirable, causing people to choose more variety in public than in private settings (Ratner and Kahn 2002). Varied options in group settings satisfy the goals of information gathering and uniqueness as a form of positive self-presentation (Ariely and Levav 2000).

The context of charitable giving is different in that it involves spending one's resources for the benefit of others. Despite this difference, prior findings have predominantly suggested that donors seem to apply the diversification heuristic similarly in the context of charitable giving, distributing their resources across charities rather than concentrating them among a smaller set of charities (Baron and Szymanska 2011). One of the main identified reasons for this behavior is that individuals want to look fair. Donors perceive distributing their resources across multiple recipients as procedurally fairer than concentrating them (Sharps and Schroeder 2019). Fairness functions to signal an individual's impartiality to others, which is a highly regarded value for cooperative reciprocity (Shaw 2013). People choose to allocate resources equally among all available candidates, even if that allocation sacrifices efficiency, because they want to avoid being perceived as partial by others (Choshen-Hillel, Shaw, and Caruso 2015). Relatedly, social observation tends to increase individuals' preference for equal yet inefficient allocations (DeWees et al. 2018).

Another reason why consumers give to many different charities is the desire for “warm glow,” which is a positive feeling from the act of giving (Andreoni 1990). Because warm glow arises from the act of giving itself, the magnitude of the glow is roughly constant for each act of giving (Margolis 1984). Therefore, increasing the number of contributions by choosing to distribute to multiple charities is a better way to increase the magnitude of the warm glow compared to concentrated giving (Lilley and Slonim 2014; Null 2011).

Distributed allocation can also be attributed to the donor’s inclination to think of charities as investments (Baron and Szymanska 2011). Individual donors may perceive the marginal utility of their donations to decrease such that donating to the same charity does not add more value each time they donate. Although a single donor’s contribution typically does not have much influence over the total contributions a charity receives, donors choose to distribute their donations across multiple charities as if they were the only contributor by applying the decreasing marginal utility principle as in investments.

Divergence from diversified resource allocation

Interestingly, part of the research diverges from these general findings regarding the distribution of resources and hints at conditions under which donors may not allocate their donations equally among similar charities. One line of work examines the characteristics of donation recipients and has found that people donate more to a single identifiable victim than to a group of unidentifiable or statistical victims because an identifiable victim evokes stronger emotional responses (Kogut and Ritov 2005; Slovic 2007; Small and Loewenstein 2003). Li, Colby, and Fernbach (2019) found that when donations involve saving human lives, individuals

show an increased preference for concentrating their resources on a more effective option rather than equally distributing resources across available options.

In addition, some research has examined the characteristics of the donor and tested whether different types of donors may allocate their donations differently. For example, different moral values among givers influence charitable allocations. Donors who prioritize social order and communal solidarity prefer donating among a smaller set of charities than those who value social justice and seek to reduce inequality (Farmer, Kidwell, and Hardesty 2020). Social class also influences the type of cause to which consumers allocate their donations. Lower-class consumers prefer to donate to urgent causes rather than to non-urgent causes, whereas the effect is reversed for higher-class consumers (Vieites, Goldszmidt, and Andrade 2022).

Extending this line of work, I examine whether the characteristics of the resource being donated can also have implications for how people make their donation allocation decisions. My investigation addresses two gaps in the literature. First, prior work on charitable giving has mainly focused on what triggers consumer donations and why consumers give rather than understanding what influences the donation distribution decisions when consumers interested in giving are faced with multiple charities simultaneously. Second, prior work has paid less attention to resource type as an antecedent that affects donation behavior. Instead, many studies have investigated the role of donation recipients or donors in impacting donation behavior. Research on resource type has primarily assessed what causes people to choose a given resource to donate or how to increase the donations of a certain resource type.

Therefore, to fill these gaps, I investigate whether the characteristics of the donation resource can lead to a more concentrated versus distributed donation allocation among similar charities. In particular, across five studies I propose and demonstrate that when the resource

being donated is associated with higher meaningfulness, consumers tend to allocate it in a more concentrated (vs. distributed) way, choosing to allocate it among a smaller (vs. larger) number of charities. I further investigate why such meaningfulness changes the way people allocate their resources in the context of charitable giving. I suggest that meaningfulness of resource causes consumers to focus on the connection between the self and the resource (Curasi, Price, and Arnould 2004; Grayson and Shulman 2000; Winterich et al. 2017), which then motivates them to make donations that preserve meaningfulness from such a connection. Furthermore, I propose and test a mechanism through which meaning preservation leads to a concentrated (vs. distributed) allocation of donations among a set of charities.

1.4 THEORETICAL DEVELOPMENT

Resource Meaningfulness

A resource refers to anything that can be transmitted from one person or group to another (Foa and Foa 2012). Although each resource is valued by its absolute units (e.g., a dollar or a minute), the way resources are perceived is often malleable. Findings have suggested that resources are imbued with meaningfulness beyond their tangible properties or exchange values (Belk 1988; Feldman and Hornik 1981; Graham 1981; Grayson and Shulman 2000; Levav and McGraw 2009; McGraw, Tetlock, and Kristel 2003; Thaler 1999). The malleability as to what a resource subjectively means and how personally valuable it is stems from the variety of ways consumers relate to their resources. Consumers think about, spend, save, and share their resources, whether they be time, money, or tangible goods (Festjens and Janiszewski 2015;

Leclerc, Schmitt, and Dube 1995; Okada and Hoch 2004; Shaddy and Shah 2018), which contributes to the development of meaning that is personal to the individual.

Specifically, the factors shaping the meaningfulness of a resource can be largely categorized into the expected use of the resource, the source of the resource, and related social contexts. First, expected use can cause individuals to perceive their resources differently. For example, individuals mentally create accounts of their money depending on what it is used for and then spend money according to those labels (Kahneman, Knetsch, and Thaler 1990; Thaler 1999). The value of time varies according to the opportunities for its use (Festjens and Janiszewski 2015). Both intrinsic satisfaction from the activity and satisfaction from the association with others while participating in the activity constitute the meaning of time (Feldman and Hornik 1981). Second, consumers consider the traces of history a resource carries and assign meaning accordingly. Therefore, the same pen has different meanings and is valued differently when it is gifted by a friend than when it is a raffle prize (McGraw and Tetlock 2005). Individuals perceive their resources differently depending on the person(s) from whom they receive them (McGraw et al. 2003). Third, resources can be laden with meaningfulness in social contexts where they are most commonly used and exchanged (Foa and Foa 1980). One's possessions become meaningful when they embody personally significant memories, which often involve other people (Van den Hoven, Orth, and Zijlema 2021). People derive additional sentimental value from their possessions beyond the utility of the product's features, based on associations with significant others, special events, or special times in their lives (Yang and Galak 2015).

Although these factors explain how a resource acquires meaningfulness as opposed to its neutral state (e.g., money from a parent versus just money on its own), they can also be

associated with fundamental differences that determine the degree of meaningfulness across different types of resources. For example, some resources are perceived to be more meaningful than others due to the ways in which they are exchanged (Foa and Foa 1980). Some resources are particularistic and thus have more potential to acquire meaningfulness, which means they are used and influenced by particular individuals or entities involved in the transaction. Love is considered a particularistic resource that is expressed as affectionate regard, warmth, or comfort and involves exclusive relationships. As a closely related resource, time is also associated with warmth, such that considerations of time cause people to engage in behaviors that promote a sense of social connection with close others, such as family and friends (Mogilner 2010). In contrast, money is the least particularistic or universalistic resource in that people exchange their money with just about anybody. As a standard currency for economic exchange, people mainly use money as a means to acquire goods and services in the market (Lea and Webley 2006). Therefore, money is primarily tied to its instrumentality rather than to the qualities that evoke meaningfulness (Vohs, Mead, and Goode 2006).

In sum, various resources transcend their roles as objective means of economic exchange and embody social and symbolic significance through exchanges (Zelizer 1989). From money gifted by parents to souvenirs from enjoyable travel experiences, these resources evoke particular memories of times, places, and people and are considered more meaningful than other similar resources. In addition, some resources may be inherently associated with higher meaningfulness than others due to their innate characteristics (Foa and Foa 1980).

In the current work, I define perceived meaningfulness of resources as a sentimental value for the individual, which is often derived from associations with significant others or with special events in one's life (Yang and Galak 2015). According to this conceptualization,

meaningfulness therefore reflects an emotional value beyond the functional or material features of the resource (Winterich et al. 2017).

Resource Meaningfulness and Donation Allocation

I propose that the meaningfulness attached to a resource causes consumers to focus on the connection between the self and the resource. Prior work on consumers' possessions has suggested that individuals form an emotional bond with their resources when they hold personal meaning. For example, a possession imbued with meaningfulness is considered "special" (Price, Arnould, and Curasi 2000) or becomes a "favorite" (Wallendorf and Arnould 1988). Furthermore, consumers feel pain when they lose their meaningful possessions (Young and Wallendorf 1989). This is because consumers view an object associated with higher meaningfulness as generating added value beyond its functional value (Yang and Galak 2015). These personally relevant associations make one's possession distinctive and increase resistance to replacement because even an exact replica cannot sustain the same meaning as the original (Grayson and Shulman 2000). I suggest that in the context of charitable giving, when a resource is associated with higher meaningfulness, it will heighten consumers' perceived connection between the self and the resource and lead them to give away the resource in a way that affirms such a connection.

A heightened self-resource connection may direct one's focus to the emotional and relational associations embodied by the resource (Yang and Galak 2015). Such a focus, I argue, would enhance the desire for meaning preservation, which refers to one's motivation to keep the meaning embedded in the resource intact. Consumers use various strategies to protect personal

meaning. For example, consumers avoid situations that they believe will threaten their ability to retrieve irreplaceable memories that have special meaning (Zauberman, Ratner, and Kim 2009). When consumers give others their resource associated with meaningfulness, they become sensitive to the way the resource will be used and prefer to give it to those who would cherish the meaning (Price et al. 2000). Individuals are also reluctant to share others' resource when it contains personal meaning because they fear damaging the resource to which the owner is personally attached and try to avoid the responsibility of protecting it (Graul and Brough 2021). Resources considered irreplaceable due to their meaningfulness can even have sacred values that people desire to protect (Belk, Wallendorf, and Sherry 1989; McGraw and Tetlock 2005).

In the context of charitable giving, a desire for meaning preservation, I further argue, will lead to the maximization of the marginal utility of the meaningful resource being donated. Prior research has indicated that meaningful resources (e.g., those that cannot be saved and aggregated), are perceived to have increasing marginal utility, that is, they are understood to offer increasing benefits from their accumulation (Festjens and Janiszewski 2015). Additionally, Gestalt principles suggest that a holistic integration of multiple items is perceived to be more than, or at least different from, the sum of the parts (Kimchi 1992). For example, money in the form of a whole (e.g., a \$100 bill) possesses Gestalt properties of cohesion, is perceived to have greater value, and is processed more fluently than money in the form of parts (e.g., ten \$10 bills) (Mishra, Mishra, and Nayakankuppam 2006). A similar process may apply to the donation of resources with higher meaningfulness such that donors perceive the resource as an inseparable Gestalt unit and are thus less likely to break it apart by distributing it across charities. I conjecture that a desire to preserve meaning will subsequently motivate individuals to maximize

the marginal utility of resources. Such motivation will then make them consolidate the resources to achieve the maximum marginal utility and ensure their better use.

In sum, I suggest that a heightened self–resource connection driven by the meaningfulness of the resource will lead to concentrated versus distributed donation allocation. A focus on the self–resource connection will trigger people’s desire to preserve the meaning embedded in the resource and enhance the impact of their donation, which can be achieved by maximizing the marginal utility of the resource. Such a chain of motivations will lead people to consolidate their resource, which appears as more concentrated donation allocation.

1.5 HYPOTHESES

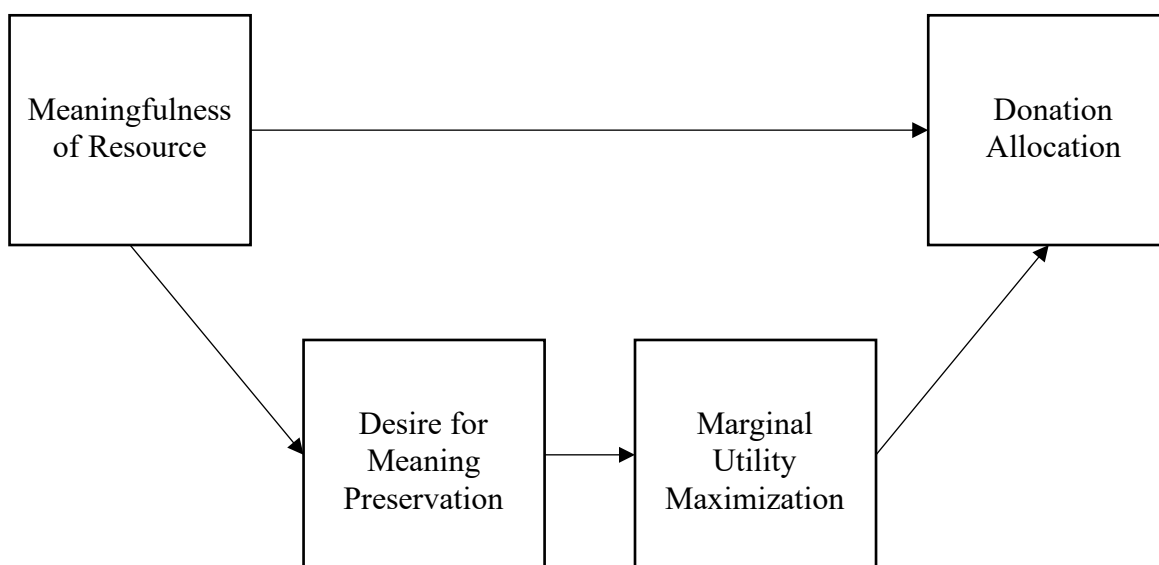
I hypothesize that a resource associated with higher meaningfulness will cause individuals to focus on the connection between the self and the resource, which yields a chain of mechanisms that lead to concentrated versus a distributed donation allocation. A focus on the relational associations will increase individuals’ desire to preserve the meaning embedded in the resource. The desire for meaning preservation will then shift the donor’s focus toward the maximization of the marginal utility of the given resource to ensure the donation is impactful. As a result, people are more likely to consolidate the resource to make the best use of the increasing marginal utility. This will then appear as more concentrated donation allocation. Formally,

H1: A meaningful resource, as compared to a neutral resource, will be donated in a concentrated (vs. distributed) manner. That is, when making a decision to donate among a set of similar charities, consumers will allocate the resource that holds

higher meaningfulness among a smaller (vs. larger) number of charities than a neutral resource.

H2: The impact of resource meaningfulness on donation allocation will be serially mediated by the desire for meaning preservation and the motivation to maximize the marginal utility of the resource.

Figure 1: Essay 1 Conceptual Model



1.6 OVERVIEW OF STUDIES

I tested my hypotheses through five experimental studies. The first two studies (Studies 1A and 1B) tested and provided support for the focal hypothesis under a controlled experimental setting, revealing that when deciding among a given set of similar options, people indeed donate higher meaningfulness-imbued resources among fewer charities. Study 2 leveraged the inherent differences in meaningfulness across different types of resources (i.e., time versus money) and

showed that the effects of resource meaningfulness on donation allocation hold not only for the same but also different types of resources. Study 3 replicated and extended the main findings through a real-life donation task. Study 4 tested the chain of process mechanism through a serial mediation model by investigating the role of desire for meaning preservation and the resulting motivation to maximize marginal utility in driving a concentrated donation allocation decision.

1.7 STUDY 1A

Study 1A was conducted to test H1 in a controlled laboratory setting. Specifically, I examined whether, when choosing to donate to a set of similar charities, people would allocate their donation in a more concentrated manner (i.e., among fewer charities) when the resource being donated had meaningfulness as compared to when it did not (i.e., no personal meaning is attached to the resource).

Method

One hundred and ninety-nine MBA students ($M_{\text{age}} = 37.09$, $SD = 7.53$; 59 female) at a large Midwestern university successfully completed this study in exchange for course credits. The study adopted a one-way between-subjects design, in which participants were randomly assigned to either a meaningful resource or a neutral (i.e., no personal meaning associated with it) resource condition. Based on prior research on the impact of social-relational sources on facilitating meaningfulness to a resource (Levav and McGraw 2009; McGraw et al. 2003; Zelizer 1989), those in the meaningful resource condition were asked to imagine a scenario where they

received money (i.e., \$250) from their uncle, who had just been diagnosed with an illness. Those in the neutral resource condition were simply told to imagine they had \$250. All the participants were told that they were to consider donating this money to any of five charities. I further informed them that these five charities were working for the same cause, that is, providing medical supplies and assistance to those affected by natural disasters. Brief information about each charity was presented. The participants could choose to allocate their \$250 among the five charities however they liked (see Appendix A for the exact instructions). Once the participants had finished allocating their donations, they answered demographic questions about themselves (i.e., age and gender) and were then debriefed and dismissed.

Results

An independent samples *t*-test was conducted to assess whether the number of charities the participants donated to differed under the meaningful resource versus neutral resource donation condition. In support of my hypothesis, the participants in the meaningful resource donation condition ($M = 3.13$, $SD = 1.70$) allocated their donations to significantly fewer charities than those in the neutral resource donation condition ($M = 3.75$, $SD = 1.49$; $t(197) = 2.72$, $p = .007$, Cohen's $d = 0.39$).

Discussion

The results of Study 1A provided initial evidence for my hypothesis that people allocate their donations among fewer charities when the resource being donated has meaningfulness

compared to when it does not. To further support my hypothesis, I conducted Study 1B using a different donation resource.

1.8 STUDY 1B

Study 1B was conducted to further test H1 using a different resource type: material goods.

Method

One hundred and eighty-nine adults ($M_{\text{age}} = 37.50$, $SD = 10.93$; 71 female) who were members of the Amazon Mechanical Turk online panel successfully completed this study in return for a small monetary compensation. The study adopted a one-way between-subjects design, in which the participants were randomly assigned to either a meaningful resource or a neutral (i.e., no personal meaning associated with it) resource condition. As in Study 1A, social-relational associations were used to facilitate meaningfulness. Those in the meaningful resource condition were asked to imagine a scenario in which they had inherited 50 pieces of dinnerware sets from their grandmother. Those in the neutral resource condition were simply told to imagine that they had 50 pieces of dinnerware sets. A separate brief study was conducted to confirm the difference in resource meaningfulness across the conditions. One hundred ninety-seven adults ($M_{\text{age}} = 38.89$, $SD = 11.12$; 87 female) from the Amazon Mechanical Turk online panel were recruited and randomly assigned to a meaningful resource or neutral resource condition. To assess the perceived meaningfulness of the resource, the participants were asked to indicate the

extent to which they thought their dinnerware sets were replaceable and exchangeable, respectively ($r = .79$, 1 = not at all, 7 = very much). As expected, the participants in the meaningful resource condition indeed perceived their dinnerware sets as less replaceable (i.e., more meaningful) ($M = 4.84$, $SD = 1.83$) compared to those in the neutral resource condition ($M = 5.58$, $SD = 1.32$; $t(195) = 3.26$, $p < .001$, Cohen's $d = 0.47$).

All the participants in the main study were told that they were to consider donating the dinnerware sets and were given five charities to choose from. I further informed them that these five charities were working for the same cause, that is, providing support to children and families in need. Brief information about each charity was presented. The participants could choose to allocate their 50 pieces of dinnerware sets among the five charities however they liked (see Appendix B for the exact instructions). Once the participants had finished allocating their donation amounts, they answered demographic questions about themselves (i.e., age and gender) and were then debriefed and dismissed, as before.

Results

An independent samples t -test was conducted to assess whether the number of charities to which the participants had donated differed under the meaningful resource versus the neutral resource condition. Supporting my hypothesis and replicating the results from Study 1A, the participants in the meaningful resource donation condition ($M = 4.43$, $SD = 1.29$) allocated their donations to significantly fewer charities than those who were in the control donation condition ($M = 4.86$, $SD = 0.65$; $t(187) = 2.80$, $p = .006$, Cohen's $d = 0.41$).

Discussion

The results of Study 1B replicated those of Study 1A, which provided further support for the focal hypothesis. However, meaningfulness can vary across different types of resources. Hence, in the next study, I leveraged the inherent characteristics of the resources to manipulate their meaningfulness and examine whether the focal effect still held.

1.9 STUDY 2

Study 2 further tested the focal hypothesis (H1) by using a different method to manipulate the meaningfulness of the resource. Each resource has distinct inherent characteristics, which leads people to perceive different levels of meaningfulness for different resources and treat them differently (Foa and Foa 1980). For example, time and money, the two primary resources in our lives, have psychologically distinct characteristics. One notable difference between time and money is that time is associated more with emotional and social qualities than money, which tend to be personally meaningful (Liu and Aaker 2008). Simply making the concept of time salient enhances people's tendency to spend time with those who are more personally meaningful to them, such as family and friends (Mogilner 2010), or those to whom they feel close (Reed and Aquino 2003). Thinking about spending time with inanimate objects also leads people to feel more connected to those products (Mogilner and Aaker 2009). Indeed, people consider their time expenditure to be a better reflection of themselves and their values compared to their monetary expenditure (Gino and Mogilner 2014; Mogilner and Aaker 2009; Reed et al. 2007). Based on these prior findings, I posited that time would evoke greater

meaningfulness than money. Therefore, utilizing this naturally occurring difference in meaningfulness between time and money, I predicted that when people donate their time, which has higher inherent meaningfulness, the allocation of their donations would be more concentrated (vs. distributed) compared to when they donated their money.

Method

Two hundred and ninety-seven MBA students at a large Midwestern university ($M_{age} = 36.02$, $SD = 7.37$; 109 female) successfully completed this study in exchange for extra course credit. The participants were randomly assigned to either a meaningful resource (i.e., time donation) or a neutral resource (i.e., monetary donation) condition. The study began by introducing the participants to an ostensibly new nonprofit management program at the university and then asking for their feedback on partnering with five local charities. To solicit their feedback on this initiative, I asked the participants to imagine a situation in which they were considering donating either their time or their money.

All the participants were informed that there were five local charities available, and they were presented with the name and a brief description of each charity. Those in the time donation condition were then told that they were considering supporting this new program by volunteering 15 hours of their time over a semester. Those in the monetary donation condition were told that they were considering supporting this program by donating \$250 of their money over a semester. All the participants then indicated how they would allocate their time (i.e., 15 hours) or their money (i.e., \$250) depending on the condition among the five charities (see Appendix C for the exact instructions).

Next, to assess the perceived meaningfulness of the resource, the participants were asked to indicate the extent to which they thought their time or their money (depending on the condition) was replaceable and exchangeable, respectively ($r = .83$, 1 = not at all, 7 = very much). Finally, the participants answered demographic questions about themselves and were debriefed as in the previous studies.

Results

Meaningfulness. As expected, the participants in the time donation condition perceived their resource as less replaceable (i.e., more meaningful) ($M = 4.08$, $SD = 1.58$) compared to those in the monetary donation condition ($M = 4.81$, $SD = 1.36$; $t(295) = 4.26$, $p < .001$, Cohen's $d = 0.49$).

Donation Allocation. Replicating the findings from the previous studies, the participants allocated their donations to a significantly smaller number of charities in the meaningful resource (i.e., time) condition ($M = 3.39$, $SD = 1.49$) than when they donated their neutral resource (i.e., money) ($M = 3.86$, $SD = 1.42$; $t(295) = 2.77$, $p = .006$, Cohen's $d = 0.32$).

Discussion

The findings from Study 2 provided further support for my hypothesis that, indeed, people allocate their donations among fewer charities when they donate a resource deemed more (vs. less) personally meaningful. Importantly, this study leveraged the inherent psychological characteristics associated with different resources as a way to imbue meaningfulness. Time, as

discussed previously, was indicated as holding higher meaningfulness than money. Hence, the participants who were donating their time concentrated their donations among fewer charities compared to those who were donating their money. In the next study, I utilized this difference in meaningfulness between time and money and extended the main findings to a real-life donation task.

1.10 STUDY 3

Study 3 had two main objectives. First, I wanted to conceptually replicate the findings from the previous studies to provide further evidence for the meaningfulness of a resource being the main driver of the differing allocation decisions I had observed. To do so, I used the same focal donation task (i.e., donating pictures) for time and money conditions, but I framed it as either a time or a monetary donation, which had been established to have different meaningfulness in Study 2. Second, I aimed to extend the previous findings through a real-life donation task in a controlled experimental setting.

The focal donation task entailed finding pictures on the Internet and then donating them to one or more of the given charities. Donating pictures to charitable organizations is an increasingly popular practice among charitable organizations that attempts to either direct consumers' attention to particular causes or use the pictures to support certain causes (e.g., Johnson & Johnson's Donate a Photo, https://www.donateaphoto.com/en_US). I gave the participants an opportunity to donate their pictures to five charities that worked in the health domain. I predicted that when the picture donation was framed as a time donation, people would

donate the pictures in a more concentrated manner (that is, they would allocate them among fewer charities) compared to when it was framed as a monetary donation.

Method

One hundred and six undergraduate students at a large Midwestern university ($M_{\text{age}} = 20.18$, $SD = 0.99$; 69 female) successfully completed this study in exchange for course credits. The participants were randomly assigned to either a meaningful resource (i.e., time donation) or a neutral resource (i.e., monetary donation) condition. They were told that the study had partnered with five charities that were looking for donations from university students like them. The five charities were described as working toward promoting better health among individuals, and the names of the charities were presented along with some brief information: Creating Health, Health Allies, Health & Awareness, Healthier Tomorrow, and Neighborhood Health.

Next, those in the time donation condition were told that these charities were seeking volunteers to find pictures online that could be used to promote their cause. The participants were then asked to search for five online pictures that they thought these health-related charities could use and indicate to which charity they would like to donate each of the pictures. The participants were told to copy and paste the web address of the picture they had chosen under the name of the charity to which they wanted to donate it. Importantly, before the participants started browsing the Internet to search for pictures, those in the time donation condition were told that they should consider this picture donation task as volunteering their time to a charitable cause. The procedure was similar for those in the monetary donation task, except that the participants were told to consider the picture donation task as donating their money to a charitable cause, as

they were essentially saving these charities money by finding the pictures (see Appendix D for the exact instructions). Next, to assess the participants' perceptions about the effort it took to donate, I asked them to indicate how much effort they put into the picture donation task on a 7-point scale (1 = not at all, 7 = very much). Additionally, the survey tracked time participants spent on looking for pictures and allocating pictures. Finally, all the participants answered demographic questions about themselves and were debriefed before being dismissed, as before.

Results

As expected, there was no difference in the perceived effort required to engage in the donation of pictures between the meaningful resource condition ($M = 3.52$, $SD = 1.40$) and neutral resource condition ($M = 3.56$, $SD = 1.18$; $t < 1$), indicating that the effort put into these donations was perceived to be similar. Across the conditions, participants spent similar amounts of time on looking for pictures ($M_{\text{meaningful}} = 190.34$ seconds, $SD = 76.85$ vs. $M_{\text{neutral}} = 180.34$ seconds, $SD = 76.85$; $t < 1$) and allocating pictures ($M_{\text{meaningful}} = 110.77$ seconds, $SD = 64.08$ vs. $M_{\text{neutral}} = 116.76$ seconds, $SD = 86.65$; $t < 1$). Consistent with the results from the previous studies, the participants who considered the picture donation task to be a time donation allocated their pictures among significantly fewer charities ($M = 3.52$, $SD = 1.67$) than those who regarded the same task as one involving monetary donations ($M = 4.37$, $SD = 1.27$; $t(104) = 2.93$, $p = .004$, Cohen's $d = 0.57$).

Discussion

Replicating and extending the previous findings, I again found that the participants were more selective when they considered their donation to involve the more personally meaningful resource, time, than the less personally meaningful or neutral resource, money. Even when the participants were engaged in the same task of donating goods, their donation allocation was more concentrated when they were induced to think about their donations as involving time, compared to when they were induced to think of them as involving money. Note that I hypothesized that the difference in donation allocation as a function of the meaningfulness of the resource occurs because meaningfulness leads people to focus on the connection between self and the resource and donate the resource in a way that affirms such a connection. The next study examined this proposed underlying mechanism by testing the role of desire for meaning preservation and subsequent motivation to maximize the marginal utility of the resource.

1.11 STUDY 4

Study 4 tested H2, which addressed the underlying role of desire for meaning preservation and motivation to maximize marginal utility of resource in driving the effect of meaningfulness of resource on donation allocations. I expected that the meaningfulness of the resource would increase the desire for meaning preservation and motivate individuals to maximize the marginal utility of the resource, through which they can enhance the impact of the donation. As a result, this chain of motivations will lead people to consolidate their resource and make a more concentrated donation allocation decision.

Method

Two hundred and three adults ($M_{\text{age}} = 44.00$, $SD = 14.10$; 120 female) who were members of Prolific successfully completed this study in return for a small monetary compensation. The participants were randomly assigned to either a meaningful resource condition or a neutral resource condition. Those in the meaningful resource condition imagined a situation in which they had money (i.e., \$250) that had sentimental value to them because of its association with their grandmother. Those in the neutral resource condition imagined having the same amount of money, but without any association with a sentimental value. All the participants then considered donating this money across five charities working in the health domain. Brief information about each charity was presented (see Appendix E for the exact instructions).

Next, the participants indicated to what extent they were motivated to preserve the meaning associated with the resource (i.e., money) on a 5-item scale, which I later averaged to create an index of desire for meaning preservation ($\alpha = .94$, 1 = strongly disagree, 7 = strongly agree). The participants also responded to what extent they were motivated to maximize marginal utility on a 5-item scale, which I later averaged to create an index of maximizing marginal utility ($\alpha = .76$, 1 = strongly disagree, 7 = strongly agree) (see Appendix E for the exact measures). As a manipulation check, participants indicated their perceived meaningfulness of the resource by responding to two items adapted from Winterich et al. (2017) (“The money I thought about was personally meaningful to me” and “I was emotionally attached to the money”; $r = .81$, 1 = not at all, 7 = very much). I created an index of resource meaningfulness by averaging these two items. Finally, the participants answered demographic questions about themselves and debriefed as in the previous studies.

Results

Meaningfulness. As expected, the participants in the meaningful resource condition perceived their resource as more meaningful ($M = 4.64$, $SD = 1.73$) compared to those in the monetary donation condition ($M = 2.75$, $SD = 1.56$; $t(201) = 8.16$, $p < .001$, Cohen's $d = 1.15$).

Donation Allocation. Replicating the findings from the previous studies, the participants allocated their donations among a significantly smaller number of charities in the meaningful resource condition ($M = 3.94$, $SD = 1.71$) than when they donated their neutral resource ($M = 4.61$, $SD = 1.11$; $t(201) = 3.32$, $p = .001$, Cohen's $d = 0.47$).

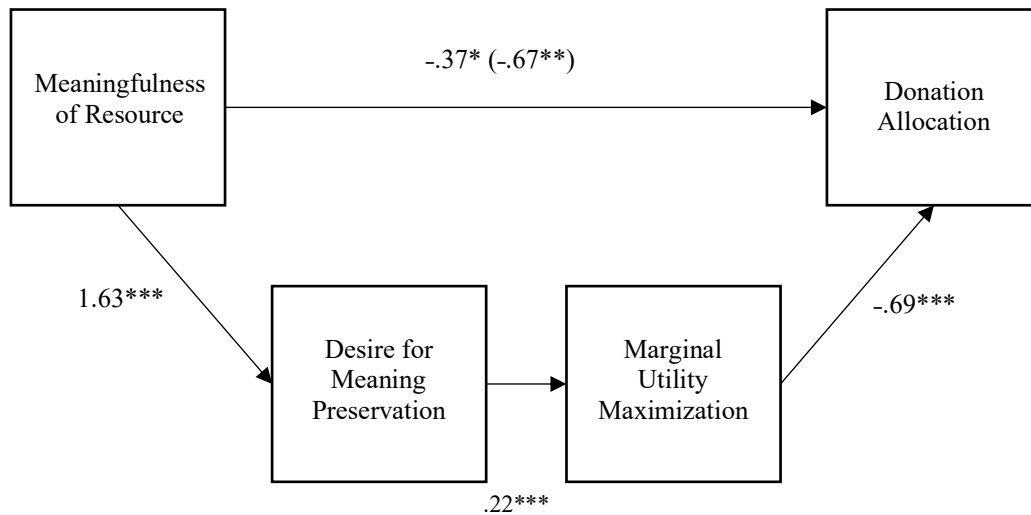
Desire for Meaning Preservation. Consistent with the predictions, the participants who had considered a meaningful resource ($M = 4.33$, $SD = 1.88$) indicated a greater desire to preserve meaning and maintain the sentimental value associated with the resource than those who had considered a neutral resource ($M = 2.70$, $SD = 1.53$; $t(201) = 6.79$, $p < .001$, Cohen's $d = 0.95$).

Maximizing Marginal Utility. Consistent with the predictions, the participants who had considered a meaningful resource ($M = 4.03$, $SD = 1.18$) were more motivated to maximize the marginal utility of the resource compared to those who had considered a neutral resource ($M = 3.72$, $SD = 1.05$; $t(201) = 1.98$, $p = .049$, Cohen's $d = 0.28$).

Testing the Underlying Process. To test whether the effect of the meaningfulness of the resource on the allocation decision was driven by the desire for meaning preservation and by the motivation to maximize marginal utility, we conducted a serial mediation analysis with the desire to preserve meaning and maximize marginal utility as the two mediators. I used bootstrapping with the repeated extraction of 5,000 samples (Model 6, Hayes 2013, see Figure 2). The analysis

revealed a significant indirect (i.e., mediation) effect of resource meaningfulness on donation allocation via two mediators ($\beta = -.24$, $SE = .07$, 95% CI $[-.40, -.11]$). The indirect effect was not significant via each mediator alone (desire for meaning preservation, $\beta = -.08$, $SE = .09$, 95% CI $[-.29, .09]$; maximizing marginal utility, $\beta = .03$, $SE = .12$, 95% CI $[-.22, .25]$).

Figure 2: Study 4 – The Mediating Role of Desire for Meaning Preservation and Marginal Utility Maximization in the Effect of Resource Meaningfulness and Donation Allocation (* $p < .05$; ** $p < .01$; *** $p < .001$)



Discussion

The results of Study 4 provided support for the proposed mechanism underlying the effect of resource meaningfulness on donation allocation. Consistent with the hypothesis, the findings of Study 4 showed that the focal effect was serially mediated by a stronger desire for meaning preservation and an enhanced motivation to maximize the marginal utility of the resource. These results demonstrate how the desire for meaning preservation systematically triggers a motivation to change the valuation of a resource, which is closely associated with

enhancing the impact of one's donation and ultimately determines their donation allocation decisions.

1.12 GENERAL DISCUSSION

In their daily lives, consumers donating their resources are inevitably faced with numerous options and must make decisions about how to allocate their resources among potential options (Fox, Ratner, and Lieb 2005; Sharps and Schroeder 2019). Such allocation decisions not only have significant implications for donors themselves (Ein-Gar et al. 2021) but also for charitable organizations that use the resources they receive to serve their respective causes (Berman et al. 2018). Prior research has primarily focused on examining various factors that may impact the amount of donations (Bendapudi et al. 1996), while donation allocation and the factors that may influence it have received relatively less attention. Therefore, developing a deeper understanding of what factors affect consumers' donation allocation decisions is important from both theoretical and practical standpoints. The present research focused on one key aspect of donation as a driver of donation allocation decisions: resource meaningfulness. The central hypothesis was that higher levels of resource meaningfulness causes individuals to make more concentrated (vs. distributed) donations, which means their resources are allocated among a smaller (vs. larger) set of charities.

Evidence from the five conducted studies provides strong support for this hypothesis. Moreover, the findings pinpointed the psychological mechanism underlying the effects of resource meaningfulness on donation allocation decisions. The results showed that when making a decision to donate among a set of similar charities, resource meaningfulness triggers

consumers' desire to preserve the meaning embedded in the resource, thus critically affecting consumers' decisions to allocate their donations among a smaller set of charities. Furthermore, the findings demonstrate that the desire for meaning preservation in turn causes people to maximize the resource's marginal utility because they become inclined to make an impactful donation and enhance the given resource's value as a way to preserve the meaning.

Theoretical Contributions

The current work therefore makes several important contributions to both theory and practice. First, while previous research primarily focused on determining how donations can be increased (Bekkers and Wiepking 2011), this work examined the novel issue of how the type of resource being donated may affect donation allocation decisions. As in consumption contexts, donors must make decisions about where to allocate their resources among charities, especially when charities are pursuing the same cause that donors care about. The current work focuses on such decisions that take place at an advanced stage of donation decision making, after which consumers have already committed to helping. By identifying meaningfulness of resource as an important factor that influences consumers' donation allocation decisions, this work contributes to the emerging research on the factors that influence later-stage donation decisions.

Second, the current findings extend prior work on the psychology of resource by demonstrating the psychological process underlying donation allocation decisions (Liu and Aaker 2008; Foa and Foa 1980). Building on prior work on how people assign meaning to their resources (Belk 1988; Grayson and Shulman 2000; McGraw et al. 2003), I also investigated how people make decisions differently depending on how personally meaningful the resource is

perceived to be. I unpacked this issue in the context of donation allocation decisions and showed that the effects of resource meaningfulness emerge via the extent to which individuals desire to preserve associated meaning and the subsequent motivation to maximize the marginal utility of the resource. The link between the desire for meaning preservation and the motivation to maximize the marginal utility is particularly relevant and important to the donation context because this link is closely associated with how much impact people think they can make through their donation.

Third, the present work advances the current understanding of resource allocation by identifying a factor that reduces people's naïve distribution of resources among a set of alternatives (Fox et al. 2005; Read and Loewenstein 1995). The findings suggest that leveraging the meaningfulness of resources can be an effective way to impact the tendency to split donations across multiple charities (Baron and Szymanska 2011; Sharps and Schroeder 2019), which may decrease the effectiveness of giving (Caviola, Schubert, and Nemirow 2020). The current work contributes to these lines of literature by examining the role of resource meaningfulness in the context of donation allocations.

Managerial Implications

The current work also offers important practical insights for both managers of charitable organizations and donors. First, charitable organizations will benefit from a better understanding of donors' allocation decision-making processes amid intense competition with other similar organizations. Within a set of charities, donation allocations ultimately determine the amount of donations each charity receives. The results of the current experimental studies demonstrated that

organizations can moderate individuals' allocation decisions by encouraging donations of a particular type of resource or changing consumers' perceptions of resources by encouraging them to find the source of meaningfulness if they cannot control the type of resource consumers donate.

Second, the present work also conveys an important message to organizations and policy makers. Understanding consumers' donation allocation patterns as a function of resource type will help organizations to identify the right target consumers for donation requests and design more effective strategies accordingly. For example, those who donate their personally meaningful resources and thus are more likely to make a concentrated allocation are more likely to become repeat donors compared to those who donate less personally meaningful resources and thus are more prone to splitting their resources across different charities. Therefore, managers may encourage consumers to frame their resources as more personally meaningful if they want to facilitate a more concentrated (vs. distributed) donation allocation pattern. If there is a need to support some new charities, practitioners may attempt to neutralize meaningfulness associated with resources so that they can promote a distributed allocation pattern.

Third, the findings inform consumers of a factor that influences their allocation decisions and will curb their tendency toward the naïve distribution of donations. Specifically, this could help them approach their decisions more consciously and allow them to make better decisions that benefit both personal and societal well-being. Allocation decisions are critical, especially in the context of donation, because they not only involve the individual donor but also recipients and society at large.

Directions for Future Research

The current work also suggests several avenues for future research. First, the presented studies examined the effect of resource meaningfulness on donation allocation decisions across different types of resources and different ways of manipulating meaningfulness. With the acceleration of technological innovation, the way resources are being consumed and produced is changing rapidly. For example, a non-fungible token (NFT) is a newly emerging resource. NFTs are ownable unique or limited-quantity units of data that are tradeable and stored on a decentralized public blockchain along with their ownership history (Hofstetter et al. 2022). Each NFT is authenticated as being the only one in existence and is irreplaceable, and it can represent ownership of anything digital, including artwork, music, social media posts, and other collectibles. NFTs can potentially have social-relational associations, as many different communities have formed around particular NFTs, which have led to in-person events (Atkins 2022). Would these characteristics of NFTs cause people to perceive NFTs as holding higher levels of meaningfulness compared to other types of resources? If so, how will this elevated perception of meaningfulness affect the way people allocate NFTs toward good causes? Exploring these questions will help us better understand how consumers perceive new types of resources and associate meaning with these resources.

Second, the current research used amounts of resources deemed reasonable for donation (e.g., 15 hours or \$250). However, in real life, the amount of resources donated varies significantly, from a few minutes or dollars to many months or millions of dollars. The difference in allocation decisions should appear as long as the meaningfulness of the resource is present. However, the meaningfulness of resources could be changed by the amount of resources

being donated. For example, prior work suggests that the feeling of lacking a sufficient amount of resources can trigger a competitive mindset (Roux, Goldsmith, and Bonezzi 2015), which might reshape perceptions of resource meaningfulness. Future research may investigate any differences resulting from different donation amounts. Specifically, the perceived meaningfulness of resources and the resulting motivations can be studied.

Third, the present work investigated meaningfulness as a sentimental value that stems from associations with significant others or special events that tend to be positive. However, meaningfulness can be derived from negative associations or associated with mixed feelings (Kashdan, Biswas-Diener, and King 2008). Future research could examine whether the valence of associations from which meaningfulness is derived can influence people's donation allocation decisions. For example, if negative associations are too strong, individuals may no longer want to preserve the meaning embedded in the resource, which in turn leads to a distributed donation allocation pattern. Alternatively, negative associations may fundamentally change the underlying mechanism and trigger a different motivation. By further investigating the source of meaningfulness, future research could elucidate the scope of the associations from which meaningfulness arises.

Conclusion

The present research advances prior knowledge and provides practical implications for charitable giving. Accumulating a large amount of resources is important for nonprofit organizations. However, understanding where or how resources are allocated is also an essential part of charitable giving which has been largely overlooked. The findings demonstrated that

resource meaningfulness has a significant impact on donation allocation decisions. Hence, donors should be mindful of the influence of resource meaningfulness, as it affects their motivations and resource valuation. Practitioners should also pay more attention to the type of donation resource and leverage resource meaningfulness to devise the right charity appeals and communication strategies that will truly enhance social welfare.

ESSAY TWO: Belief in Karma and Prosociality: The Presence of Karmic Rewards Enhances Bounded Ethicality

2.1 ABSTRACT

Does belief in karma always lead to positive consequences? In an attempt to answer this question, this research examines whether karma, a principle often associated with positive consequences, such as guiding individuals to be prosocial as a way to do good, can lead to any negative consequences. This research proposes that belief in karma leads to bounded ethicality by increasing self-serving altruism. I show that, with the presence of karmic rewards, those who believe in karma tend to engage in ethically constrained decision-making that sacrifices other moral values for performing good deeds toward others. I further demonstrate that the unique effect of belief in karma is driven by heightened self-serving altruism, which refers to the motivation to increase one's own benefits while enhancing others'. The findings indeed show that self-serving altruism, not other similar constructs, such as warm glow, drives the effect of karmic beliefs on bounded ethicality. A moderation study to explicate the process further demonstrates that belief in karma leads to bounded ethicality, particularly when people expect karmic rewards rather than when they do not, thereby ruling out alternative explanations of merely having a goal or feeling empathy. In summary, the findings highlight the dark side of karmic beliefs, providing evidence that belief in karma can unexpectedly create ethical blind spots and increase bounded ethicality through heightened self-serving altruism, especially when karmic rewards are at stake.

Keywords: karmic beliefs, bounded ethicality, self-serving altruism

2.2 INTRODUCTION

Extraordinary beliefs are ubiquitous around the world. People hold a variety of beliefs that stand outside the established rules of science, such as those related to God, spirits, and superstitions. Traditionally, engaging in these extraordinary beliefs was believed to be associated with mental deficits (Eckblad and Chapman 1983); however, recent work has established that even intelligent, educated, emotionally stable adults may hold and follow extraordinary beliefs (Gervais 2013; Gray, Gray, and Wegner 2007; Kramer and Block 2008; Risen 2016; Risen and Gilovich 2008). In their daily lives, people often find themselves relying on extraordinary beliefs, which then influence their cognitive processes and decision making. In fact, such extraordinary beliefs can have significant implications for marketers across different touchpoints they have with consumers, including promotions (Hock, Bagchi, and Anderson 2020), persuasion (Wu and Cutright 2018), and service failures (Chan, Wan, and Sin 2009). These beliefs can also affect consumers, including their investment decisions (Jiang, Cho, and Adaval 2009), choices (Kim, Kulow, and Kramer 2014), and goal achievement (Hamerman and Morewedge 2015).

More relevant to the current work, marketers often attempt to leverage extraordinary beliefs—or particular aspects of them—to encourage morally good consumer behavior in the marketplace (Carter 2018; Gupta 2022; Tompor 2016). Many of these attempts evolve around belief in karma, which is in line with the common sayings “you reap what you sow” or “what goes around comes around.” For example, the social media platform Reddit gives its users karma

scores, which reflect how much the user contributes to the Reddit community. Karma is calculated by the ratio of upvotes against downvotes; to gain a high karma score, the user's posts and comments need to be well-liked by other users rather than upsetting them, which encourages the user to make posts and comments that communities find valuable (Reddit 2022). A chatbot called "Karma bot" is designed to lift team morale and enhance team members' performances. It tracks in-chat data, which allows users to set goals and award their colleagues karma points, which can then be converted into tangible rewards each time they successfully complete the assigned task or achieve a goal (Karma bot 2022). The personal finance company Credit Karma once used a giveaway mystery prize vending machine called "Karma Machine" to increase awareness of financial literacy on social media. They asked consumers to post about their experiences with Credit Karma on social media and gave each participant a prize from the Karma Machine afterwards. For each verified social media post, Credit Karma then made a donation to a nonprofit working for those in poor socioeconomic conditions (Tompson 2016). In a similar vein, an affinity credit card program is leveraged to allow the cardholder to donate a percentage of their transaction amount whenever they make a purchase. In many cases, the cardholder receives more credit card rewards and special offers for charitable donations (Horner 2021). These examples demonstrate how marketers utilize extraordinary beliefs, specifically belief in karma, in their offerings to encourage prosocial behavior and generate positive outcomes for themselves.

Although the existing anecdotal evidence suggests general acceptance and utilization of the concept of "belief in karma" in the marketplace, academic work exploring its systematic effects on consumer behavior is still in a nascent stage. The extant work in this domain primarily focuses on the positive consequences of belief in karma, especially the association between

karmic beliefs and prosocial behavior (Chairy and Syahrivar 2020; Chen et al. 2022; Kulow and Kramer 2016; White et al. 2019). It has been suggested that belief in karma encourages individuals to perform good deeds toward others by guiding them to believe that morally good actions will lead to positive outcomes for themselves in the future (Banerjee and Bloom 2017; Converse, Risen, and Carter 2012). An interesting question that arises is whether such a belief system, which is generally considered positive, can have any negative consequences and side effects and, if so, what the psychological underpinnings of such effects could be.

Karmic beliefs rest heavily on a close connection between self-benefits and other-benefits, which underlies the operationalization of the karmic system. Accruals of karmic rewards are determined by the extent to which people engage in good deeds for the benefit of others. Given that one's own benefits are closely tied to benefitting others, an intriguing question arises regarding the nature of people's behavior under the karmic principle, particularly in relation to their desire for and expectation of karmic rewards. Can such expectations and motivations for accruing karmic rewards by helping others lead to behaviors that undermine other important moral values and ethical behaviors?

In this essay, I propose that the widely accepted link between karmic beliefs and prosocial behavior may have hidden costs and unexpected negative implications under certain conditions. Specifically, I argue and demonstrate that belief in karma may in fact lead to bounded ethicality in which individuals show ethically constrained behaviors under the guise of prosociality, particularly when karmic rewards are present. I further suggest this occurs because karmic beliefs induce self-serving altruism, which is a motivation to enhance one's own benefits through enhancing other's.

In what follows, I review the existing literature on extraordinary beliefs that share essential elements of karmic beliefs and their association with prosociality, and I suggest the need for understanding the psychology of karma beliefs. Based on this conceptual background, I present hypotheses regarding the effect of karmic beliefs on their previously neglected negative consequences. After this theoretical development, I present empirical evidence of the ways in which karmic beliefs can lead to bounded ethicality and the psychological mechanisms that drive this effect. Finally, I discuss how this research broadens our understanding of the impact of extraordinary beliefs on consumer behavior and present several ideas for future studies that build on this line of research.

2.3 CONCEPTUAL BACKGROUND

Extraordinary Beliefs and Moral Causal Reasoning

Many people hold and endorse an extraordinary belief—such as belief in God, a superstition, fate, or luck—that cannot be explained using the established rules of science (Aggarwal et al. 2018). In the United States alone, the vast majority of Americans (90%) believe in God or some kind of higher power (Fahmy 2018). More than half of surveyed young Americans were found to believe in horoscopes (Hosie 2017). People knock on wood, avoid walking under ladders, and bring their lucky charms to important exams (Kramer and Block 2011). Even leading international sporting events (such as Olympics) are influenced by extraordinary beliefs. The 2008 Beijing summer Olympics opening ceremony began at 8pm on August 8, 2008, as the number 8 is considered auspicious in China. In fact, such extraordinary

beliefs are so powerful that even when believers recognize that their beliefs do not make rational sense, they still act upon them (Risen 2016).

Interestingly, holding extraordinary beliefs can help individuals interpret events that are uncontrollable and thus provide explanations for events and outcomes that are difficult to reconcile (Keinan 2002; Vyse 1997). In other words, extraordinary beliefs can provide positive benefits as coping strategies and can offer increased perceptions of control over future outcomes (Langer 1975; St. James, Handelman, and Talyor 2011). As an illustration, individuals who believe in negotiable fate (i.e., the belief that one can negotiate with fate by exercising personal agency within the boundaries of predetermined fate) are better at making sense of surprising outcomes. As a result, they demonstrate higher persistence in goal pursuit despite early unfavorable outcomes (Au et al. 2011). Similarly, belief in good luck has been found to be associated with positive illusions that lead to greater confidence, control, and optimism, which in turn contribute to psychological well-being by reducing anxiety and depression (Darke and Freedman 1997; Day and Maltby 2003). It is thus no surprise that prior work has found that individuals are more likely to be susceptible to extraordinary beliefs in situations that are uncontrollable and uncertain in nature (Keinan 1994; Padgett and Jorgenson 1982). For example, both the severity of the economic threat in Germany between the two World Wars and missile attacks during the Gulf War were found to be closely related to the emergence of superstitious and magical beliefs among individuals in the affected regions (Keinan 1994; Padgett and Jorgenson 1982).

Importantly, extraordinary beliefs can also impact one's behavior and decision making. Indeed, prior work has found that such beliefs may increase risk taking (Darke and Freedman 1997), enhance indulgent and compensatory consumption (Kim et al. 2014), impact product

choice (Hamerman and Johar 2013), and influence purchase likelihood and satisfaction (Block and Kramer 2009). The process by which extraordinary beliefs influence consumers' behavior and decision making largely follows how such beliefs trigger initiation or avoidance of actions that consumers think will lead to positive or negative consequences, that is, the doctrine of causation (Vyse 1997). Individuals believe that certain actions can influence the results they wish for or attempt to avoid. This is an error of attribution, as no scientifically proven causal relationship exists between their actions and the outcomes. Thus, individuals demonstrate "conditioned superstition," in which they associate their purchase or consumption decisions with positive or negative outcomes (Hamerman and Johar 2013). Under such conditioned superstitions, consumers are more likely to choose lucky products that are associated with positive outcomes, particularly when their desire for control is high but their perceived ability to control outcomes is low. For example, it is not uncommon for consumers to make sub-optimal purchase decisions by paying more for products that reflect good luck (e.g., the number 8 and the color red are associated with prosperity and good luck in China; Block and Kramer 2009; Kramer and Block 2008; Yang 2011). Consumers also actively avoid actions that "tempt fate," which they believe will increase the likelihood of negative outcomes (Risen and Gilovich 2008). For example, participants believed that a student would be less likely to be accepted to a prestigious school if he tempted fate by wearing the school's T-shirt while awaiting the decision. From crossing one's fingers to engaging in complicated rituals, extraordinary beliefs change the way consumers see connections between events, which in turn leads them to do things that they would not normally do (Hobson et al. 2018; Malinowski 1954; Vyse 1997).

Rooted deep within the doctrine of causation is the expectation that good people experience good things, whereas bad people experience bad things (Norenzayan et al. 2016).

However, how good or bad behavior is determined and how one experiences the consequences of goodness or badness differ across extraordinary beliefs. For example, belief in God reinforces the notion that supernatural agents monitor human behavior and deliver rewards and punishments according to how well people meet moral standards and help others (Shariff et al. 2016). Unlike the belief in God, fate beliefs posit that an impersonal transcendental power or law brings about inevitable outcomes that are good or bad, following predestined orders that are outside human control (Chan et al. 2009; Pepitone 1997 and Saffiotti 1997). Superstitious and magical beliefs tend to draw on irrational intuitions regarding similarity and availability, as well as confirmation bias (Risen 2016). People expect that engaging in a presumably positive (negative) action that is aligned with (against) the existing superstitious or magical belief will lead to a positive (negative) outcome.

Distinct from all other extraordinary beliefs, belief in karma encapsulates the core concept of ethical causation (White, Norenzayan, and Schaller 2019). Karma is a Sanskrit word that literally means “actions,” and it is often referred to as the “moral law of causation”—good deeds cause good things to happen, whereas bad deeds cause bad things to happen, either at a later time in one’s life or in a future lifetime (Atkinson 1908; Pappu 1987; Rao 1987). Karma shares many elements of moralizing supernatural agents but is usually described as an impersonal force and naturalistic principle that is deeply ingrained into the fabric of the universe. Karma itself does not reward or punish humans. Rather, karma works like a cosmic balance sheet that emerges for settling the ethical imbalance resulting from one’s actions (Krishan 1997).

Although prior research has begun to examine the impact of extraordinary beliefs on consumer behavior and decision making, it is still unclear how fundamental belief in ethical

causation plays a role in prosocial behavior and the nature of the prosocial behavior in which people decide to engage. In this regard, belief in karma helps us explore these questions the best.

Karma and Karmic Causality

Although karmic belief is a central tenet of many Asian religious traditions such as Hinduism or Buddhism that involve more than 1.5 billion people around the world (Pew Research Center 2015), this belief that “what goes around comes around” is commonly found across the world, and has gained wide acceptance in Western cultures (Bender 2010).

Karmic causality indicates that when an individual commits an action that influences the harmony of the universe, the person will experience its resulting consequences in the future with an equal amount of positive or negative influence prompted by the initial action (Krishan 1997). The concept of karma posits that individuals’ experiences are attributable to their own past actions. Interestingly, there is often no discernible connection between one’s actions and karmic consequences. Rather, karmic consequences operate especially when the connection between actions and outcomes is causally unexplainable.

Actions considered to be part of karmic causality are related to morality and are broadly classified as morally good and morally bad. Following the law of causation, such actions then result in certain consequences that correspond to the valence of the actions. Good actions enhance the likelihood of good experiences, whereas bad actions increase the likelihood of bad experiences. Furthermore, under the doctrine of karma, the karmic consequences of moralized actions can manifest in the near future within this lifetime or in a later life. Such opaque causal relationships between moralized actions and future experiences across infinitely long timescales

emphasize individuals' responsibility for their actions and the ensuing consequences of those actions.

Karmic causality is what makes beliefs in karma conceptually and empirically distinct from other related beliefs. Although other extraordinary beliefs share conceptual and psychological aspects similar to karmic beliefs, there are elements that result in different cognitive mechanisms and outcomes for believers. Belief in God is similar to belief in karma in that it concerns human morality and provides believers with a way to explain their experiences that cannot be interpreted by human agency. However, God is construed as an anthropomorphic agent that possesses independent agency, desires, and motivations (Barrett and Keil 1996; Shtulman and Lindeman 2016). Furthermore, believers often conceptualize God as an attachment figure with whom they can have a personal relationship (Davis, Moriarty, and Mauch 2013) and thus create various images of God (e.g., loving or punishing; Shariff and Norenzayan 2011). By contrast, karma is not usually depicted as an anthropomorphic entity; rather, it is rather perceived as an impersonal causal connection between one's moral actions and the consequences of those actions (Bronkhorst 2011).

Belief in fate shares similarities with belief in karma, in that it is impersonal and leads people to interpret improbable life outcomes based on irrational causations (Chan et al. 2009). However, fate is believed to lead to predetermined events and outcomes, unlike karma, which cites the individual's past moral actions as the source of current experiences (Daniel 1983). Those who believe in fate interpret certain life experiences as "meant to happen" and look for pre-determined sources outside of one's own influence such as astrological configurations at the time of birth that are not tied to moral considerations (Norenzayan and Lee 2010; Pepitone and Saffiotti 1997; Taylor 2007).

Superstitious and magical beliefs, similar to karmic beliefs, also involve perceiving causal connections. However, superstitious beliefs usually create unseen causality specific to particular objects and actions that are believed to engender “lucky” and “unlucky” outcomes (Kramer and Block 2008). Furthermore, these causal connections do not necessarily include the consideration of one’s past moral actions. Magical beliefs follow the principles of similarity and contagion, which are principles different from those of karmic beliefs (Nemeroff and Rozin 2000). These principles of similarity and contagion reinforce people’s beliefs that a person’s immaterial qualities or essence can be transferred to an object through physical contact (Rozin and Nemeroff 1990). This belief in the power of transferred essence explains why a celebrity’s physical contact with an object significantly influences consumers’ willingness to purchase (Newman, Diesendruck, and Bloom 2011). Belief in karma is primarily about one’s actions and experiences. Karmic beliefs operate through different principles that focus on how one’s moral actions impact oneself, and karmic rewards are accumulated in proportion to those actions (Krishan 1997).

Belief in Karma and Prosociality

Prior research has found that belief in karma facilitates prosocial behavior only when the benefits for others are emphasized, and that the positive effect of karma on prosocial behavior disappears when benefits for the self are focused upon (Kulow and Kramer 2016). These findings suggest that the accrual of karmic rewards is understood as an incidental consequence of helping others rather than as a result of helping others with an explicit motivation to accumulate karmic rewards. However, prior findings still cannot fully explain the role of karmic rewards in

influencing people's motivations and what kinds of behaviors people are then willing to perform in relation to others.

Compared to other extraordinary beliefs, a unique aspect of karmic beliefs is that karmic causality emphasizes the influence of one's own moral actions on future outcomes. As a result, belief in karma is more likely to orient one's attention to their actions and the expected consequences of those actions. Individuals who believe in karma then attempt to adhere to prosocial norms and engage in benevolent acts toward others, which they expect will translate into karmic rewards in the future (White et al. 2019). Interestingly, although karmic belief leads people to focus on the consequences of one's own actions, it simultaneously directs people's attention to others because the deed performed for the others determines the valence of consequences the actor ultimately receives. The inevitable link between self-benefits and other-benefits is woven into the very nature of karma. This quintessential feature of karma poses a question regarding the nature of behavior intended to benefit others. If karmic beliefs lead people to engage in deeds that benefit others, and these deeds are also believed to generate karmic rewards in return, then to what extent do karmic rewards urge people to engage in such behaviors? That is, can karmic beliefs cause such behavior to the extent that individuals undermine other moral standards and ultimately yield negative consequences?

The current research attempts to investigate this line of thesis and examines the role of karmic beliefs in inducing bounded ethicality. I propose that belief in karma will lead to bounded ethicality in which under the guise of prosociality, other moral standards, such as fairness and honesty, are compromised, particularly when karmic rewards are present. Furthermore, I suggest that this occurs because the karmic rewards that an individual expects to receive in return for

enhancing another's benefit facilitate self-serving altruism. Such motivation to ultimately increase self-benefits aggravates one's moral justifiability and leads to bounded ethicality.

2.4 THEORETICAL DEVELOPMENT

Karma, Karmic Rewards, and Self-Serving Altruism

Prior research has predominantly focused on the intuitive connection between karmic beliefs and prosocial behavior and has demonstrated how karmic beliefs guide individuals to perform morally good social behavior—that is, doing good for others and engaging in prosocial behavior. It has been argued that thinking about karma decreases selfishness among karmic believers and leads them to be prosocial by giving more money to strangers (White et al. 2019). Similarly, belief in karma encourages people to donate more time, especially when they consider how their actions can benefit others and not themselves (Kulow and Kramer 2016). These findings then seem to suggest that belief in karma drives altruistic motivations to engage in prosocial behavior, which carries the ultimate goal of increasing another's welfare (Batson and Shaw 1991).

However, I argue that the nature of karmic causality provides the possibility of enhancing the self-serving motivation to engage in prosocial behavior. Note that karmic causality can be construed as a process of exchange in which current actions produce karma as a resource that can be accumulated, retained, and then spent for future self-benefit (Cadge 2005; Sherrill 2000; White and Norenzayan 2019). Thus, if karma can be conceptualized as an exchangeable resource, it is plausible that, with the expectation of karmic rewards, karmic beliefs may drive

behavior that is not solely motivated by altruistic reasons but also by self-serving reasons. Such behavior then has more potential to become a morally questionable behavior as long as it appears to benefit others.

Findings from prior work suggest that individuals can engage in prosocial acts for self-serving reasons in which the anticipation of rewards or punishments associated with prosocial behavior may motivate them to do good for others. For example, the expectation of receiving internal rewards, such as “warm glow” or feeling good about oneself, leads people to engage in helpful acts (Andreoni 1990). People are also more likely to help others in order to avoid guilt and relieve their own distress caused by seeing someone in need (Cialdini et al. 1987). Further, external rewards or punishments, such as receiving monetary rewards, gaining social approval, or complying with social norms, have also been shown to elicit the motivation to help (Ariely et al. 2009; Batson 1987; Batson and Shaw 1991; Fisher and Ackerman 1998; Goldstein, Cialdini, and Griskevicius 2008). Converse et al. (2012) found that people may be more likely to engage in prosocial behavior, such as donating money or volunteering their time, to gain favor with the universe and influence uncontrollable outcomes, such as increasing the chances of finding a job.

The above arguments suggest that belief in karma may trigger self-serving motives over and above altruistic motivation while engaging in prosocial behavior. Following this line of thesis, I propose that belief in karma, with its inherent expectation of karmic rewards, will trigger self-serving altruism, in which the individual’s ultimate goal is to increase their own benefits while enhancing others’.

Self-Serving Altruism, Moral Justifiability, and Bounded Ethicality

Self-serving altruism refers to a motivational state in which the ultimate goal is to enhance one's own benefits while increasing others' benefits (Gino, Ayala, and Ariely 2013). An important aspect of self-serving altruism is that pursuing an altruistic goal must precede as a means of achieving the ultimate self-serving goal. As a result, for those who are high in self-serving altruism, it is acceptable to receive self-benefits in return for engaging in deeds that benefit others (Hochman et al. 2021; Shalvi et al. 2015).

Self-serving altruism is a distinct construct that differs from other related motivations in the context of prosocial behavior. For example, "warm glow," similar to self-serving altruism, is referred to as an impure motive associated with helping others (Andreoni 1990). Although warm glow is characterized as feeling good and morally satisfied as a result of helping others (Kahneman and Knetsch 1992), rewards associated with self-serving altruism do not necessarily need to be internal. Further, empathy, defined as the extent to which individuals feel compassionate with others in need, similarly promotes helping behavior (Batson 2011). However, empathy leads to helping behavior only via autonomous reasons rather than via other controlled reasons such as positive regard from others, feelings of pressure, or external control (Pavey, Greitemeyer, and Sparks 2012). Helping behaviors driven by self-serving altruism are not always autonomously motivated, as self-serving altruism involves individuals' concern for self-benefits as well.

Would self-serving altruism always lead to positive consequences, given that a part of it includes enhancing the welfare of others? Prior research provides a hint of an answer to this question and suggests that good deeds intended to benefit others can in fact constrain the

ethicality of decision-making when the benefits toward others act as a strong justification for unethical behavior (Gino et al. 2013; Hochman et al. 2021; Shalvi et al. 2015). Such moral justification originates from people's desire to maintain a positive moral self-image (Mazar, Amir, and Ariely 2008). People who engage in unethical behavior try to decrease ethical dissonance through moral justification, thereby attenuating the psychological cost of acting immorally (Barkan, Ayal, and Ariely 2015). As a result, individuals feel licensed to act in unethical or morally questionable ways after performing good deeds as if their good deeds earned them moral credits and established moral credentials that would cancel out future wrongdoings (Monin and Miller 2001). Conversely, merely anticipating engaging in moral behaviors can also lead to a present immoral behavior due to the moral credits expected to be accumulated in the future (Cascio and Plant 2015).

From a moral justification perspective, altruism can increase moral flexibility and lead one to engage in behaviors that are intended to do good toward another but are consequentially unethical on other ethical dimensions. For example, people sometimes lie to others to prevent harm to others (Erat and Gneezy 2012; Lupoli, Jampol, and Oveis 2017). People even think that lying is more moral than telling the truth if it benefits others (Levine and Schweitzer 2014). Further, empathy, which instigates altruism, can bias individuals and make them violate the moral principle of justice (Bloom 2017). Batson and his colleagues (1995) found that those who were induced to feel empathic and thus motivated to help, violated the principle of fairness, allocating resources preferentially to the person for whom empathy was felt. Individuals also become lenient and tend to reduce punishment toward transgressors when they feel compassion toward them (Condon and DeSteno 2011). Shalvi and De Dreu (2014) found that oxytocin, a

neuropeptide known to promote affiliation with others, facilitates dishonesty for one's group members.

Self-serving motivation can also create ethical blind spots (Sezer, Gino, and Bazerman 2015). Individuals' ethical judgments are affected by self-serving reasons. For example, without conscious awareness, people tend to hold a biased view of fairness, in which one's belief of a fair share of scarce resources tends to be greater than what others view to be fair (Epley and Caruso 2004; Wade-Benzoni, Tenbrunsel, and Bazerman 1996). Further, people fail to notice others' unethical behavior if it brings positive outcomes for themselves (Chugh, Bazerman, and Banaji 2005). People also often fail to recognize their own conflicts of interest (Moore et al. 2006), and individuals can become more lenient toward punishing others' unethical behavior when they are indirectly involved in that decision (Paharia et al. 2009).

Although conscious justification may occur, people find it easy to justify their moral transgressions made for self-benefits when others can also benefit from those transgressions. Individuals cheat more for their own gain when the benefits of cheating are shared with others because they can diffuse their responsibilities (Conrads et al. 2013). Such deceptive acts even emerge when the benefits of doing so are shared with an anonymous stranger (Wiltermuth 2011), and these acts become more acceptable as the number of beneficiaries increases, because the erring individual feels less guilty (Gino et al. 2013). An employee may allow a customer who fails the vehicle emission test to pass when the employee feels empathy toward the customer (Gino and Pierce 2010).

Although prior research has discussed different motivations underlying people's prosocial behavior and unethical behavior, most research typically examines situations in which choices involving prosociality and ethicality are distinct and independent of one another. In other

words, unethical behavior and prosocial behavior are often two separate behaviors that occur at different times (Mazar et al. 2008). Even in prior work that examined situations in which one decision could be both prosocial and unethical, such as when people's unethical behavior also brings benefits to others, these situations usually incurred immediate rewards or guaranteed self-benefits (Gino et al. 2013). Therefore, we still have little knowledge regarding whether people will engage in boundedly ethical behavior—ethically constrained behavior limited to prosociality and blind to ethical failures on other moral dimensions—when tangible self-benefits are not specified, and if so, what may underlie this effect.

I argue that studying the role of karmic beliefs in facilitating bounded ethicality will fill this gap in the literature. Karmic belief operates through the association between self-benefits and other-benefits, and the delivery of karmic rewards is technically unforeseeable but implicitly expected. Furthermore, karmic causality is opaque: the connection between one's actions and its consequences is often causally ambiguous. The ambiguity of the situation and the resulting enhanced justifiability of one's behavior exacerbates bounded ethicality (Pittarello et al. 2015; Peer, Acquisti, and Shalvi 2014; Schweitzer and Hsee 2002; Shalvi et al. 2015). Therefore, following the principles of karma and the inseparable association between self-benefits and other-benefits, I suggest that the contexts in which karmic rewards are present will particularly trigger self-serving altruism when karmic beliefs are activated.

2.5 HYPOTHESES

To summarize, I argue that with the presence of karmic rewards, belief in karma induces self-serving altruism, which is a motivational state with the ultimate goal of enhancing one's

benefits while increasing others' benefits. Self-serving altruism, driven by belief in karma, will then create ethical blind spots and lead individuals to engage in boundedly ethical behavior, particularly when they can do good deeds toward others that, they expect, will generate karmic rewards for themselves. Such acts toward others seem prosocial on the surface, but they actually blindly contradict other moral values for the sake of prosociality.

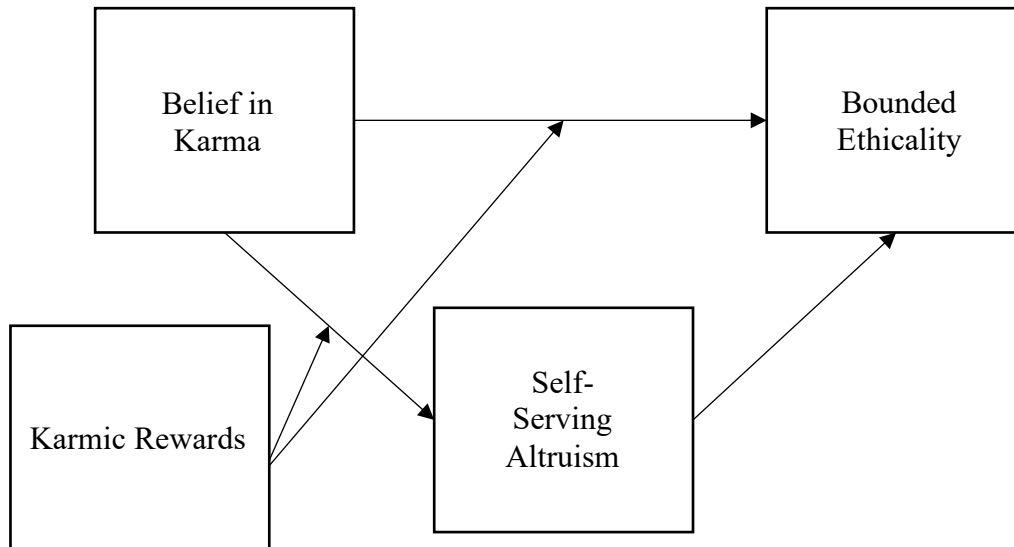
In our everyday lives, we often encounter such conflicts between benevolence toward others and other moral values, such as fairness or honesty, and people often fall prey to unethical behavior. A professor may write a fabulous recommendation letter for a student who is not perfectly qualified. An accountant may unwittingly overestimate his client's performance (Bazerman, Loewenstein, and Moore 2002). Given that self-serving altruism is a motivation to ultimately enhance one's own benefits while increasing others' benefits as well, I suggest that self-serving altruism will shift one's attention to being prosocial and increase individuals' moral justifiability. This will, in turn, lead to boundedly ethical behavior, particularly when that very action can benefit others and, therefore, accumulate karmic rewards for the doer in return.

Formally,

H1: When karmic rewards are present, those who are higher (vs. lower) in belief in karma will be more likely to engage in boundedly ethical behavior.

H2: When karmic rewards are present, self-serving altruism mediates the relationship between belief in karma and bounded ethicality, such that when karmic rewards are present, belief in karma induces self-serving altruism, which in turn leads to bounded ethicality.

Figure 3: Essay 2 Conceptual Model



2.6 OVERVIEW OF STUDIES

I tested my hypotheses with four experimental studies. Study 1 examined the relationship between chronic belief in karma and bounded ethicality in real-life scenarios. The results showed that individuals with a strong belief in karma were more willing to engage in behaviors that sacrifice moral values for prosociality in certain situations. Study 2 further examined the effect of belief in karma on bounded ethicality in a controlled lab setting by manipulating belief in karma and employing a task that was relevant to real-life crowdsourcing practice. The findings supported my hypothesis regarding the positive relationship between belief in karma and bounded ethicality, demonstrating that those with a heightened belief in karma were more likely to provide inflated ratings of low-quality products. Study 3 investigated the mechanism underlying the effect of karmic beliefs on bounded ethicality by directing examining the role of self-serving altruism. The results indicated that belief in karma indeed increased the motivation

to benefit oneself while benefitting others, which led to seemingly prosocial yet unethical behavior. This study also ruled out warm glow as an alternative process. To further understand the nature of bounded ethicality driven by karmic beliefs, Study 4 examined the process by manipulating the presence of karmic rewards. Employing a grading task in an educational service context, the study showed that those led to believe in karma gave higher scores for poorly written essays than those in the control condition. However, the observed effect was attenuated when the opportunity to gain karmic rewards was suppressed; that is, when the potential for self-benefit was absent. Thus, the findings also ruled out the alternative explanation that goal salience or higher empathic concern may have driven bounded ethicality.

2.7 STUDY 1

I began my investigation by examining whether belief in karma is positively associated with bounded ethicality. To explore the relationship, I measured belief in karma and provided participants with scenarios that gave them an opportunity to make prosocial but biased decisions.

Method

One hundred and nineteen adults (38 women) who were members of the Amazon Mechanical Turk online panel completed this study in return for a small amount of monetary compensation.

Belief in Karma. Initially, participants responded to the belief in karma scale (Kopalle, Lehmann, and Farley 2010; see Appendix F for all items). This scale consists of seven

statements that measured the extent to which an individual believed in the principle of karma, focusing on its causality (e.g., Good actions in the present lead to good outcomes in the future either in this life or in the hereafter; Bad actions in the present lead to bad outcomes in the future either in this life or in the hereafter). Participants reported their agreement with these statements on a 7-point scale (1 = strongly disagree, 7 = strongly agree).

Bounded Ethicality. To measure bounded ethicality, participants were asked to imagine two situations in which they had a chance to engage in seemingly prosocial yet biased behavior (see Appendix G for scenarios). In one scenario, the participants imagined applying to a medical school they really wanted to attend and waiting for the results of their applications. They also imagined interviewing an applicant for their undergraduate alma mater and making a recommendation regarding a student who was not a particularly strong candidate. Participants indicated how likely they would be to recommend the student for admission on a 7-point scale (1 = not at all likely, 7 = very likely). In the other scenario, participants imagined waiting for their manager to give them the results of their annual evaluations at work, which were critical for promotion. The situation also positioned them as members of the evaluation committee and asked how they would evaluate one of their subordinates (who they thought did not deserve a position) for promotion to a different position. The participants indicated how likely they would be to give the subordinate a good evaluation for promotion on a 7-point scale (1 = not at all likely, 7 = very likely). Finally, they responded to demographic questions and were thanked and debriefed.

Results

To examine the relationship between belief in karma and bounded ethicality, I first calculated the mean of 7 items for the belief in karma scale ($\alpha = .88$; $M = 4.85$, $SD = 1.29$). A higher score on this scale represented a strong belief in karma. I then created an index for bounded ethicality ($\alpha = .67$, $M = 5.18$, $SD = 1.09$), by averaging the mean scores for all the biased decisions in the academic admission scenario ($M = 5.15$, $SD = 1.91$) and the promotion evaluation scenario ($M = 5.21$, $SD = 1.33$). The correlational analysis indicated that there was indeed a positive relationship between belief in karma and bounded ethicality, demonstrating that participants with a strong belief in karma were more likely to make biased decisions that cross ethical boundaries ($r = .38$, $p < .001$). Specifically, those who had higher scores for belief in karma were more likely to recommend the student ($r = .29$, $p = .002$) and overrate the subordinate ($r = .36$, $p = .002$).

Discussion

In Study 1, the correlational results revealed that participants with a strong belief in karma had a greater tendency to engage in behaviors that transgress ethical standards in situations in which their behaviors could benefit another person. Although such a positive relationship was encouraging, the relationship did not provide causal evidence. Therefore, in the next study, I manipulated belief in karma and examined its impact on bounded ethicality, which would be significantly less likely in a neutral condition.

2.8 STUDY 2

Study 2 was designed to further examine the hypothesis that belief in karma leads to bounded ethicality (H1). Importantly, I manipulated belief in karma and gave the participants a task that was relevant to a crowdsourcing context in which bounded ethicality driven by belief in karma can have negative consequences for both marketers and consumers. Many companies engage with consumers to evaluate product ideas (Burkitt 2010). Misjudging and inflating the value of such ideas can be detrimental for marketers and consumers when evaluations influence product development and launch decisions. In particular, I employed a crowdsourcing context in which participants were asked to evaluate T-shirt designs. Threadless is a crowdsourcing community in which individuals submit their apparel designs for public rating. Only highly rated designs are selected for printing T-shirts and sold worldwide, providing royalties for designers. Since only a limited number of designs could be selected, giving a higher rating for one design deprived another designer of the opportunity to be selected. I expected that participants with a strong belief in karma would inflate their ratings for low-quality designs—a behavior that appears prosocial in favor of particular designers but is in fact dishonest in nature.

Method

One hundred and sixteen undergraduate students (89 women) completed this study in exchange for a course credit. Participants were randomly assigned to either the karma or control condition.

Belief in Karma Manipulation. I manipulated belief in karma using writing tasks adapted from prior work (Kopalle et al. 2010). Participants in the karma condition read a short paragraph on karma, summarized the paragraph, and wrote about the strength of their belief in the concept of karma. In the control condition, participants read a short paragraph about routine activities, summarized the paragraph, and wrote about how they spent their evenings on an ordinary day (see Appendix H for full instructions).

Bounded Ethicality. Participants then engaged in a design rating task (see Appendix I for full instructions). The task presented participants with a new online platform that had the characteristics of Threadless and emphasized the importance of design ratings. Participants imagined submitting their designs to this new platform and waiting hopefully for the decision about whether their designs would be printed, which would be a positive outcome for themselves. The participants were then asked to rate five T-shirt designs on a 5-star rating scale. The presented designs were taken from an existing pool of actual designs that had been submitted to Threadless. Importantly, all the chosen designs had been poorly rated in reality (average rating 2.24 on the 5-point rating scale; see Figure 4 for an example) and had not been selected for printing. Given that participants were led to consider a positive outcome for themselves, it was expected that those in the karma condition would be more likely to inflate their ratings of these low-quality designs, which would inadvertently distort their evaluations but represent a prosocial attitude toward the designers.

Figure 4: Study 2 – An Example of Designs Collected from Threadless



Results

To examine the impact of belief in karma on design ratings, I first created an index of ratings by averaging the ratings for the five T-shirt designs ($\alpha = .59$). The results supported for the focal hypothesis (H1). Participants in the karma condition ($M = 2.93$, $SD = 0.78$) gave higher ratings for the low-quality designs than those who were in the control condition ($M = 2.47$, $SD = 0.71$; $t(114) = 3.32$, $p < .001$, Cohen's $d = 0.62$). Taking a different view of the results, the number of T-shirts that received three or more stars was higher in the karma condition ($M = 3.02$, $SD = 1.47$) than in the control condition ($M = 2.40$, $SD = 1.21$; $t(114) = 2.45$, $p = .016$, Cohen's $d = 0.46$).

Discussion

The observed results again established the main effect of belief in karma on bounded ethicality. Compared to participants in the control condition, those in the karma condition

inflated their ratings of the low-quality designs. The impact of belief in karma on overrating the value of the designs was important because it can potentially disrupt the optimal decisions for choosing a superior product that appeals to consumers and therefore negatively affect marketers' profits.

All the participants considered submitting their own designs to this crowdsourcing platform and expected their designs to be selected, which highlighted the consequences of their actions, particularly for those in the karma condition compared to those in the control condition. Belief in karma, based on the results, leads individuals to engage in bounded ethicality, which manifests as prosocial actions that benefit others, particularly when karmic rewards are present. I also hypothesized that the effect of karmic beliefs on bounded ethicality is driven by self-serving altruism. In the next study, I examined this proposed underlying mechanism to better understand the effects of belief in karma.

2.9 STUDY 3

Using a mediation model, Study 3 tested Hypothesis 2 (H2) regarding the role of self-serving altruism in driving the effect of karmic beliefs on unethical behavior. I predicted that belief in karma would trigger self-serving altruism, with individuals pursuing goals that increased both their own benefits and those of others. Such increased self-serving altruism would in turn lead to bounded ethicality, as in previous studies.

Method

Two hundred adults (122 women) who were members of the Amazon Mechanical Turk online panel completed this study in return for a small amount of monetary compensation.

Participants were randomly assigned to either the karma or control condition.

Belief in Karma Manipulation. I manipulated belief in karma using commercials adopted from prior work (Kulow and Kramer 2016). In both the karma and control conditions, participants were first asked to evaluate a commercial. The participants in both conditions read a brief description of the commercial (the same one used in Study 2) before watching it (see Appendix J for the descriptions). Participants in the karma condition read a short paragraph on karma and watched a short, humorous commercial that featured karma. The commercial showed a chain of events resulting from a man discarding a water bottle as litter. After a series of incidents, the littering action rebounded on him in the form of negative consequences (being struck by a rogue arrow and being hit by a truck). The tagline, “It all comes back to you,” appeared at the end of the commercial. Therefore, the task emphasized that an individual’s own actions ultimately rebound on the individual, and it thus prompted the participants to consider the consequences of their actions. In the control condition, participants read a short paragraph on routine activities and watched a commercial that featured an attractive woman trying to place a fast food order. Realizing that she was in a library, she whispered the order, after which the tagline “Beauty is nothing without brains” appeared.

After watching their respective commercials, depending on the condition, the participants evaluated them in terms of both how appealing and how funny they were (1 = not at all, 7 = very) and evaluated the commercials overall (1 = very bad, 7 = very good). At the end of the

survey, participants completed the belief in karma scale (Kopalle et al. 2010, 1 = strongly disagree, 7 = strongly agree; $\alpha = .88$), which served as a check of the karma manipulation and revealed the expected difference between the conditions ($M_{Karma} = 4.28$, $SD = 1.36$ vs. $M_{Control} = 3.63$, $SD = 1.46$; $t(198) = 3.26$, $p = .001$, Cohen's $d = 0.46$).

Bounded Ethicality. The participants then engaged in the same design rating task used for Study 2. After imagining submitting their designs to the design challenge, participants rated the five T-shirt designs on a 5-star rating scale.

Self-Serving Altruism. To examine the underlying process, I measured self-serving altruism by adapting a scale used in the previous literature (Johnson et. al. 2019). This 6-item scale examined the extent to which actors are motivated by the self-benefit of portraying themselves as good people who do good deeds for others. To rule out an alternative explanation, I also measured warm glow using a 3-item scale, which assessed the extent to which individuals expected to receive internal rewards for their actions (Andreoni 1990; see Appendix K for the exact measures).

Results

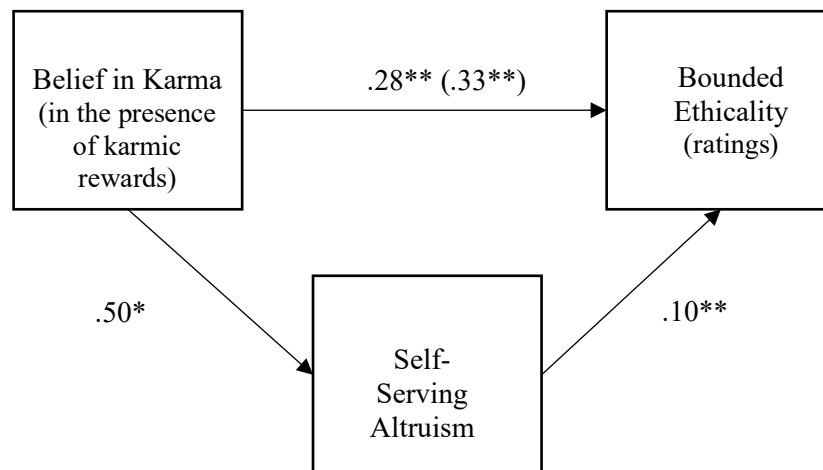
Bounded Ethicality. To examine the impact of belief in karma on the design ratings, I first created an index of ratings by averaging the ratings for the five T-shirt designs ($\alpha = .63$). The results supported the focal hypothesis. Participants in the karma condition ($M = 3.06$, $SD = 0.72$) gave higher ratings for the low-quality designs than those in the control condition ($M = 2.73$, $SD = 0.80$; $t(198) = 3.07$, $p = .002$, Cohen's $d = 0.44$). Considering the results differently, the number of T-shirts that received three or more stars was higher in the karma condition ($M =$

3.43, SD = 1.37) than in the control condition ($M = 2.81$, SD = 1.52; $t(198) = 3.03$, $p = .003$, Cohen's $d = 0.43$).

Self-Serving Altruism. The six items for self-serving altruism were averaged ($\alpha = .92$). Consistent with my hypothesis, participants in the karma condition ($M = 3.97$, SD = 1.43) exhibited greater self-serving altruism than those in the control condition ($M = 3.48$, SD = 1.57; $t(198) = 2.34$, $p = .02$, Cohen's $d = 0.33$). However, as expected, there was no significant difference in warm glow ($\alpha = .96$) between the karma condition ($M = 5.27$, SD = 1.60) and the control condition ($M = 4.91$, SD = 1.94; $t(198) = 1.43$, $p = .15$).

Self-Serving Altruism as the Underlying Process. To test whether the effect of karmic beliefs on bounded ethicality was driven by self-serving altruism, I conducted a mediation analysis with self-serving altruism as the mediator. I used bootstrapping with repeated extraction of 5,000 samples (Hayes 2013, Model 4; see Figure 5). The analysis revealed a significant indirect (i.e., mediation) effect of belief in karma on bounded ethicality via self-serving altruism ($\beta = .05$, SE = .03, 95% CI [.004, .11]).

Figure 5: Study 3 – The Mediating Role of Self-Serving Altruism in the Effect of Belief in Karma on Bounded Ethicality (** $p < .01$; *** $p < .001$)



Discussion

The results of this study demonstrated the underlying mechanism: activating belief in karma in the presence of karmic rewards indeed increased one's self-serving altruism, which then led to bounded ethicality, giving dishonestly inflated ratings for low-quality designs. The findings also ruled out an alternative process by which belief in karma could increase warm glow and drive rating decisions. No difference in warm glow was found across the conditions.

The role of self-serving altruism further supports the idea that belief in karma orients people's focus toward both self-benefit and benefit for others, emphasizing the importance of anticipating karmic rewards leading to ethical blind spots that bias individuals toward prosociality while undermining other moral values. Therefore, in the next study, I examined the role of karmic rewards to deepen our understanding of the nature of bounded ethicality and to rule out other alternative explanations, such as merely having a goal for oneself and feeling empathic toward others.

2.10 STUDY 4

Study 4 aimed to better understand the underlying process and nature of bounded ethicality driven by belief in karma. Thus, it investigated the role of karmic rewards and attempted to rule out alternative explanations. This study particularly examined bounded ethicality in the educational domain, which is a different context from the contexts of the previous studies and has significant implications in the current marketplace. Bounded ethicality was operationalized as the inflated evaluation of poorly written essays. With technological

advances, many educational services have started to utilize online platforms and peer-review systems to evaluate students' work. Inflated evaluations can have a significantly negative impact on students' learning and the credibility of the educational systems.

As in previous studies, this behavioral paradigm reflected a regular occurrence in organizations and marketplaces, whereby individuals evaluate an underperforming individual or non-competitive product and decide whether to give accurate and honest feedback. Additionally, I examined the role of karmic rewards to rule out two alternative explanations. First, merely having a goal for oneself could increase one's tendency to engage in boundedly ethical behavior. Second, individuals may feel greater empathy and engage in boundedly ethical behavior when their actions benefit others. I argue that the impact of belief in karma on bounded ethicality is unique in that only the expectation of karmic rewards leads to bounded ethicality, as distinct from goal salience and empathic concern.

Method

Two hundred fifty-seven undergraduate students (137 women) at a large North American university completed this study in exchange for a course credit. The study adopted a 2 (Belief in Karma: Induced vs. Control) $\times$ 2 (Karmic Reward: Present vs. Non-Present) between-subjects design, with participants randomly assigned to one of four conditions.

Belief in Karma Manipulation. As in Study 3, I manipulated belief in karma using commercials. Participants watched the commercials according to the condition and reported what they thought of the commercial by briefly summarizing what they saw in it and how they felt about it. At the end of the survey, participants completed the belief in karma scale (Kopalle et al.

2010, 1 = strongly disagree, 7 = strongly agree; $\alpha = .79$), which served as a check of the karma manipulation and revealed the expected difference between the conditions ($M_{Karma} = 4.28$, $SD = 1.08$ vs. $M_{Control} = 3.96$, $SD = 1.18$; $t(255) = 2.28$, $p = .024$, Cohen's $d = 0.28$).

Karmic Reward Manipulation. To examine the role of karmic rewards and rule out alternative explanations, I manipulated whether the expectation of karmic rewards was made salient or not. If the impact of karma on unethical behavior is driven by the expectation of karmic rewards, unethical behavior should arise only when individuals have a strong level of belief in karma and expect karmic rewards. For the karmic reward present condition, participants were asked to consider a tough recent assignment or exam that would be critical to their final grade. After briefly describing the assignment or the exam, they indicated the importance of their performance regarding it (1 = not at all, 7 = very important), its impact on their final grade (1 = not at all, 7 = very critical), and how well they would like to do on the final assignment/exam they described (1 = not at all, 7 = very well). In the non-present condition, participants proceeded to the grading task immediately after watching the commercial.

Grading Task. To measure unethical behavior, I employed a grading task that focused on poorly written essays, with inflated scores reflecting the degree of dishonesty (see Appendix L for essays). The task was described as a collaboration with a school of arts, and the participants evaluated three short essays (average 167 words) from students majoring in the arts. The instructions explained that the grading system for this course required each paragraph of an essay to be graded by three people, with the average scores for the paragraph summed to produce the final score for the essay. Participants were asked to act as graders and grade three paragraphs written by three different students. Each paragraph was shown, accompanied by the essay question. Following each paragraph, participants graded the paragraph with a score out of 100

for four aspects of the essay (clarity of expression, logical development, mechanics of word choice, and grammar; 1 = did not do very well, 7 = did very well).

Results

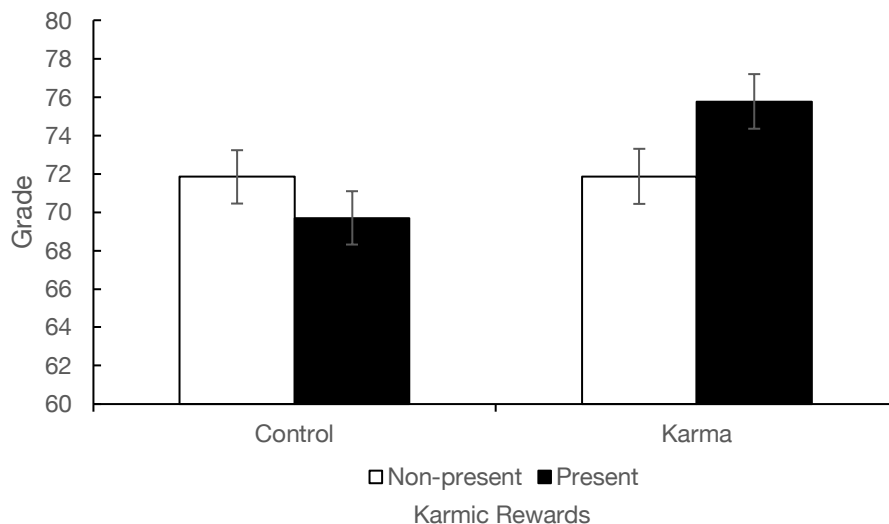
Importance of One's Own Grades. To examine whether karma manipulation had any impact on the perceived importance of participants' own grades, I created an index by averaging their scores for the importance of the assignment/exam, its impact on their final grade, and their desire to do well in final assignment/exam ($\alpha = .71$). A one-way ANOVA showed no difference between the participants in the karma condition ($M = 6.27$, $SD = 0.91$) and those in control condition ($M = 6.18$, $SD = 0.82$; $F < 1$).

Grading Score. To examine the impact of belief in karma on bounded ethicality, moderated by the presence of karmic rewards, I first created an index of grade scores across three paragraphs ($\alpha = .71$). A two-way ANOVA revealed a significant interaction between karma and reward presence ($F(1, 253) = 4.59$, $p = .033$, see Figure 6). As expected, under reward-present conditions, those in the karma condition gave higher grades to the paragraphs ($M = 75.77$, $SD = 10.58$) than those in control condition ($M = 69.70$, $SD = 12.38$; $F(1, 253) = 9.30$, $p = .003$). However, when the reward was not present, there was no difference in grades between the participants in the karma condition ($M = 71.87$, $SD = 10.18$) and those in the control condition ($M = 71.84$, $SD = 11.81$; $F < 1$). The results also showed that being in the situation of a student pursuing higher grades and thus feeling empathy toward the essay writers did not fully explain the impact of belief in karma on inflated grades. Considering their own

assignments/exams and final grades did not lead to inflated grades compared to thinking of karma and perceiving their own grade as a karmic reward.

Further contrast analysis showed that such inflated grades were not driven by goal orientation (achieving a good grade for themselves). For those in the control condition, the grades they gave for the paragraphs did not increase when they considered their own assignments/exams and final grades ($M = 69.70$, $SD = 12.38$) compared to when they did not ($M = 71.84$, $SD = 11.81$; $F(1, 253) = 1.18$, $p = .278$). Furthermore, for those in the karma condition, the grades they gave for the paragraphs were higher when they thought about their own assignments/exams and final grades ($M = 75.77$, $SD = 10.58$) compared to when they did not ($M = 71.87$, $SD = 10.18$; $F(1, 253) = 3.73$, $p = .054$), suggesting that the expectation of good grades for themselves was more important than having the goal itself and was perceived as karmic reward.

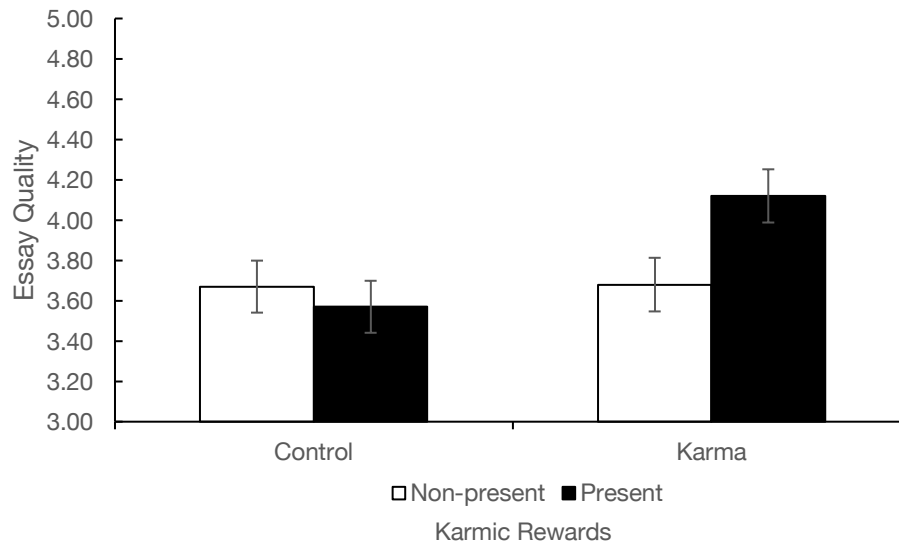
Figure 6: Study 4 – The Interaction between Belief in Karma and Karmic Rewards on Grading Score



Essay Quality. I further examined the effect of the interaction between karma and karmic rewards on bounded ethicality using the four previously listed criteria for essay quality. I first created an index for the four ratings criteria (clarity of expression, logical development, mechanics of word choice, and grammar; $\alpha = .88$). In line with the results for the essay scoring, a two-way ANOVA revealed a significant interaction between karma and reward presence ($F(1, 253) = 4.30, p = .039$; see Figure 7). As expected, under reward-present conditions, those in the karma condition gave higher ratings for the paragraphs ($M = 4.12, SD = 1.07$) than those in the control condition ($M = 3.57, SD = 1.18$; $F(1, 253) = 8.94, p = .003$). However, when the karmic reward was not present, there was no difference in ratings between those in the karma condition ($M = 3.68, SD = 0.96$) and those in control condition ($M = 3.67, SD = 0.95$; $F < 1$), ruling out the empathy explanation.

Further contrast analysis showed that inflated ratings were not driven by merely having a goal (achieving a good grade for themselves). For those in the control condition, the ratings that participants gave for the paragraphs did not increase when they thought about their own assignments/exams and final grades ($M = 3.57, SD = 1.18$) compared to when they did not ($M = 3.67, SD = 0.95$; $F < 1$). Furthermore, for those in the karma condition, the ratings they gave for the paragraphs were higher when they thought about their own assignments/exams and final grades ($M = 4.12, SD = 1.07$) than when they did not ($M = 3.68, SD = 0.96$; $F(1, 253) = 5.60, p = .019$), suggesting a significant role of karmic rewards.

Figure 7: Study 4 – The Interaction between Belief in Karma and Karmic Rewards on Essay Quality



Discussion

The results of this study showed that participants with a strong belief in karma engaged in ethically constrained behavior by inflating grades for poorly written essays more than those who did not, especially when the expectation of karmic rewards (i.e., receiving a good grade for themselves) was salient. When such expectations were not salient, the impact of karmic beliefs on unethical behavior disappeared. Study 4 demonstrated that the influence of karmic beliefs on unethical behavior is not due to merely having a goal, based on the results showing that, under control conditions, there was no difference between those who considered their final grades and those who did not. The results also showed that the effect of belief in karma was not driven by feeling empathy toward the essay writers, demonstrating that those in the control condition did not give better evaluations than those in the karma condition, even when they considered others' evaluations of their own assignments/exams.

Taken together, the findings demonstrate that belief in karma leads to bounded ethicality, and this effect is unique in that merely having a goal or feeling empathy cannot fully explain the demonstrated effect. The moderating role of karmic rewards was consistent with the idea that self-serving altruism underpins the effect of belief in karma, leading to bounded ethicality.

2.11 GENERAL DISCUSSION

Consumers engage in prosocial behavior for various reasons, and its consequences can be either positive or negative. This essay has demonstrated that belief in karma—an extraordinary belief—influences individuals' motivation to benefit themselves through helping others, which results in ethically constrained behavior under the guise of prosociality. Importantly, the findings showed that the influence of karmic beliefs in prompting bounded ethicality is distinct from merely having a self-interested goal or feeling empathic or altruistic toward others. I have also illustrated the role of karmic rewards by showing that individuals engage in ethically constrained behavior only when karmic rewards are present.

Theoretical Contributions

The current work makes several important contributions to both theory and practice. On a theoretical level, while prior research has studied the implications of belief in karma, researchers have only very recently begun to explore the concept of karma and mainly the positive consequences of karmic beliefs (Kulow and Kramer 2016). This research contributes to the literature by revealing the negative consequences of belief in karma, ironically because it

encourages actions that benefit others. Therefore, the findings of this research shed light on the dark side of karma and encourage us to consider the negative outcomes of prosocial behavior. Also, although previous research on karma has focused on the aspects of karmic beliefs that benefit others, I have placed more weight on the other side of karmic beliefs—how individuals perceive karmic rewards and expect such rewards to result from their own actions. Since causality is a fundamental facet of karmic beliefs, it is important to understand both sides of karmic causality and the different consequences of each. The current work provides novel insights into the conditions under which belief in karma increases and decreases individuals' awareness of ethical implications of their decisions. Moreover, it explains individuals' motivation when karmic rewards are present, conceptualizes it as self-serving altruism, and demonstrates its role in causing bounded ethicality. The findings also illustrate the unique role of self-serving altruism, which is distinct from other related similar constructs or psychological mechanisms. Taken together, the present work furthers current understanding of the phenomenon of belief in karma—an extraordinary belief that is traditionally associated with positive consequences—by revealing negative outcomes that ironically derive from doing good deeds for others.

Managerial Implications

The current work also offers important practical insights for both practitioners and consumers. People often encounter situations that involve potential conflicts of interest in which the negative impact of boundedly ethical decisions can be severe. For example, dishonest online reviews, driven by karmic beliefs and intended to help others, can mislead consumers and

increase costs for marketers in the long term. In an educational context, biased evaluations pacify students but are ultimately damaging to their success and instructors' reputations. At the societal level, bounded ethicality limited to prosociality driven by a belief in karma can foster partiality and thus unfair resource allocation, subsequently undermining social welfare and the common good. Therefore, marketers and organizations that attempt to employ beliefs in karma to facilitate prosocial behavior, such as increased donations, should be mindful of how this can inadvertently lead to negative consequences that compromise ethicality on certain ethical dimensions. The findings also improve consumers' awareness of the negative consequences of belief in karma by showing that the expectations of karmic rewards can focus unequivocal attention on seemingly benevolent behavior, ultimately resulting in ethically constrained outcomes.

Directions for Future Research

This research opens up avenues for future research. One interesting question it raises is whether individuals' different moral foundations can influence the impact of belief in karma on limiting ethicality. Individuals may emphasize one of two universal moral foundations—justice or care—when judging what is right or wrong. Whereas justice is a moral foundation that emphasizes fairness, honesty and rules, care is a moral foundation that prioritizes helping others and avoiding causing harm (Haidt and Graham 2007). The effect of belief in karma on increasing bounded ethicality could be stronger for individuals who rely more on a care foundation than on a justice one.

Another question for future research is what other negative consequences beliefs in karma may have. As the current research has shown, belief in karma has a dark side when it is

used for moral justification. From a societal hierarchy perspective, in India, belief in karma is an ideological belief based on the idea of deservingness that makes inequality seem morally just and fair. The doctrine of karma holds that individuals deserve positive or negative social outcomes, or receive or lack benefits, based on rewards and punishments for their actions in their past lives. Relatedly, Cotterill et al. (2014) found that belief in karma is strongly associated with values that are often used to legitimize inequality and have negative interpersonal consequences in society, such as social dominance orientation and right-wing authoritarianism (Pratto et al. 1994; Whitely 1999). For example, a sense of deservingness induced by belief in karma can lead to victim blaming and thus decrease the willingness to help the victims. Similarly, belief in karma can promote a sense of entitlement, which makes people narcissistic and aggressive following an ego threat.

Conclusion

In conclusion, this research shows that belief in karma leads to paradoxical consequences, increasing individuals' bounded ethicality that constrains the ethicality of decision-making under the guise of prosociality, through self-serving altruism. This may help explain the role of karmic rewards in real-life situations by considering both directions of karmic causality. For consumer researchers, it is important to understand the role of extraordinary beliefs that are prevalent in the marketplace. Extraordinary beliefs are powerful in that consumers often behave according to them, despite their strong assertions to the contrary. Consumers buy products in the hope of being lucky, and sometimes spend unreasonable amounts of money on horoscopes and psychics to discover their futures. In fact, the uncertainty in the current society and its resulting stress have

increased the popularity of such extraordinary beliefs, especially among millennials (CBS 2019). It is important to understand their impact of extraordinary beliefs not only on individuals but also on their behavior, which can either benefit or harm other individuals and organizations. In fact, this is one of the first studies on prosocial behavior to identify the negative consequences of extraordinary beliefs, particularly belief in karma, and hence provides a platform for future research to investigate this interesting and important topic. I hope that my work spurs more interest in examining the role of extraordinary beliefs in prosocial behavior and encourages a greater understanding of the mechanisms underlying their roles.

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APPENDIX A: Study 1A – Task Instructions (Essay 1)

In this task, we are interested in understanding how people use money. You will be asked to think about a situation as if you were in that situation at this moment, right now, and tell us what you would do.

[Meaningful Resource Condition]

Imagine that **you check the mail and find a card from your uncle that contains a \$250 cash gift for your birthday. As you finish reading the card, you receive a phone call from your mother, and she informs you that your uncle has just been diagnosed with a very serious illness.**

You decide to donate this \$250.

You go on a website that lists various charities in need and see these five charities below that provide medical supplies and assistance to those who are affected by natural disasters.

- Project C.U.R.E. - To help bridge staggering health resource gaps in the developing world by matching medical supplies and modern equipment with facilities in need
- Good360 - To transform lives of individuals, families, and communities impacted by disasters or other challenging life circumstances
- Water Mission - To design, build, and implement safe Water, Sanitation, and Hygiene (WASH) solutions for people in developing countries and disaster areas
- Convoy of Hope - To feed the world through children's feeding initiatives, community outreaches and disaster response
- Direct Relief - To improve the health and lives of people affected by poverty or emergencies

We would like to know how you would like to allocate your **\$250** among these 5 charities.

For example, you can

- Allocate all \$250 to one charity, or
- Equally allocate \$250 among the 5 charities (i.e., \$50 each), or
- Donate \$125 to two charities, or
- Any other combination of money and charities

Now, please tell us how you would like to allocate your \$250 among the five charities.

(Note: Only restriction is that the total amount should be equal to \$250).

Project C.U.R.E	_____
Good360	_____
Water Mission	_____
Convoy of Hope	_____
Direct Relief	_____

Total _____
[Neutral Resource Condition]

Imagine that **you decide to donate \$250 of your money.**

You go on a website that lists various charities in need and see these five charities below that provide medical supplies and assistance to those who are affected by natural disasters.

- Project C.U.R.E. - To help bridge staggering health resource gaps in the developing world by matching medical supplies and modern equipment with facilities in need
- Good360 - To transform lives of individuals, families, and communities impacted by disasters or other challenging life circumstances
- Water Mission - To design, build, and implement safe Water, Sanitation, and Hygiene (WASH) solutions for people in developing countries and disaster areas
- Convoy of Hope - To feed the world through children's feeding initiatives, community outreaches and disaster response
- Direct Relief - To improve the health and lives of people affected by poverty or emergencies

We would like to know how you would like to allocate your **\$250** among these 5 charities.

For example, you can

- Allocate all \$250 to one charity, or
- Equally allocate \$250 among the 5 charities (i.e., \$50 each), or
- Donate \$125 to two charities, or
- Any other combination of money and charities

Now, please tell us how you would like to allocate your \$250 among the five charities.

(Note: Only restriction is that the total amount should be equal to \$250).

Project C.U.R.E	_____
Good360	_____
Water Mission	_____
Convoy of Hope	_____
Direct Relief	_____

Total	_____

APPENDIX B: Study 1B – Task Instructions (Essay 1)

[Meaningful Resource Condition]

We all own products or items that are special to us because they have some kind of special meaning. Many times these are products that we no longer use in any way. However, the product may be of use to someone else.

Imagine that you have dinnerware sets you inherited from your grandmother. They have special meaning to you, but you no longer use them. They could still be by someone else. You decide to donate these dinnerware sets.

There are 50 pieces in total.

You go on a website that lists various charities in need and see these five charities below that sell donated items and use funds to provide support to children and families, the homeless, veterans, and others in need. All of them offer donation pick up services.

- The Caring Place - Provides for the basic human needs of all people in our community.
- Cornerstone Assistant Work - Meets the needs and restore the hope of individuals and families suffering under the burden of poverty in our community.
- Day Star Life Center - Provides the basic necessities of life on an emergency basis to our neighbors in need in order to stabilize their lives.
- Bread for the City – Helps those living with low income to develop their power to determine the future of their own communities.
- Person-to-Person - Responds to individuals and families who lack the basic necessities or resources to improve their lives.

We would like to know how you would like to allocate your **50 pieces of dinnerware from your grandmother** among these 5 charities.

For example, you can

- Allocate all 50 pieces to one charity, or
- Equally allocate 50 pieces among the 5 charities (i.e., 10 pieces each), or
- Donate 25 pieces to two charities, or
- Any other combination of pieces and charities

Please click next if you have understood the situation and are ready to indicate your choice.

[Neutral Resource Condition]

We all own products or items. Many times these are products that we no longer use in any way. However, the product may be of use to someone else.

Imagine that you have some dinnerware sets that you no longer use. They could still be by someone else. You decide to donate these dinnerware sets.

There are 50 pieces in total.

You go on a website that lists various charities in need and see these five charities below that sell donated items and use funds to provide support to children and families, the homeless, veterans, and others in need. All of them offer donation pick up services.

- The Caring Place - Provides for the basic human needs of all people in our community.
- Cornerstone Assistant Work - Meets the needs and restore the hope of individuals and families suffering under the burden of poverty in our community.
- Day Star Life Center - Provides the basic necessities of life on an emergency basis to our neighbors in need in order to stabilize their lives.
- Bread for the City – Helps those living with low income to develop their power to determine the future of their own communities.
- Person-to-Person - Responds to individuals and families who lack the basic necessities or resources to improve their lives.

We would like to know how you would like to allocate your **50 pieces of dinnerware** among these 5 charities.

For example, you can

- Allocate all 50 pieces to one charity, or
- Equally allocate 50 pieces among the 5 charities (i.e., 10 pieces each), or
- Donate 25 pieces to two charities, or
- Any other combination of pieces and charities

Please click next if you have understood the situation and are ready to indicate your choice.

Now, please tell us how you would like to allocate **your 50 pieces of dinnerware** (*meaningful resource condition only: from your grandmother*) among the five charities.

(Note: Only restriction is that the total amount should be equal to 50).

- The Caring Place
- Cornerstone Assistant Work
- Day Star Life Center
- Bread for the City
- Person-to-Person

APPENDIX C: Study 2 – Task Instructions (Essay 1)

*The name of the institution is removed for confidentiality.

Introduction

Thanks again for participating in today's session! Before we move on to the next task, we would like to take this opportunity to tell you about one of programs under development at X [Institution Name] and seek your input. Please click next to begin.

[Meaningful Resource Condition: Time]

X Nonprofit Management Program

Students and faculty at X are at the forefront of sustainable, responsible, and inclusive business practices—in a wide variety of fields and functions.

X iMBA is planning to launch a new program designed to deliver the strategic perspectives, leadership skills, and practical tools for business leaders to create a more responsive, successful, and sustainable nonprofit organization.

As part of this program, we would like to engage the iMBA community to help local charities and offer a way to give back to the society. However, at this time we are just looking to get some implicit feedback that will enable us to design a solid program.

We anticipate partnering with five local charities. We would then give iMBA students an opportunity to get involved and offer management help or advise these charities through virtual/online means.

>>

Now, we would like you to imagine that you indeed decide to support this program by **volunteering 15 hours of your time over a semester**. What we would like to know is under such conditions **how you would like to allocate your 15 hours among these five charities**.

Please note, there are no right or wrong answers and we are only interested in your honest opinions and how you would make the allocation if you were doing this in reality.

Only restriction is that the total amount should be equal to 15 hours.

Big Brothers Big Sisters of X County – Community-based mentoring program for youth.

X County CASA – Court-appointed special advocates for children.

X 1 to 1 Mentoring – School-based mentoring program for youth.

Don Moyer Boys & Girls Club – Afterschool and out-of-school time program for youth.

Assurance Creek Youth Program – Service for underprivileged children in rural and urban areas.

Total _____

[Neutral Resource Condition: Money]

X Nonprofit Management Program

Students and faculty at X are at the forefront of sustainable, responsible, and inclusive business practices—in a wide variety of fields and functions.

X iMBA is planning to launch a new program designed to deliver the strategic perspectives, leadership skills, and practical tools for business leaders to create a more responsive, successful, and sustainable nonprofit organization.

As part of this program, we would like to engage the iMBA community to help local charities and offer a way to give back to the society. However, at this time we are just looking to get some implicit feedback that will enable us to design a solid program.

We anticipate partnering with five local charities. We would then give iMBA students an opportunity to contribute to the initiatives that will be put in place to help these charities.

>>

Now, we would like you to imagine that you indeed decide to support this program by **donating \$250 of your money over a semester**. What we would like to know is under such conditions **how you would like to allocate your \$250 among these five charities**.

Please note, there are no right or wrong answers and we are only interested in your honest opinions and how you would make the allocation if you were doing this in reality.

Only restriction is that the total amount should be \$250.

Big Brothers Big Sisters of X County – Community-based mentoring program for youth.

X County CASA – Court-appointed special advocates for children.

X 1 to 1 Mentoring – School-based mentoring program for youth.

Don Moyer Boys & Girls Club – Afterschool and out-of-school time program for youth.

Assurance Creek Youth Program – Service for underprivileged children in rural and urban areas.

Total _____

[Meaningfulness Measure]

Please think about when you were making the allocation decision and let us know while making that decision how you thought about 15 hours (\$250) that you were donating:

I would say for me 15 hours (\$250) was:

Replaceable

Exchangeable

1 = Not at all, 7 = Very much

APPENDIX D: Study 3 – Task Instructions (Essay 1)

D-1. Picture Donation Task Instructions

We have partnered with five charities (Healthier Tomorrow, Health Allies, Neighborhood Health, Health & Awareness, and Creating Health) that pursue similar causes and need your help!

Each charity is a national non-profit organization that seeks to empower individuals to develop the skills to overcome the epidemic of obesity and sedentary lifestyles focusing on changes in communities around the country to improve nutrition and increase physical activity. All five charities attempt to foster sound nutrition and good physical activity in schools and communities, envisioning a country where everyone develops the lifelong habits necessary to promote health.

[Meaningful Resource Condition: Time]

These charities are now seeking volunteers to find some pictures online that they can then use to promote their cause. Hence, in this task, we would like you to spend your time in searching 5 pictures online that you think these health-related charities can use. Also, you can decide how many of these pictures you would like to donate to what charity. You can donate all 5 pictures to one charity or give 1 picture to each charity, or any other combination as you see fit. As you find each picture you can simply copy its web address and paste it against the charity you would like it to be donated to.

Note, you can consider this as volunteering of your time for a good cause.

[Neutral Resource Condition: Money]

These charities are now seeking monetary donations which they plan to use to secure some pictures that they can then use to promote their cause. Hence, in this task, we would like you to search 5 pictures online that you think these health-related charities can use. Also, you can decide how many of these pictures you would like to donate to what charity. You can donate all 5 pictures to one charity or give 1 picture to each charity, or any other combination as you see fit. As you find each picture you can simply copy its web address and paste it against the charity you would like it to be donated to.

Note, you can consider this as monetary donation on your part for a good cause as you are essentially saving these charities money.

Click next when you are ready.

[Meaningful Resource Condition] **Finding and Donating Pictures = Volunteering/Donating Time**

[Neutral Resource Condition] **Finding and Donating Pictures = Monetary Donation**

On each of the following pages, you will be asked to find and then donate 5 pictures to the charity/ies of your choice.

Please follow the following steps for the picture donation.

1. As mentioned previously, consider participation in this task [***Time Condition***] as **volunteering your time (i.e., donating time).** / [***Money Condition***] as **donating money.**
2. First, find any picture/image on the Internet that you think aligns with the health cause and can be used by these charities.
3. Right-click on the picture you would like to donate and select “Copy Image Address.” The picture’s web address is now copied.
4. Paste the address in the space provided and then click the name of the charity you will like this picture to be donated to. You can right click and select “Paste” or use the shortcut key Ctrl + V.
5. Go to the next page to donate the next picture. In all there will be 5 donations.

[*Meaningful Resource Condition*] Ready? Please click next to start your time donation!

[*Neutral Resource Condition*] Ready? Please click next to start your monetary donation!

D-2. Picture Donation Task

Copy and paste each picture’s web address to the blank below.

(Right-click on the picture you find and select "Copy Image Address." Paste the address to the blank below.)

Picture 1 _____
Picture 2 _____
Picture 3 _____
Picture 4 _____
Picture 5 _____

Turn to the next page once you find 5 pictures.

[*Meaningful Resource Condition*] Finding and Donating Pictures = Volunteering/Donating Time

Thank you for finding the pictures! **Now, please allocate your pictures among the five charities. Remember, think of this task as allocating your volunteer time.**

[*Neutral Resource Condition*] Finding and Donating Pictures = Monetary Donation

Thank you for finding the pictures! **Now, please allocate your pictures among the five charities. Remember, think of this task as allocating your donation money.**

Simply copy the web address and paste it against the charity you would like it to be donated to. Only restriction is that the total number of pictures (i.e., web addresses) donated across the charities should be equal to 5.

For example, you can

- Allocate all 5 pictures to one charity, or
- Allocate 1 picture to each charity, or
- Any other combination as you see fit

Below are the five pictures you have found. *(The web addresses participants collected on the previous page reappeared.)*

Picture 1 _____
Picture 2 _____
Picture 3 _____
Picture 4 _____
Picture 5 _____

Healthier Tomorrow

Health Allies

Neighborhood Health

Health & Awareness

Creating Health

APPENDIX E: Study 4 – Task Instructions (Essay 1)

E-1. Donation Allocation Task

[Meaningful Resource Condition]

Imagine that you recently scored a side gig as freelance writer at your local newspaper. It has been your childhood dream to be a columnist and your grandmother, who recently passed away, always supported and encouraged you to follow your dream, even if as a side-gig. You just got paid your first remuneration and decide to **donate \$250 in the memory of your grandmother. This \$250 has huge sentimental value for you.**

Now, suppose that you decide to donate this \$250 between a different set of five charities (Healthier Tomorrow, Health Allies, Neighborhood Health, Health & Awareness, and Creating Health) in your neighborhood that are in need of help.

Each charity is a national non-profit organization that seeks to empower individuals to develop the skills to overcome the epidemic of obesity and sedentary lifestyles focusing on changes in communities around the country to improve nutrition and increase physical activity. All five charities attempt to foster sound nutrition and good physical activity in schools and communities, envisioning a country where everyone develops the lifelong habits necessary to promote health.

Given this situation, we are interested in understanding how you would allocate this \$250, which has huge sentimental value for you.

There are no right or wrong answers here, and we are simply interested in your honest opinions.

Below, please tell us how you would like to allocate your \$250 among the five charities. (Note: Only restriction is that the total amount should be equal to \$250).

Healthier Tomorrow _____
Health Allies _____
Neighborhood Health _____
Health & Awareness _____
Creating Health _____

Total _____

[Neutral Resource Condition]

Imagine that you recently scored a side gig as freelance writer at your local newspaper and have been making some cash. You just got paid and decide to donate \$250.

Now, suppose that you decide to donate this \$250 between a different set of five charities (Healthier Tomorrow, Health Allies, Neighborhood Health, Health & Awareness, and Creating Health) in your neighborhood that are in need of help.

Each charity is a national non-profit organization that seeks to empower individuals to develop the skills to overcome the epidemic of obesity and sedentary lifestyles focusing on changes in communities around the country to improve nutrition and increase physical activity. All five charities attempt to foster sound nutrition and good physical activity in schools and communities, envisioning a country where everyone develops the lifelong habits necessary to promote health.

Given this situation, we are interested in understanding how you would allocate this \$250.

There are no right or wrong answers here, and we are simply interested in your honest opinions.

Below, please tell us how you would like to allocate your \$250 among the five charities. (Note: Only restriction is that the total amount should be equal to \$250).

Healthier Tomorrow _____
Health Allies _____
Neighborhood Health _____
Health & Awareness _____
Creating Health _____

Total _____

E-2. Process Measures

Follow-Up Questions

We would like to better understand how you made your donation decision. Tell us how much each of the following statements might be true when you were making your donation decisions:

A. Desire for meaning preservation

When I was allocating \$250 of my money...

1. I was concerned about preserving what this money meant to me.
 2. I thought about how I could remember the emotional associations that the money embodied.
 3. I was thinking about how to keep the sentimental value associated with my money intact.
 4. I was trying to maintain what made this money unique to me.
 5. I was trying to keep memory of my grandmother (meaningful resource condition) / my money (neutral resource condition) alive.
- 1 = Strongly disagree, 7 = Strongly agree

B. Marginal utility

[*Meaningful Resource Condition*]

1. I thought that each additional dollar that carried a sentimental value for me, would make a bigger impact if it was given to a charity I was already allocating to, rather than allocating that dollar to another charity.
1 = Strongly disagree, 7 = Strongly agree
2. Say for example you donated \$50 of the money that had huge sentimental value for you, to one charity, how much do you think additional \$50 given to this same charity would be more impactful than if it was given to a new charity?
1 = Not impactful at all, 7 = Very impactful
3. Say for example you donated \$50 of your sentimental money to one charity, giving the next \$50 to another charity (rather than increasing the amount to \$100 for the first charity) would make a much bigger overall impact.
4. Suppose that you donated \$50 of your sentimental money to one charity, how much do you think giving additional \$50 to this same charity would better maximize the outcome than giving it to a new charity?
5. Suppose that you donated \$50 of your sentimental money to one charity, giving the next \$50 to this same charity would be more likely to expand potential uses of your money as compared to giving it to a different charity.

1 = Strongly disagree, 7 = Strongly agree

[Neutral Resource Condition]

1. I thought that each additional dollar would make a bigger impact if it was given to a charity I was already allocating to, rather than allocating that dollar to another charity.
1 = Strongly disagree, 7 = Strongly agree
2. Say for example you donated \$50 of the money to one charity, how much do you think additional \$50 given to this same charity would be more impactful than if it was given to a new charity?
1 = Not impactful at all, 7 = Very impactful
3. Say for example you donated \$50 of your money to one charity, giving the next \$50 to another charity (rather than increasing the amount to \$100 for the first charity) would make a much bigger overall impact.
4. Suppose that you donated \$50 of your money to one charity, how much do you think giving additional \$50 to this same charity would better maximize the outcome than giving it to a new charity?
5. Suppose that you donated \$50 of your money to one charity, giving the next \$50 to this same charity would be more likely to expand potential uses of your money as compared to giving it to a different charity.

1 = Strongly disagree, 7 = Strongly agree

APPENDIX F: Study 1 – Belief in Karma Scale Items (Essay 2)

1. Good actions in the present lead to good outcomes in the future either in this life or in the hereafter.
2. Bad actions in the present lead to bad outcomes in the future either in this life or in the hereafter.
3. I believe in karma.
4. I believe in rebirth.
5. The universe is a continuous cycle.
6. There is no beginning or end to the universe.
7. The world was not formed by a one-time act of creation.

APPENDIX G: Study 1 – Scenarios (Essay 2)

Scenario 1: Imagine that you applied for medical school that you really wanted to go and are waiting for the decision letter, hopefully acceptance, by the end of this week. You did your best and now all you can do is wait. Meanwhile, this being admissions season, your undergrad alma mater has asked your help in interviewing an applicant, as part of the college alumni interviews. You interview the applicant and he seems to be very eager to go to your alma mater. Overall, you think he is a good student, but at the same time you are not perfectly sure whether he is indeed a strong candidate. As the interviewer, now you have to recommend whether to admit him or not. How likely would you recommend him for admission?

Scenario 2: Imagine that you have been waiting for the results of your annual evaluation by your boss at work, which is critical to your promotion. You did everything you could do and now all you can do is to wait. You are also a member of the evaluation committee at your company for your subordinates. During the evaluation, you notice one of your subordinates, who just started to work in your team a few years ago, is also up for promotion for a different position he really wants. Since you have worked with him, you know that he's good but not 100% deserving the position. Your evaluation would matter to whether he gets promoted or not. How likely would you give him a good evaluation for promotion?

APPENDIX H: Study 2 – Belief in Karma Manipulation (Essay 2)

[Karma Condition]

“As you have planted, so do you harvest”

According to the concept of karma, the universe is a continuous cycle, so that what goes around comes around. A key part of the philosophy of karma is that your current actions lead to corresponding results in the future. Whatever you do unto people will eventually be done unto you. It may take time—as seeds often take time to grow—but your words, actions or thoughts eventually always yield their harvest. If you do good deeds, something good will happen to you in the future. If you do bad deeds, something bad will happen to you in the future. Remember, your actions and even your reactions will come back to you somehow.

Please summarize the paragraph above and tell us how much you would believe in the concept of Karma described above.

[Control Condition]

“Life is full of routine activities.”

In this study, we are interested in learning more about activities that are part of your everyday life. In particular, we would like to learn more about how you typically spend your evenings on an ordinary day. Think of activities that you normally do in a typical evening. Do you normally work, read, watch television, or engage in other routine activities such as doing household chores, chatting with other family members, calling friends on the phone, etc.?

Please summarize the paragraph above and tell us how you spend your evenings on an ordinary day.

APPENDIX I: Study 2 – Design Rating Task Instructions (Essay 2)

Design Rating Task

This next task is collaborated with a new online platform, where they are planning to have people submit their t-shirt designs that are put to a public vote. Each week they will have a themed challenge that allows people to submit designs that fit a particular theme. For each themed challenge, they plan to select 10 top-scoring designs, printed on t-shirts and sold worldwide through the online store. Designers whose work is printed will receive royalties based on net profits and extra cash. Unfortunately, low-rated designs will not have an opportunity to be printed and archived on the platform after the decision is made.

Therefore, the scores on these designs are absolutely critical for those who design t-shirts as well as the platform.

Imagine you have just submitted your design for a theme and are waiting for the result that will be announced at the end of this week. What would it be like? How would you feel?

(On next page)

Now, in this task, you will rate 10 actual designs that are currently on the beta version of this platform, on a 5-star rating. Think of these designs as those submitted to another themed challenge that you would not imagine to submit for.

We would like you to put on a judge's hat and tell us how much you think each design should be selected for print. Please take your responses seriously as your responses will be delivered to this platform and used for making a selection decision.

Click the arrows >> below to rate the first design!

APPENDIX J: Study 3 – Commercial Descriptions (Essay 2)

[Karma Condition]

Below is a brief description of the commercial. Please read and think about it for a moment, and click next to watch the commercial when you are ready.

“As you have planted, so do you harvest”

According to the concept of karma, the universe is a continuous cycle, so that what goes around comes around. A key part of the philosophy of karma is that your current actions lead to corresponding results in the future. Whatever you do unto people will eventually be done unto you. If you do good deeds, something good will happen to you in the future. If you do bad deeds, something bad will happen to you in the future.

Now, please click next to watch the commercial.

[Control Condition]

Below is a brief description of the commercial. Please read and think about it for a moment, and watch the commercial when you are ready.

"Life is full of routine activities"

There are a variety of activities that could be part of your everyday life. Think about how you typically spend your ordinary day. Think of activities that you normally do on a typical day. Do you normally work, read, watch television, or engage in other routine activities such as doing household chores, chatting with other family members, calling friends on the phone, etc.?

Now, please click next to watch the commercial.

APPENDIX K: Study 3 – Self-Serving Altruism Measure (Essay 2)

Follow-up Questions

In this section, we are interested in understanding your thought process as you were making decisions in earlier tasks. Please tell us what was going through your mind **at that moment in time.**

Also, note that there are no right or wrong answers to these questions, and we are only interested in your honest opinion.

Self-Serving Altruism

At that moment, I thought...

1. I would need to try to show what a good person I am through my sacrifices
 2. I would help others in order to prove I am a good person
 3. I would like to have friends who rely on me because it makes me feel important
 4. I felt important when others rely on me
 5. Sacrificing for others would make me the better person
 6. I could make myself feel good by caring for others
- 1 = Strongly Disagree, 7 = Strongly Agree

Warm Glow

Again, please indicate your agreement with each item. Please be open and honest in your responding.

At that moment, I thought...

1. I would feel a warm-glow inside if I helped someone.
 2. I would feel emotionally positive about myself if I helped someone.
 3. I would feel good about myself if I helped someone.
- 1 = strongly disagree, 7 = strongly agree

APPENDIX L: Study 4 – Essays for Grading (Essay 2)

Student #1. Score of 3 on a 1-8 scale; 37.5/100

Question: Are we free to make our own decisions or are we limited in the choices we can make?

We are limited in the choices that we can make by a number of things. First we are restricted by our government, who sets rules that we have to abide by. Next is our schools, because they set a certain standard on our classes and we have to meet their requirements and also we are limited in our actions when we are at work. Our government has laws that we have to go by or we will be fined or punished for not abiding by them. Hitler came up with all sorts of rules and conditions and if they weren't followed he would have the citizen executed. In our school we don't have very much freedom in choosing which courses we want to take because we have so many mandatory ones that has to be taken in order to get enough credits to graduate such as 3 years of Math 4 years English and 3 years of Reading and Writing. So all in all I think we are limited in the choices we can make by our government, schools and our employers.

Student #2. (67)

Question: Different people value different qualities in a medical doctor. Everyone wants a well-educated and knowledgeable doctor, but what other qualities should a good medical doctor have? Explain why these are important.

It is widely accepted that most people want their doctors who had graduated famous university and well-educated. However, there are more important factors which affect people's condition in the hospital. The first thing is ability of explanation about patient's condition and progress. Whenever we are being admitted to the hospital, we are usually afraid of our next step. Besides, after we experienced big operation or procedure, we want to know our current state and how to cope with the future. Even though the doctors are very knowledgeable and skillful, most patients feel scare when they do not being supported by doctor's explanation. Secondly, doctors should be warm. It is very important to treat the patient's inner side. We can not live without human beings. By time goes by, our society have changed like factory. To sum up, doctors who are living in modern society, should have warm heart and treat the patient like their family.

Student #3. (63)

Question: There are many different energy sources (for example, sun, wind, oil water, natural gas, coal, nuclear fission, etc.). Pick one such source and discuss its advantages and disadvantages. You might consider availability, safety, geographical location, etc.

People say that water is the original energy. We can see it everywhere and we use it everyday It seems like everything need water. for their life, as energy of large number Water always play a good role in our world. We use water clean the clothes , people need drink water to be energy for

them., Sometimes Water of river and ocean can be a transportation to help people transport the goods we need the good role everyday. for everyone as the most important energy. But everything has two sides. Water also has the bad side sometimes like when the rain keep a long time as usual of the beginning it will be a disaster to break people's normal life and houses. If we didn't cherish water environment They will turn dirty and become pollution then we couldn't drink it. At last. Water give us life and available to use we should grateful for it. and save water everytime Trying to protect water clean.