ASSESSING THE PERSUASIVE EFFECTS OF TEMPORAL DISTANCE AND SOCIAL DISTANCE ON INTENTIONS TO VOLUNTEER

A Thesis in
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by
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ABSTRACT

The current study examined the persuasive impact of employing various levels of psychological distance in prosocial communications, specifically social and temporal distance. Self-benefit versus other-benefit marketing appeals are considered instances of social distance, whereas appeals that emphasize the benefits received now versus later represent temporal distance. Low psychological distance is associated with concrete mental construals and high psychological distance is associated with abstract mental construals. Taking into account the propositions of psychological distance and construal level theory, the current study assessed the impact of individual characteristics on message evaluations and intentions to comply with message claims. Messages with the same level of psychological distance and messages that match participants’ own characteristics should be more fluent and lead to a higher degree of persuasiveness. A 2 (social distance: high and low) X 2 (temporal distance: high and low) between-subjects design experiment was conducted with an undergraduate sample. Results indicated that attitudes and intentions in response to prosocial messages could vary as a function of social distance. Differences in self-construals produced a gender effect with female participants reporting higher intentions to volunteer in response to messages with other-benefit appeals.
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CHAPTER 1

Introduction

Persuasion strategies are commonly framed in terms of dual-process models that identify thoughtful, systematic modes of information processing versus peripheral, heuristic processing of message cues (Petty & Cacioppo, 1986; Todorov, Chaiken & Henderson, 2002). However, the literature also offers alternate frameworks with potential to gain the attention of communicators. The current study argues that psychological distance and construal level theory can provide promising benefits for persuasive purposes.

Psychologists have continuously tested the relationship between levels of psychological distance in relation to levels of mental construal (Trope & Liberman, 2003; Trope & Liberman, 2010; Stephan, Liberman & Trope, 2010). Furthermore, a growing stream of research adds emphasis on the effectiveness of matching participants’ own characteristics to the way a message requires the reader to process information (Higgins, 2000). But indeed, previous findings need to be assessed in media-focused settings to provide more evidence for predictions formulated in different contexts.

The concept of psychological distance suggests that distance is not only possible in terms of physical space and time, but it is also experienced in relation to social targets (distance from friends compared to distance from strangers) and hypothetical situations (“what if” situations; Liberman, Trope & Stephan, 2007). The relevance of this concept is better understood considering construal level theory. Proponents of construal level theory argue that processing of information will vary depending on the level of construal, and levels of construal are associated
with levels of psychological distance (Trope & Liberman, 2003). For example, processing of information about an event that will occur in the near-future (tomorrow) is processed differently for an event that will take place in the distant-future (in five years). Construal level theory would predict that distance from the event would lead to abstract processing of information. More distance makes processing of information abstract and decontextualized whereas reduced distance elicits concrete, contextualized information processing (Liberman, Trope & Stephan, 2007).

Communications messages can be framed in relation to time by including, for example, a call to take action now or in the future. This distinction represents differences in temporal distance. In the same way, messages can create social distance by emphasizing global vs. individual outcomes. Following the predictions in the literature, the main goal of the current study is to examine the relationship between dimensions of psychological distance, specifically temporal and social distance, taking into account the effect of matching levels of psychological distance with participants’ own characteristics.

The following sections will introduce relevant literature on psychological distance, construal level theory, temporal orientation and additional variables that may exert an influence on the intersection among the concepts mentioned.
CHAPTER 2

Literature Review

Months in advance, we might think about our next trip as “vacation.” But a week before we take the flight, the word “vacation” turns into “packing” and “printing tickets.” As we get closer in time to the event, the way we think about its occurrence goes from abstract, decontextualized thoughts to concrete, specific mental representations. In the same way, we can admire a city’s skyline from afar, but if physical distance is reduced, we get to focus on the different buildings and streets. However, not all mental representations of distance are experienced in relation to time and space. Consider, for instance, perceived distance from other people. That is, the perceived social distance from family, friends or complete strangers. Likewise, perceived distance from past hypothetical situations is also considered a type of mental distance. Thinking about “what might have been,” in a moment of our past can lead people to judge past decisions on broad, abstract terms instead of focusing on the contextualized, specific situational constraints that led to the selection of the alternative. Altogether, these examples represent forms of distance that can impact the way people think about a target. This suggests that our perception of time, of physical space, of closeness to other people, and of hypothetical situations have something in common: they vary depending on the distance from direct experience with the event, object, or person.

Psychological Distance

The aforementioned examples constitute the idea of psychological distance. According to Liberman, Trope and Stephan (2007) “psychologically distant things (objects, events) are
those that are not present in direct experience of reality” (p. 353). Psychological distance is created by experiences that are not lived in the moment or in direct contact with. Real-time, direct experiences delimit the starting point and represent proximal targets, whereas objects and events are considered distal as they move further away in terms of physical space, time or social relation. Transcending the here and now implies a reference to distal representations that are mentally constructed (Liberman & Trope, 2008). The four main components of psychological distance include: temporal distance, spatial distance, social distance, and hypothetically.

As Liberman, Trope and Stephan (2007) would define them, temporal distance relates to perception of past and future events with a focus on time. Social distance refers to the distance from other people, with a focus on the proximity from known others or strangers, thus, experienced in relation to society. Spatial distance relates to perceptions of the proximity or remoteness from locations; also referred to as physical distance. And hypotheticality relates to the distance experienced when considering alternative actions that were not part of reality.

The work by Trope, Liberman and colleagues (Trope & Liberman, 2003; Trope & Liberman, 2010; Ledgerwood, Trope & Chaiken, 2010; Fujita, Trope, Liberman & Levin-Sagi, 2006; Nussbaum, Liberman & Trope, 2006; Stephan, Liberman & Trope, 2010; Liberman & Trope, 2008) deals with the concept of psychological distance in relation to levels of construal, or mental representations with various levels of abstractness. What are levels of construal and how do they relate to psychological distance? The following section extends the concept of psychological distance in line with the claims proposed by construal level theory, a theory displaying strong evidence for the connection between the two concepts (Liberman, Trope &

**Construal Level Theory**

Human capacity allows processing of information at abstract levels (Liberman & Trope, 2008). Construal level theory posits that temporally distal information will be processed in an abstract level, whereas temporally proximal information is represented at a concrete level (Trope & Liberman, 2003). This means that variance in distance leads to different modes of information processing ranging from concrete, low-level representations in one end, to abstract, high-level processing on the other. The same dynamic would apply for spatial distance, social distance, and hypotheticality.

Construal level theory connects the representation of mental abstractions with perceived psychological distance from the event, object or person. Under this theory, if interacting with the “here and now” is the point of reference, any distancing from experiencing the moment and the present would be considered “construal.” Moving away from direct experience with the world entails an increase in construal. Conversely, as reality is closer and in the present, the lower the level of construal (Liberman, Trope & Stephan, 2007).

The theory posits that high-level construals are more abstract and decontextualized, whereas low-level construals are more concrete and situation-specific. However, this does not imply that higher, more abstract construals are necessarily more complex than low-level construals. A high-level of construal conveys a more abstract idea in a higher hierarchical level. For example, a dog may be considered a pet (low-level construal), or it can be considered a mammal (high-level construal). The fact that the construal is higher suggests that it will include
a broader “category” of possibilities and, because we distance ourselves from the present, the
details that characterize the object or idea are more easily lost (Wakslak, Trope, Liberman &
Aloni, 2006).

As mentioned previously, the plans to go on vacation begin to change in meaning, as the
event gets closer in time. Closeness to experienced reality brings up questions about “how?” and
distal representations raise questions about “why?” This makes high-level construal
representations simpler than low-level ones. A higher level of construal leads to a perception of
increased psychological distance. This is important because high-level construals allow changes
in the meaning of events or objects and leads to processing of larger ideas; they are
decontextualized abstractions that gain a new meaning as they become more distant (Trope &
Liberman, 2003). In sum, a distant perspective guides attention to central traits, but moving
closer turns attention to specific representations.

The propositions of construal level theory suggest important extensions to be studied
under the framework of psychological distance. We could argue that this evidence allows the
theorizing of marked differences between varying levels of construal for dimensions of
psychological distance. That is, the mental construction of proximal versus distal targets can
vary depending on the temporal distance, spatial distance, social distance, or hypothetical
distance. We now turn to a discussion about temporal distance, a concept that can offer insights
about the relationship between processing of various levels of construal in relation to time.

**Temporal Distance**

The way individuals experience the world is constantly framed in reference to time.
Messages often encourage people to consider the past, enjoy the present, or plan for the future
(Martin, Gnoth & Strong, 2009). The literature offers many examples that evidence the effect of temporal distance on everyday decision-making (Liberman, Trope & Stephan, 2007). Temporal distance primes, messages that make reference to the past, present or future (Martin, Gnoth, & Strong, 2009), are embedded in everyday communication and they can activate different modes of message processing, according to the logic proposed by the dimensions of psychological distance and construal level theory.

As mentioned before, a distant representation guides attention to central traits. From this assumption, it has been argued that a distal temporal perspective highlights individuals’ central traits or values. According to Agerström and Björklund (2009), people tend to place more weight on their central values when judging more distant events as opposed to temporally close ones. This may be happening because higher construals lead to abstract thinking and people are more likely to focus on desirable traits that they value. However, as temporal distance was reduced in the study, people placed more emphasis on situational factors that made their judgments less harsh.

In a similar way, environmental advertisers try to reach consumers’ core values by emphasizing high-level construals in order to persuade audiences to engage in sustainable behaviors. A distal temporal perspective is usually coupled with a loss-frame message to communicate the future negative consequences of failing to perform a specific behavior (Meijers & Stapel, 2011). Construal level theory would propose that this is an effective strategy to maximize focus on higher construals that can relate to individuals’ values.

Kivetz and Tyler (2007) found support for another notable example of the relationship between levels of construal and temporal distance. They examined the relationship between
temporal distance and the self-concept, arguing that high temporal distance activates the ideal self whereas low temporal distance activates the pragmatic self. The ideal self is conceptualized as being guided by values, core principles and preferences based on the individuals’ true identity, while the pragmatic self is a version of the self that is constrained by situational factors and preferences for instrumental benefits. The situational, contextualized factors that are characteristic of a proximal time perspective made the pragmatic self more salient in these cases, and the same effect was supported for the connection between distal time perspective and the salience of the ideal self. Similarly, Nussbaum, Trope and Liberman (2003) demonstrated that higher temporal distance leads people to see future actions as representative of their personality.

The evidence supporting the relationship between levels of construal, temporal distance and the self is further expanded by Eyal et. al. (2009). They argue that participants’ core, defining traits are more likely to guide their behavior in distant rather than proximal events. People with either an altruistic orientation or an achievement orientation planned to act in accordance with their prioritized trait more often in the distant future than in the near future. Altogether, these findings support the hypothesized relationship between levels of construal and the future self, suggesting that higher construals lead people to think of their future self as a representation of their core traits and values.

So far, the importance of temporal distance has been framed in terms of the self and judgments of present and future selves according to levels of construal. However, another relevant dimension of psychological distance—social distance—takes into account the perceived distance between the self, known others, and unknown others. This dimension can potentially clarify how judgments are affected by distance in relation to social targets.
Social Distance, Reference Point and Mental Construals

According to Liberman, Trope and Stephan (2007) “the distinction between self and other, similar and dissimilar others, familiar and unfamiliar other, in-group and out-group members, and status differences, all may be considered as instances of social distance” (p. 357). The literature suggests that there is a higher level of construal for distal social targets (other people). This could be explained considering that people know more information about themselves than they know about others. Therefore, evaluations made about others could be seen as high-level construal and as low-level construal for the self (Agerström & Björklund, 2009).

Stephan, Liberman and Trope (2010) conducted a series of studies arguing that the traits of politeness and familiarity are perceived as indicators of social distance. Eight experiments offered strong support for the notion that politeness creates distance between the self and others. Politeness was related to higher-level construals, temporal distance and spatial distance. The use of specific traits as indicators of social distance, politeness in this case, can help understand the circumstances under which social distance can vary as a result of levels of construal. However, the limited amount of literature on social distance in relation to levels of construal does not provide a complete picture of how this dimension operates.

It should be noted that the current research does not address the differences between self and others in the same way they have been conceptualized by the literature on psychological distance. The focus of this project intends to address the differences in response to messages that evoke different points of reference that may represent social distance, with a self-benefit approach vs. an other-benefit approach. Messages that highlight the benefits that the participant
will receive are considered a self-benefit appeal and messages that emphasize the benefits that other people will receive are considered an other-benefit appeal. The focus of the current study aims to extend the understanding of social distance to differences between self and others in terms of the social target that benefits from the rewards emphasized in the message.

Although forms of social distance and self vs. other referencing appeals represent different concepts, this paper argues that they may share similarities based on levels of mental construal. As previously suggested, construal level theory posits that distal information is processed in an abstract level, whereas proximal information is represented at a concrete level (Trope & Liberman, 2003). Basically, the mental construction of proximal versus distal targets varies depending on the distance from the target, in this case, the perceived distance from the self or from unknown others. The use of self-benefit claims or other-benefit claims, such as “you will receive” or “others will receive,” might lead participants to focus on various levels of mental construal. More specifically, participants exposed to a message with a self-benefit appeal may feel less distance and experience lower levels of mental construal. Conversely, participants exposed to a message with an other-benefit appeal may feel more distance and experience a higher, more abstract mental construal.

In support of this claim, Liberman, Trope and Stephan (2007) suggest that individuals report more involvement with messages that use a self-referencing frame. This argument, together with the findings from their study on familiarity and politeness (Stephan, Liberman & Trope, 2010) may indicate that increased involvement, increased familiarity and reduced politeness could represent indicators of proximal social distance. In line with this reasoning, Loroz (2007) further reinforces the notion that self-referencing increases involvement with a
message. Furthermore, she claims that the activation of the self-schema increases the use of cognitive resources to process a message.

An important addition by Anderson, Glassman and Gold (1998) suggests that representations of self and others vary considerably in terms of richness, accessibility, and distinctness. This argument can be related to the logic behind construal level theory suggesting that low construals are more concrete and contextualized whereas high construals are abstract and decontextualized. If representations of the self are more rich and accessible, they should be more concrete and contextualized. Conversely, if representations of others are less rich and accessible, they should be more abstract.

Moreover, considering Agerström and Björklund’s (2009) claim proposing that we know more about ourselves than we know about others, self-schemas should be more rich and concrete than schemas about others; hence, making self-schemas and self-referencing claims more concrete and relatable to low mental construals and other-claims relatable to high mental construals under the construal level theory framework. Altogether, the literature seems to offer potential support for the connection between levels of mental construal and self vs. other referencing points, which can be further related to levels of social distance.

In the realm of social distance, a recent study by Pronin, Olivola and Kennedy (2008) tested the relationship between social distance and temporal distance using scenarios that included actions for the benefit of others or for the benefit of the self. Their main goal was to test the role of internal subjective states in light of differences in social distance for present or future actions, and regardless of the type of task, participants’ responses operated in the same way for help-self as low social distance and help-others as high social distance. That is,
perceived social distance increased when participants had to engage in decision-making for tasks that offered benefits for others.

These dimensions of psychological distance, temporal and social distance, appear to operate in distinct ways but are unified via construal level theory reasoning. The literature provides evidence for the interconnectedness of dimensions of psychological distance, including spatial distance and hypotheticality (Trope & Liberman, 2010). But what other variables might impact the relationship between these types of distance?

**Temporal Distance and Social Distance**

Very little research has addressed how temporal distance and social distance impact message processing and decision-making. In a series of experiments mentioned previously, Pronin, Olivola and Kennedy (2008) test the possibility of treating the future self and future others in the same way, while treating the present self differently. More specifically, they argue that judgments and decisions that affect the self or others (social distance) in the future (temporal distance) will be similar, however, these considerations will change when distance is reduced and consequences of these choices will have an impact on the present self. They manipulated social and temporal distance in four experiments that included scenarios leading to positive and negative consequences for the self or others (i.e. drinking a disgusting liquid for the benefit of science, volunteering time during midterms week, helping in a charity task, and deferring a monetary price); and in all cases there was a significant difference between present self and future self and others. As they hypothesized, people treated their future self and future others in the same way and treated their present self differently. Therefore, temporal distance had a significant impact.
As one of the first series of studies testing the relationship between temporal distance and social distance, these experiments offer strong support for construal level theory and introduce new concepts relating to present subjective experiences (thoughts and feelings at the moment of decision-making) that differentiate low construals from high construals. Based on these findings, the current study explores the following research question:

**RQ1:** Are there any differences for (a) attitudes toward the message, (b) attitudes toward the brand and (c) intentions to volunteer in response to messages with different levels of social distance and temporal distance?

Kim, Zhang and Li’s (2008) examination of social and temporal distance sheds light on the relationship between these dimensions in the arena of consumer evaluations. When both social and temporal distance were proximal, participants were more likely to base their product evaluations on the value of low-level construals. Conversely, product evaluations were based on values of high-level construal when the distance was farther for both social and temporal dimensions. The logic behind this study could be understood taking into account the congruence or fit between levels of psychological distance.

**Psychological Distance Congruence**

Higgins’ (2000) theory of regulatory fit posits that congruence (or fit) between individuals’ regulatory orientation and the way they pursue a goal or process information increases motivation to complete a task. This compatibility leads to a “feel right” perception that increases motivation (Spiegel, Grant-Pillow & Higgins, 2004), and can be an effective tool for persuasive purposes (Cesario & Grant, 2004; Lee & Higgins, 2009).
Potentially, it could be proposed that the connection between the self vs. other reference points and temporal distance can be enhanced via a fit of levels of psychological distance. Fit in the context of psychological distance and construal level theory could occur when, for instance, temporal distance and social distance are focused on high-level construals. Alternately, it could also happen when both types of psychological distance are focused on low-level construals. Following the reasoning of the theory of regulatory fit, the current study argues that congruence between levels of construal for types of psychological distance could result in more action-effectiveness feelings (Meijers & Stapel, 2011) and fluency (Cesario & Higgins, 2008). Therefore, the current research suggests that messages employing the same level of psychological distance will be more persuasive than messages featuring alternate levels of psychological distance, such that:

**H1:** Messages employing the same level of psychological distance (low temporal distance and low social distance or high temporal distance and high social distance) will elicit (a) more positive attitudes toward the message, (b) more positive attitudes toward the brand, (c) and higher intentions to volunteer than messages with alternate levels of psychological distance (low temporal distance and high social distance or low social distance and high temporal distance).

While this prediction suggests fit between levels of construal for types of psychological distance, other instances of congruence or fit integrate dimensions of psychological distance with variables related to individual differences, such as people’s temporal orientation, level of consideration of future consequences, or other context-dependent variables that may impact people’s tendency to consent with a message.
Temporal Orientation and Consideration of Future Consequences

Many studies in the realm of temporal distance take into account the moderating role of time orientation or time perspective and individual differences in consideration of future consequences (Martin, Gnoth & Strong, 2009; Meijers & Stapel, 2011; Orbell & Hagger, 2006; Kees, 2011). Temporal orientation is used to refer to individuals’ tendency to focus on the past, the present or the future (Holman & Silver, 1998). On the other hand, consideration of future consequences represents the degree of influence of immediate versus distant outcomes (Orbell & Hagger, 2006). A high level of consideration of future consequences entails higher consideration for distant consequences of actions, which suggests that present behavior is guided by distant goals (Orbell & Hagger, 2006). Taken together, it can be predicted that individuals with higher concerns for future consequences are expected to be more future-oriented.

To illustrate the role of temporal orientation, Meijers and Stapel (2011) examined the fit between this variable and the social target (self vs. others). Their findings offer support for the effectiveness of matching temporal orientation and social target to encourage participants to make sustainable choices. Individuals with a distal time perspective and distal social focus (others), or with a proximal time perspective and proximal social focus (self) were more likely to be persuaded to consent with environmental behaviors. These findings are important because they highlight an alternate strategy that proves to be effective in the context of sustainability. By focusing on a proximal time perspective and a proximal social target, participants can be more persuaded to make sustainable choices. These findings could potentially work in the same way for other dimensions of psychological distance, especially when a temporally proximal (rather than distant) action is desired.
Additionally, Martin, Gnoth and Strong (2009) examined the effects of temporal distance on advertisement evaluations. Two experiments revealed that future-oriented consumers and present-oriented consumers differed in their evaluations of a message depending on their focus on present or future and the fit between this individual trait and the temporal distance frame used in the message. Consumers with a future-orientation had more favorable evaluations of advertisements that would be released in the future, and vice versa for present-oriented consumers. Moreover, future-oriented consumers had more favorable evaluations for ads highlighting primary product attributes, whereas present-oriented consumers valued secondary product attributes more often. Primary attributes related to high-construal, or primary product functions, and secondary attributes referred to low-construal, secondary product functions. Differences in product evaluations varied as a result of mental construals of psychological distance. In addition to supporting the literature on construal level theory, this study supports the fit effect and the importance of temporal orientation.

Similarly, Kees (2011) demonstrates that persuasion in the health domain is more likely when there is a match between temporal orientation and temporal distance. Present-oriented people were more persuaded by the proximal consequences of their health choices and future-oriented people were more persuaded by the distal consequences. Within the same domain, Orbell and Hagger (2006) find support for the persuasive effects of fit between temporal distance and consideration of future consequences. Participants’ decision to undergo a health screening in the present or the future was dependent on levels of consideration of future consequences.

Following the results from previous work relating dimensions of psychological distance to individuals’ temporal orientation, the current study suggests that messages will produce
different responses depending on the individuals’ temporal orientation. More specifically, participants with low consideration of future consequences and high consideration of future consequences are expected to respond more favorably to messages that match their level of mental construal. However, the addition of the social distance dimension is expected to have a distinct impact such that:

**H2:** For individuals with low consideration of future consequences, a message with a near-future and self-benefit appeal will elicit (a) more positive attitudes toward the message, (b) more positive attitudes toward the brand, (c) and higher intentions to volunteer than a message with a near-future and other-benefit appeal or messages with distant-future appeals.

**H3:** For individuals with high consideration of future consequences, messages with a distant-future appeal will elicit (a) more positive attitudes toward the message, (b) more positive attitudes toward the brand, (c) and higher intentions to volunteer, regardless of self-benefit vs. other-benefit appeal.

These hypotheses claim that self-benefit appeals will be more persuasive than other-benefit appeals for participants with low consideration of future consequences, but self-benefit vs. other-benefit appeals will not impact response from participants with high consideration of future consequences. This argument is proposed after Pronin, Olivola and Kennedy’s (2008) findings suggesting that people treat their future self and future others in the same way, while treating the present self differently.

As mentioned before, individual differences related to context-dependent variables can play a major role and potentially alter the hypothesized relationship between psychological
distance and levels of construal. Temporal orientation and consideration of future consequences are variables that operate under the temporal distance dimension. However, the literature on temporal distance and social distance mentions additional variables that may relate to peoples’ individual differences concerning time, and the self and others as point of reference. One of these variables is altruism, which is closely related and affected by levels of construal and dimensions of psychological distance (Milfont & Gouveia, 2006).

**Altruism**

We can relate self vs. other reference points to prosocial behaviors if we think about prosocial actions as altruistic representations where the benefits received are focused on the other (White & Peloza, 2009). Meijers and Stapel (2011) indicated that “being a prosocial, rather than a proself, implies that one attaches more importance to the outcomes of others, rather than the outcomes of oneself” (p. 19).

An effective approach to encourage altruistic behaviors in light of psychological distance effects is offered by Milfont and Gouveia (2006). They suggest that sustainable behaviors are more likely when a high-level of construal is focused. The alignment of peoples’ altruistic values and time perspective was shown to produce a positive response. A main finding of their study is the positive correlation between the prosocial behavior (environmental preservation) and the future. In line with the predictions of construal level theory, higher levels of construal lead to increased focus on central traits and values.

Agerström and Björklund (2009) examined the role played by values and central traits in a more direct way. Specifically, they tested the effects of temporal distance on morality in relation to participants’ judgments of prosocial behaviors. Their conceptualization of morality
referred to people’s concerns for others. They focused on the weight that participants placed on their moral concerns when making judgments about other individuals (not themselves) that followed morally questionable behaviors that would take place in the near future or the distant future. The authors hypothesized that participants’ core values would arise when the information was framed as a distant-future event. Furthermore, suggesting that a higher level of construal would result in a decision, in this case a judgment, more close to the true self and core values of the individual. More importantly, the distal mental abstraction would encourage concerns with altruistic behaviors. They measured how wrong they thought someone else would be if they did not perform the moral action, and they also measured how angry people would feel about this.

Consistent with their predictions, participants displayed a more negative judgment and stayed closer to their core values when the events were situated in the distant future. Affirming that temporal distance makes morality, and consequently altruistic beliefs, more prominent than situational factors. In a second experiment, Agerström and Björklund (2009) examined participants’ own willingness to contribute to the various issues and they found that as temporal distance increased so did their own intentions. This study suggests that moral questions are thought to be more wrong in the distant future, as opposed to the near future. Ideally, we would want to enhance the willingness of individuals to contribute to altruistic causes in near-future instances in order to prevent individuals from overcommitting.

The evidence presented so far does not mention the possibility of making decisions or judgments in situations where people have to select among competing values, and altruistic beliefs are not the only ones in question. Frequently, individuals’ values are prioritized in order to make decisions. Prosocial messages usually emphasize the benefits received by the people in
need. However, this approach might be effective to persuade individuals that place more weight on altruistic values. On the other hand, individuals with an achievement-orientation or egoistic perspective might be more likely to agree with a message that emphasizes the benefits for the self (Loroz, 2007). Coming back to Kivetz and Tyler’s (2007) study, participants’ main, core-defining traits determined their preference for the ideal self rather than the pragmatic self in the distant future. Therefore, individuals’ preference between competing traits may be determined by the more central attributes.

In sum, the evidence pointing out the role of altruism in the context of psychological distance leads to the following hypothesis:

**H4:** For participants with high levels of altruism, a message with distant-future and other-benefit appeal will elicit (a) more positive attitudes toward the message, (b) more positive attitudes toward the brand, (c) and higher intentions to volunteer, than a message with a distant-future and self-benefit appeal or messages with near-future appeals.
Design

The main goal of the current study is to examine the relationship between dimensions of psychological distance, specifically temporal and social distance, under the propositions of construal level theory (Trope & Liberman, 2003) and congruence between levels of psychological distance. To test the hypothesized relationships, participants in a 2 (social distance: self-benefit vs. other-benefit) x 2 (temporal distance: near-future vs. distant-future) between-subjects design were exposed to one of four versions of a message.

Participants

Undergraduate students (N = 161) from communications courses participated in the current study in exchange of course credit (female: 74%; age: M = 20.15, SD = 1.18). The majority of participants identified themselves as White (74%), followed by Asian (10%), Hispanic (8%), Black (5%), and Other (3%). Subjects were randomly assigned to one of the four experimental conditions.

Stimulus Messages

Temporal distance and social distance were manipulated in four messages intended to recruit students from multiple fields to volunteer for an organization, specifically Americorps. This organization collaborates with nonprofit groups to help communities across America on
different causes and responds to specific needs. Americorps’ messages have the potential to be manipulated in favor of the target dimensions of psychological distance.

The stimulus message aims to persuade students to join the organization either in the near-future or the distant-future. The near-future (vs. distant-future) manipulation included temporal primes like “apply now for the summer 2012 program” (vs. “applications for 2013 available this fall”). This manipulation assimilates to the most commonly used strategies to differentiate levels of temporal distance, which include claims to take action “tomorrow” versus “next year” (Liberman & Trope, 2006). To manipulate the self-benefit appeal, the message highlights the benefits that the participant can receive if he/she decides to join the organization, and the message with an other-benefit appeal emphasizes the benefits that people in need will receive if the participant decides to volunteer for the organization (see Appendix A).

Temporal and social primes were combined to achieve the following combinations: (1) near-future and self-benefit appeal, (2) near-future and other-benefit appeal, (3) distant-future and self-benefit appeal, (4) and distant-future and other-benefit appeal. 38 participants in the other-benefit, near-future appeal condition, and 41 participants in each of the following conditions: self-benefit, near-future appeal; self-benefit, distant-future appeal; and other-benefit, distant-future appeal.

Procedures

Participants were notified by the class instructor to take part in the study titled “Students’ Evaluations of Volunteering Messages.” Once they arrived to the experimental setting, they were greeted by the investigator and received instructions to read and sign the consent form if they decide to be part of the study. They were randomly assigned to one of the four experimental
conditions and received the appropriate paper-based stimulus material and questionnaire packet (see Appendix B). The instructions in the packet asked participants to complete a series of measures (premeasures), read the stimulus message, and complete additional measures after exposure to the message (postmeasures). The process lasted an average of 20 minutes. Questionnaires were returned to the investigator and participants followed the instructor’s specifications to receive course credit.

Measures

The questionnaire contained several premeasures including items for: temporal orientation, consideration of future consequences and altruism. After reading the message, participants first completed a thought-response exercise, followed by measures of attitude toward the ad, attitude toward the brand, volunteering intentions, manipulation checks and demographics (see Appendix B for a full list of items).

Temporal orientation. Participants’ time orientation was measured employing Zimbardo’s Time Perspective Inventory (ZTPI). The current study used an adapted version that only considers present and future time perspectives, without including items that allude to the past. The scale was reduced from the original 56 items developed by Zimbardo and Boyd (1999). Participants answered each item on a seven-point Likert-type scale (1 = very untrue of me, and 7 = very true of me). Responses to 14 items were averaged to create the index for temporal orientation ($M = 4.70$, $SD = .69$, $Min = 2.71$, $Max = 6.43$, Cronbach’s $\alpha = .73$). Example items include: “I make decisions on the spur of the moment,” “I resist temptation when there is work,” “I work on things to get ahead,” “I get caught up in the moment.”
Consideration of future consequences. In addition to the ZTPI scale, participants’ temporal orientation was also assessed employing the measure of consideration of future consequences. In response to eight items, subjects used a seven-point Likert-type scale to indicate how strongly they agreed with the statements ($M = 4.53$, $SD = .88$, $Min = 2.13$, $Max = 6.38$, Cronbach’s $\alpha = .81$). Example items include: “Often I engage in a particular behavior in order to achieve outcomes that may not result for many years,” “I generally ignore warnings about possible future problems because I think the problems will be resolved before they reach crisis level,” “I only act to satisfy immediate concerns, figuring the future will take care of itself” (Strahan, Gleicher, Boninger & Edwards, 1994).

Altruism. Altruism was measured with a scale adapted by Morgan and Miller (1991). Participants were asked about their altruistic attitudes and behaviors. Some of these items include: “If I could help save somebody’s life, I would do everything possible,” “I enjoy doing small favors every day for the people I care about,” “Helping others is one of the most important aspects of life,” “I enjoy working for the welfare of others,” etc. The index was constructed with six items measured with a seven-point Likert-type scale with anchors very untrue of me/very true of me ($M = 5.61$, $SD = .89$, $Min = 3.17$, $Max = 7$, Cronbach’s $\alpha = .83$).

Attitude toward the ad. The current study employed Spears and Singh’s (2004) measure of attitude toward the ad with a seven-point semantic differential scale with the following items: pleasant-unpleasant, likable-unlikable, interesting-boring, tasteful-tasteless, good-bad, not convincing-very convincing, not compelling-very compelling, difficult to understand-easy to understand ($M = 4.60$, $SD = 1.11$, $Min = 1.75$, $Max = 7$, Cronbach’s $\alpha = .88$).
**Message credibility.** Participants were asked to indicate their perception of the credibility of the message. The scale included three items measured with a seven-point semantic differential scale with anchors: not believable-very believable, not convincing-very convincing, not truthful-very truthful ($M = 5$, $SD = 1.32$, $Min = 1$, $Max = 7$, Cronbach’s $\alpha = .93$).

**Attitude toward the brand.** Attitude toward Americorps was measured with five items taken from previous work by Spears and Singh’s (2004). The scale included the following items assessed with a seven-point semantic differential scale: unappealing-appealing, bad-good, unpleasant-pleasant, unfavorable-favorable, and unlikable-likable ($M = 5$, $SD = 1.31$, $Min = 1$, $Max = 7$, Cronbach’s $\alpha = .94$).

**Brand familiarity.** In addition, two items addressed participants’ familiarity with the brand (“How familiar are you with Americorps?”) and knowledge about the brand (“How knowledgeable are you about Americorps?”), using a seven-point semantic scale with anchors not familiar at all-very familiar, not knowledgeable at all-very knowledgeable ($M = 2.09$, $SD = 1.44$, $Min = 1$, $Max = 7$, Cronbach’s $\alpha = .95$).

**Intention to volunteer.** Participants were asked to indicate how much they agree or disagree with a series of statements intended to measure their intentions to volunteer for Americorps. Items measuring individuals’ intention to volunteer in the present include: “I am considering the possibility of volunteering for Americorps,” “I have been meaning to join Americorps to become a volunteer,” “I would like to receive information about Americorps,” and “I am interested in volunteering for Americorps.” Participants’ intention to volunteer in the future will be assessed with the following items: “At some point in the future, I would like to do volunteer work at Americorps,” “Later in life, I would like to learn more about volunteering
opportunities in Americorps,” “I would like to join Americorps later in the future.” These items were adapted from Feeley and Servoss (2005) to match the prosocial behavior assessed in the current study. The index for intention to volunteer was constructed with seven items measured with a seven-point Likert type scale ($M = 2.89$, $SD = 1.59$, $Min = 1$, $Max = 6.71$, Cronbach’s $\alpha = .95$). In addition, participants were asked to indicate if they have done volunteering work in the past and if they currently volunteer.

**Manipulation checks.** To confirm each experimental manipulation, participants were asked to indicate their perception of levels of temporal and social distance. Two items were answered using seven-point semantic differential scales. Temporal distance was measured by asking participants whether they perceived the message encouraged the reader to apply for Americorps in the near future or in the distant future, and social distance was assessed with an item asking participants to indicate if the message offered benefits for themselves or for other people (1 indicating low distance and 7 indicating high distance, for both items).

**Demographics.** Participants’ age, gender, ethnicity and educational level were measured at the end of the questionnaire. Previous research indicates that gender may have an impact on individuals’ responses to prosocial messages. Therefore, additional analyses were conducted to assess a possible gender effect (Brunel & Nelson, 2000).
CHAPTER 4

Results

The purpose of the current study was to examine the relationship between levels of social distance and temporal distance on participants’ evaluations of a volunteering message and further assess their intentions to consent with the message. Messages with the same level of psychological distance were expected to result in more favorable evaluations. Similarly, messages that fit participants’ own characteristics, such as levels of consideration of future consequences and levels of altruistic beliefs, were expected to yield more positive attitudes toward the brand, more positive attitudes toward the message, and higher intentions to consent with message claims.

Manipulation Checks

Participants completed manipulation measures for levels of psychological distance. To confirm the effective manipulation of social distance, an independent sample t-test was conducted after the four conditions were categorized into two, low level and high level of social distance. The test showed that participants exposed to a message with a self-benefit appeal ($M = 4.22, SD = 1.76$) perceived the message offered benefits for themselves and participants exposed to a message with an other-benefit appeal perceived the message offered benefits for others ($M = 5.56, SD = 1.38$), $t(149) = 5.30, p < .001$.

For manipulation measures of temporal distance, participants indicated whether they perceived the message encouraged readers to take action in the near future or the distant future.
Four conditions were categorized into two conditions representing low and high temporal distance. An independent sample t-test indicated that participants exposed to a message with a near-future appeal \( (M = 3.31, SD = 1.73) \) did not differ from participants exposed to a message with a distant-future appeal \( (M = 3.41, SD = 1.71) \), \( t(157) = 0.39, p = 0.69 \).

Previous research on psychological distance has successfully confirmed manipulations of temporal distance by asking participants to indicate whether the message communicates information with a near future or a distant future appeal (Martin, Gnoth & Strong, 2009). However, in the present study, no significant differences were found for levels of temporal distance. Overall, the means indicate that participants from all conditions reported that the messages encouraged the audience to take action in the near future. The anchors employed to measure temporal distance (in the near future/in the distant future) might have not been clear enough for participants in the respective conditions to identify message claims as more distant if they were to occur in “fall of 2013” and less distant if they were to occur “this summer.”

Although the dosage of temporal primes manipulated for each message were not effective, the following results are presented based on the four conditions previously outlined in order to maintain control. Consequently, it is important to note that results for levels of temporal distance should be considered carefully.

**Descriptive Statistics and Correlations**

All participants were asked to indicate their attitudes toward the message, attitudes toward the brand, intentions to volunteer, and their ratings for the level of credibility of the message. As illustrated in Table 1, participants exposed to messages with high levels of social distance (other-benefit appeal) reported the highest ratings for each of the dependent variables.
Table 1. Means and Standard Deviations for Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>Low Social Distance</th>
<th>High Social Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Temporal Distance</td>
<td>High Temporal Distance</td>
</tr>
<tr>
<td>Attitude toward the message</td>
<td>4.37 (1.13)</td>
<td>4.34 (1.10)</td>
</tr>
<tr>
<td></td>
<td>5.03 (1.07)</td>
<td>4.69 (1.06)</td>
</tr>
<tr>
<td>Attitude toward the brand</td>
<td>4.60 (1.48)</td>
<td>4.74 (1.29)</td>
</tr>
<tr>
<td></td>
<td>5.31 (1.34)</td>
<td>5.39 (0.94)</td>
</tr>
<tr>
<td>Message credibility</td>
<td>4.49 (1.56)</td>
<td>4.89 (1.34)</td>
</tr>
<tr>
<td></td>
<td>5.50 (1.07)</td>
<td>5.14 (1.08)</td>
</tr>
<tr>
<td>Intention to volunteer</td>
<td>2.71 (1.50)</td>
<td>2.83 (1.54)</td>
</tr>
<tr>
<td></td>
<td>2.97 (1.79)</td>
<td>3.06 (1.56)</td>
</tr>
</tbody>
</table>

Note: Cell numbers are means and standard deviations (in parentheses) for each experimental condition.

The correlations in Table 2 indicate that levels of altruism were significantly correlated with all the dependent variables. However, no significant relationships emerged between levels of consideration of future consequences and the dependent variables.

Table 2. Correlations

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Altruism</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Consideration of future consequences</td>
<td>.19*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Attitude toward the message</td>
<td>.30**</td>
<td>.12</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Attitude toward the brand</td>
<td>.30**</td>
<td>.04</td>
<td>.72**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Message credibility</td>
<td>.16*</td>
<td>.02</td>
<td>.59**</td>
<td>.43**</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>6. Intention to volunteer</td>
<td>.37**</td>
<td>.05</td>
<td>.39**</td>
<td>.47**</td>
<td>.15</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: * p < .05, ** p < .01 (2-tailed)
Research Question

The main goal of the current study was to examine the impact of employing various levels of social distance and temporal distance. RQ1 explored if there were any differences for attitudes toward the message, attitudes toward the brand and intentions to volunteer in response to messages with different levels of social distance and temporal distance. An analysis of variance (ANOVA) showed a significant main effect for condition, Wilks’ $\Lambda = .89, F(9, 375) = 2, p < .05$, partial $\eta^2 = .04$. Subsequent univariate analyses revealed a significant main effect for attitude toward the message, $F(3, 160) = 3.63, p < .05$, partial $\eta^2 = .06$, a significant main effect for attitude toward the brand, $F(3, 160) = 3.97, p < .01$, partial $\eta^2 = .07$, but no significant effect for intentions to volunteer, $F(3, 160) = .37, p = .77$, partial $\eta^2 = .01$. Post-hoc analyses illustrated in Table 3 indicate that these differences were mainly due to levels of social distance. Participants exposed to other-benefit appeals reported more positive attitudes toward the message and more positive attitudes toward the brand.

Table 3. Attitude toward the message and attitude toward the brand: Main effect of condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-benefit,</td>
</tr>
<tr>
<td></td>
<td>Near-future</td>
</tr>
<tr>
<td>Attitude toward the</td>
<td>4.33 (.17) a</td>
</tr>
<tr>
<td>message</td>
<td></td>
</tr>
<tr>
<td>Attitude toward the</td>
<td>4.59 (.20) a</td>
</tr>
<tr>
<td>brand</td>
<td></td>
</tr>
</tbody>
</table>

Note: Means and standard errors (in parentheses) with no subscript in common differ at $p < .05$. 


Hypotheses Testing

The impact of levels of psychological distance was examined to determine the effect of employing similar versus dissimilar levels of social and temporal distance. H1 posits that messages employing the same level of psychological distance (self-benefit, near-future appeal, and other-benefit, distant-future appeal) will elicit (a) more positive attitudes toward the message, (b) more positive attitudes toward the brand, (c) and higher intentions to volunteer than messages with alternate levels of psychological distance (self-benefit, distant-future appeal, and other-benefit, near-future appeal).

Messages with low social and low temporal distance and messages with high social and high temporal distance were categorized as congruent, whereas messages with low temporal and high social distance or high temporal and low social distance were categorized as incongruent. An independent sample t-test showed that messages with congruent levels of psychological distance did not differ from messages with incongruent levels of psychological distance as a function of attitudes toward the message, $t(159) = .81, p = .91$, attitudes toward the brand, $t(158) = .08, p = .80$, or intentions to volunteer, $t(158) = .02, p = .53$. Therefore, H1 was not supported.

In H2 and H3, participants’ level of consideration of future consequences was hypothesized to have an impact on message evaluations. H2 predicted that, controlling for levels of altruism, for individuals with low consideration of future consequences, a message with a near-future and self-benefit appeal would result in (a) more positive attitudes toward the message, (b) more positive attitudes toward the brand, (c) and higher intentions to volunteer than messages with a near-future and other-benefit appeal or messages with distant-future appeals.
The predictions of H3 suggested that, controlling for altruism, for participants with high consideration of future consequences, a message with a distant-future appeal would result in (a) more positive attitudes toward the message, (b) more positive attitudes toward the brand, (c) and higher intentions to volunteer.

The variable measuring participants’ level of consideration of future consequences was dichotomized to represent high and low groups. Consideration of future consequences and levels of psychological distance were then employed as independent variables and levels of altruism were used as a covariate to conduct a multivariate analysis of covariance (MANCOVA). This analysis did not provide significant main effects for temporal distance, Wilks’ $\Lambda = .99$, $F(3, 149) = .32$, $p = .81$, partial $\eta^2 = .01$, or consideration of future consequences, Wilks’ $\Lambda = .99$, $F(3, 149) = .41$, $p = .75$, partial $\eta^2 = .01$. However, a value of approaching significance emerged for social distance, Wilks’ $\Lambda = .96$, $F(3, 149) = 2.23$, $p = .09$, partial $\eta^2 = .04$, due to differences caused by significant effects as a function of attitudes toward the message, $F(1,159) = 5.17$, $p < .05$, partial $\eta^2 = .03$, and attitudes toward the brand, $F(1,159) = 6.18$, $p < .05$, partial $\eta^2 = .04$. Nonetheless, H2 and H3 were not supported.

H4 suggested that for participants with a high level of altruism, a message with distant-future and other-benefit appeal would result in (a) more positive attitudes toward the message, (b) more positive attitudes toward the brand, (c) and higher intentions to volunteer than a message with a distant-future and self-benefit appeal or messages with near-future appeals. The variable measuring altruism was dichotomized to represent high levels and low levels of altruism. A MANCOVA with altruism, social distance and temporal distance as the independent variables was conducted to examine participants’ attitude toward the message, attitude toward
the brand, and intention to volunteer. This analysis did not yield significant main effects. Therefore, H4 was not supported.

**Additional Analyses**

Further analyses were conducted to examine in more detail the differences that emerged for social distance. A 2 (social distance) X 2 (temporal distance) X 2 (gender) MANCOVA, controlling for altruism, was conducted to examine participants’ attitude toward the message, attitude toward the brand, message credibility and intention to volunteer. This analysis revealed a significant main effect for social distance, Wilks’ $\Lambda = .91, F (4, 147) = 3.48, p < .01$, partial $\eta^2 = .09$, a significant main effect for gender, Wilks’ $\Lambda = .91, F (4, 147) = 3.44, p = .01$, partial $\eta^2 = .09$, and a significant social distance X gender interaction, Wilks’ $\Lambda = .90, F (4, 147) = 3.86, p < .01$, partial $\eta^2 = .09$.

The univariate analyses for social distance revealed a significant main effect for attitude toward the message, with an other-benefit appeal yielding more positive attitudes toward the message ($M = 4.73, SE = .12$), than a self-benefit appeal ($M = 4.29, SE = .14$), $F (1, 150) = 5.60, p < .05$, partial $\eta^2 = .04$. Along the same lines, an other-benefit appeal revealed more positive attitudes toward the brand ($M = 5.28, SE = .15$) than a self-benefit appeal ($M = 4.56, SE = .17$), $F (1, 150) = 9.97, p < .01$, partial $\eta^2 = .06$. Furthermore, an other-benefit appeal revealed higher message credibility ($M = 5.28, SE = .16$) than a self-benefit appeal ($M = 5.28, SE = .16$), $F (1, 150) = 4.22, p < .05$, partial $\eta^2 = .03$.

The univariate analyses for gender depicted a significant main effect for attitudes toward the message, with females reporting significantly more positive attitudes toward the message ($M = 4.72, SE = .09$) than did males ($M = 4.30, SE = .17$), $F (1, 150) = 4.86, p < .05$, partial $\eta^2 = .03$. 
Finally, subsequent univariate analyses for the social distance X gender interaction showed a significant main effect for intentions to volunteer, $F(1, 150) = 9.54, p < .01$, partial $\eta^2 = .06$. As illustrated in Figure 1, female participants reported higher intentions to volunteer when exposed to an other-benefit appeal ($M = 3.35, SE = .20$) as opposed to a self-benefit appeal ($M = 2.65, SE = .18$). Conversely, male participants reported higher intentions to volunteer when exposed to a message with a self-benefit appeal ($M = 3.24, SE = .36$) as opposed to an other-benefit appeal ($M = 2.27, SE = .31$).

Figure 1. Social Distance X Gender Interaction
CHAPTER 5

Discussion

The main goal of the current study was to explore how messages varying in levels of time focus and social closeness may produce different responses from participants within the context of advertising. More specifically, this experiment sought to test the persuasive effect of exposure to prosocial messages highlighting either a self-benefit appeal or an other-benefit appeal combined with the presence of temporal primes that either emphasize the action should take place in the near future or the distant future. Based on previous research on psychological distance and construal level theory, it was predicted that messages employing the same level of psychological distance would elicit more favorable evaluations due to the fluency expected to result from this appeal. In addition, the fit effect between participants’ own focus and the message claims was expected to affect attitudes toward the message, attitudes toward the brand, and intentions to comply with the message.

An experiment consisting of a questionnaire and exposure to one of four versions of an advertising message revealed modest findings about the use of social distance in advertising messages encouraging prosocial behaviors. The results obtained serve to confirm previous findings on the role of social distance, but no conclusions could be drawn to assess the impact of levels of temporal distance due to the inconclusive manipulation of levels of time focus.

Manipulation measures indicated that participants could not clearly identify the temporal focus employed in the message they were exposed to. Messages with a near-future appeal did not differ from messages containing a distant-future appeal. This might have occurred because
the measure lacked clarity and participants’ perception of time determined their responses. That is, some individuals may have perceived the claim “this summer” as either close in the future, or distant, depending on their own judgment. Thus, leading to inconsistency within conditions for the manipulation measure. Previous research on psychological distance in advertising by Martin, Gnoth and Strong (2009) has successfully measured temporal manipulations with this measure. However, the current study differed in the temporal primes employed in the message. Instead of creating levels of temporal distance claiming “now” or “tomorrow” for low distance, the claims encouraged the reader to “apply now for the summer 2012 program.” The claims selected for the current study were intended to help maintain ecological validity, however, they appear to have negatively affected the clear identification of a time focus. In a college environment, participants would expect to participate in a volunteering training program during the course of the summer, rather than immediately after message exposure. Consequently, manipulating temporal distance in a believable way posed methodological challenges that should be considered in future studies. Nonetheless, significant findings were obtained in response to the effective manipulation of social distance.

Overall findings for RQ1 indicated that participants’ responses varied depending on the message they were exposed. Messages with other-benefit appeals received more positive evaluations than messages with self-benefit appeals. The prosocial nature of the messages is consistent with participants’ tendency to have more positive evaluations of a message with a focus on others rather than the self. However, message evaluations were not significantly impacted by temporal primes.
The sensitive nature of manipulating participants’ time orientation had a negative impact on the ability of the current study to provide solid evidence for the role of temporal orientation. For H1, no evidence could be obtained for the persuasive effect of employing similar versus dissimilar levels of psychological distance. There were no significant differences between same-level and alternate-level of psychological distance matches for the main dependent variables. Rather than contradicting the propositions of psychological distance and construal level theory (Trope & Liberman, 2003), this result could be due to the failure of temporal distance manipulations. Inconsistencies in participants’ time focus might have led to unobservable effects based on levels of psychological distance.

Following the same pattern, no evidence was obtained for H2 regarding the persuasive impact of the match between participants’ own focus and the level of psychological distance of message claims. A low level of consideration of future consequences did not lead to higher persuasion under exposure to a self-benefit and a near-future appeal. Research on this personality trait indicates that people with low consideration of future consequences should be more focused on immediate needs and concerns (Orbell & Hagger, 2006). Moreover, the findings by Meijers and Stapel (2011) suggested that the match between temporal orientation and social target should encourage prosocial choices (in a sustainability context). In contrast, no confirming evidence was found in the current experiment. Perhaps the conditions required to trigger this focus were unmet under the circumstances of the present study. A stronger, and clearer account of both social and temporal distance levels of could yield alternative results.

Along the same lines, H3 suggested that individuals with a high level of consideration of future consequences would be more persuaded by messages with high levels of psychological
distance. Although this hypothesis was not supported, it should be noted that consideration of future consequences is a personality trait pertinent to temporal focus. Therefore, the challenges of manipulating temporal levels may be the direct cause of inconclusive evidence on the role of consideration of future consequences hypothesized for H2 and H3.

Due to the prosocial nature of the communication, H4 predicted that altruistic values would have an impact on message evaluations. Participants reporting high levels of altruism were expected to provide more favorable evaluations of a message with high-levels of psychological distance. Interestingly, no significant evidence was obtained for this prediction.

Marketing appeals that emphasize the benefits received by the people in need are considered instances of high-level social distance, and high levels of psychological distance are associated with abstract construals. Previous research indicates that abstract construals highlight individuals’ values and central traits (Agerström and Björklund, 2009). However, possessing high altruistic values did not lead to a higher degree of persuasiveness. Although the evidence is not significant, the pattern in the means associated with each condition suggests that, overall, participants with high levels of altruism had more positive evaluations. It could be possible that a higher dosage of social and temporal primes were needed to observe a clearer distinction between high and low altruism groups.

Further analyses suggested that differences between groups were the result of a gender effect. Consistent with previous research on prosocial advertising (Brunel & Nelson, 2000), the current study showed that levels of social distance were interacting with gender such that women were responding more positively to other-benefit appeals while males responded more favorably to self-benefit appeals. Females’ tendency to be more caring and person-oriented than males
makes other-benefit appeals more likely to evoke favorable responses (Hornikx, Hendriks & Thijzen, 2009). Arguably, gender and worldviews could be the leading factors causing this interaction (Brunel & Nelson, 2000). Furthermore, Cross and Madson (1997) sustain that females are associated with interdependent self-construals whereas males are associated with independent self-construals. Gender differences in cognition, emotion, and self-construals affirm the likelihood of obtaining this gender effect.

**Implications**

The main implication proposed by the current study is that, by itself, the fit between levels of psychological distance is not sufficient to produce fluency that translates into persuasion. The findings from the current experiment support the propositions of psychological distance and construal level theory by reinforcing the notion that levels of psychological distance operate differently. The findings could only support this argument for social distance but not for temporal distance. Furthermore, it can be concluded that the match between participants’ focus and the level of psychological distance of message claims is not sufficient to heighten attitudes toward the message, attitudes toward the brand or intentions to volunteer.

At the practical level, it is recommended that marketers elaborate messages emphasizing the benefits received by the people in need. Highlighting the benefits received by the contributor or the donor might lower their attitudes toward the message and their attitudes toward the brand. Both present-focused and future-focused participants responded in a similar way to measures of attitude toward the message and attitude toward the brand. Although males may be more self-benefit driven, overall findings suggest employing an other-benefit appeal.
Limitations and Future Research

Evidently, multiple limitations restrain the ability of the current study to provide a full picture of how levels of psychological distance operate. The relationship between social and temporal distance could not be elucidated as intended due to the inconclusive manipulation of temporal distance. Manipulations of temporal distance should be designed meticulously in future studies, considering the subtlety of inducing this mental state in certain contexts without losing ecological validity. Moreover, increasing the dosage of temporal primes or recurring to priming activities could satisfy this condition in order to test temporal distance appropriately.

Another limitation of the current study is the contextual setting of the persuasive communication. Accurate evaluations of prosocial messages can be difficult to obtain since social desirability issues may dominate participants’ responses. In addition, persuasive techniques for prosocial communications may only be applicable to specific types of behaviors. Marketing requests for volunteering may differ from appeals for behaviors such as blood donation, organ donation, and charity ads. Future studies could test additional scenarios to expand the generalizability of the findings.

In addition, the sample under study composed of only undergraduate students could be providing a different picture of psychological distance effects in the context of prosocial communications. In the same way, the artificial nature of experimental settings might be offering results that could otherwise produce a different response in more naturalistic settings.

Conclusion

This research sought to examine the understudied relationship between temporal distance and social distance in the realm of advertising. In an attempt to rationalize the persuasive impact
of combined levels of psychological distance, the current study provides modest evidence supporting previous findings about the role of social distance in communications messages. Results indicate that attitudes and intentions in response to prosocial messages can vary as a function of social distance. Using abstract mental construals, elicited from high levels of psychological distance, can lead to more favorable evaluations of a message and more positive attitudes toward a brand. Due to differences in self-construals, males and females seem to respond differently to prosocial appeals. However, the overall picture suggests that high levels of social distance produced more positive evaluations.
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Appendix A:

Stimulus Messages
YOU CAN BENEFIT FROM AMERICORPS
APPLIED FOR 2013 AVAILABLE THIS FALL!

AmeriCorps is an organization with programs aimed to meet critical needs in communities all across America. Each year, AmeriCorps offers 75,000 opportunities for adults of all ages and backgrounds to serve through a network of partnerships with local and national nonprofit groups.

BY JOINING AMERICORPS, YOU CAN RECEIVE:
✓ Skills training
✓ Experience in your field of interest
✓ Opportunities to expand your professional network
✓ Award to pay for college, graduate school, or student loans

TO JOIN US AND RECEIVE THESE BENEFITS, PLEASE CONSIDER APPLYING FOR THE 2013 TRAINING PROGRAM.
LOG IN TO AMERICORPS.GOV

YOU CAN BENEFIT FROM AMERICORPS
APPLY NOW FOR THE SUMMER 2012 PROGRAM!

AmeriCorps is an organization with programs aimed to meet critical needs in communities all across America. Each year, AmeriCorps offers 75,000 opportunities for adults of all ages and backgrounds to serve through a network of partnerships with local and national nonprofit groups.

BY JOINING AMERICORPS, YOU CAN RECEIVE:
✓ Skills training
✓ Experience in your field of interest
✓ Opportunities to expand your professional network
✓ Award to pay for college, graduate school, or student loans

TO JOIN US AND RECEIVE THESE BENEFITS, PLEASE APPLY NOW FOR THE 2012 SUMMER TRAINING PROGRAM.
LOG IN TO AMERICORPS.GOV
AmeriCorps is an organization with programs aimed to meet critical needs in communities all across America. Each year, AmeriCorps offers 75,000 opportunities for adults of all ages and backgrounds to serve through a network of partnerships with local and national nonprofit groups.

**THROUGH AMERICORPS, COMMUNITIES RECEIVE:**

- Disaster aid
- Education
- Support from local and national nonprofit groups
- Program development to meet specific needs

**TO HELP COMMUNITIES RECEIVE THESE BENEFITS, PLEASE APPLY NOW FOR THE 2013 SUMMER TRAINING PROGRAM.**

**LOG IN TO AMERICORPS.GOV**

**APPLICATIONS FOR 2013 AVAILABLE THIS FALL!**
Appendix B:

Questionnaire
Your class has been selected to participate in this study. You will be asked to complete a questionnaire and review a message. When completing the questionnaire, please read the instructions carefully and respond to all of the items. Take your time to read each statement and keep in mind that there are no right or wrong answers.

PLEASE DO NOT SKIP PAGES AND DO NOT GO BACKWARD TO PRIOR PAGES.

We will gather and report the data for the entire group with no reference to individual persons. Your anonymity is guaranteed and all of the information that you provide will be confidential.

When you have finished the questionnaire, please take all materials to the researcher. Thank you for your participation. Your input is very valuable!
Please indicate whether or not the statement is characteristic of you.

You can’t really plan for the future because things change so much.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

When I want to achieve something, I set goals and consider specific means for reaching them.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

I do things impulsively.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

Meeting tomorrow’s deadlines and doing other necessary work comes before tonight’s play.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

Since whatever will be will be, it doesn’t really matter what I do.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

It upsets me to be late for appointments.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

I make decisions on the spur of the moment.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

I complete projects on time by making steady progress.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

My life path is controlled by forces I cannot influence.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

I keep working at difficult, uninteresting tasks if they will help me get ahead.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

It is important to put excitement in my life.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

I am able to resist temptations when I know that there is work to be done.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

It doesn’t make sense to worry about the future, there's nothing that I can do about it anyway.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

I make lists of things to do.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

Taking risks keeps my life from becoming boring.
  Very untrue of me  1  2  3  4  5  6  7  Very true of me

Please indicate the degree to which you agree or disagree with the following statements.

If I could help save somebody’s life, I would do everything possible.
  Strongly disagree  1  2  3  4  5  6  7  Strongly agree
I enjoy doing small favors every day for the people I care about.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Helping others is one of the most important aspects of life.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

I enjoy working for the welfare of others.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

My family tends to do what we can to help those less fortunate than ourselves.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

I agree with the old saying, “It is better to give than to receive.”

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Please indicate the degree to which the statement is characteristic of you.

Often I engage in a particular behavior in order to achieve outcomes that may not result for many years.

Very untrue of me 1 2 3 4 5 6 7 Very true of me

I only act to satisfy immediate concerns, figuring the future will take care of itself.

Very untrue of me 1 2 3 4 5 6 7 Very true of me

My behavior is only influenced by the immediate (i.e., a matter of days or weeks) outcomes of my actions.

Very untrue of me 1 2 3 4 5 6 7 Very true of me

My convenience is a big factor in the decision I make of the actions I take.

Very untrue of me 1 2 3 4 5 6 7 Very true of me

I generally ignore warnings about possible future problems because I think the problems will be resolved before they reach crisis level.

Very untrue of me 1 2 3 4 5 6 7 Very true of me

I think that sacrificing now is usually unnecessary since future outcomes can be dealt with at a later time.

Very untrue of me 1 2 3 4 5 6 7 Very true of me

I only act to satisfy immediate concerns, figuring that I will take care of future problems that may occur at a later date.

Very untrue of me 1 2 3 4 5 6 7 Very true of me

Since my day to day work has specific outcomes, it is more important to me than behavior that has distant outcomes.

Very untrue of me 1 2 3 4 5 6 7 Very true of me
How would you evaluate the message you just read?

- unpleasant
- unlikable
- boring
- tasteless
- bad
- not credible
- not believable
- not truthful
- not convincing
- not compelling
- difficult to understand
- pleasant
- likable
- interesting
- tasteful
- good
- very credible
- very believable
- very truthful
- very convincing
- very compelling
- easy to understand

Please list all thoughts and feelings that came to your mind while reading the message. In the lines provided below, please write down the first thought/idea that comes to your mind in the first box, the second thought/idea in the second, etc. Please state your thoughts and ideas as concisely as possible... a phrase is sufficient. Ignore spelling, grammar, and punctuation. There are no right or wrong answers. You will have about two minutes to write up to six thoughts.
How would you evaluate Americorps? Please use the scales below to indicate your response.

<table>
<thead>
<tr>
<th>Unappealing</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Appealing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Good</td>
</tr>
<tr>
<td>Unpleasant</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Pleasant</td>
</tr>
<tr>
<td>Unfavorable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Favorable</td>
</tr>
<tr>
<td>Unlikable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Likable</td>
</tr>
</tbody>
</table>

How familiar are you with Americorps?
- Not familiar at all   1  2  3  4  5  6  7  Very familiar

How knowledgeable are you about Americorps?
- Not knowledgeable at all 1  2  3  4  5  6  7  Very knowledgeable

Using the scale provided, please respond to the following statements.

I am considering the possibility of volunteering for Americorps.
  - Strongly disagree 1  2  3  4  5  6  7  Strongly agree

I have been meaning to join Americorps to become a volunteer.
  - Strongly disagree 1  2  3  4  5  6  7  Strongly agree

I would like to receive information about Americorps.
  - Strongly disagree 1  2  3  4  5  6  7  Strongly agree

I am interested in volunteering for Americorps.
  - Strongly disagree 1  2  3  4  5  6  7  Strongly agree

At some point in the future, I would like to do volunteer work at Americorps.
  - Strongly disagree 1  2  3  4  5  6  7  Strongly agree

Later in life, I would like to learn more about volunteering opportunities in Americorps.
  - Strongly disagree 1  2  3  4  5  6  7  Strongly agree

I would like to join Americorps later in the future.
  - Strongly disagree 1  2  3  4  5  6  7  Strongly agree

Please complete the following items by placing a mark in one of the alternatives provided.

I have done volunteer work in the past.
  ___ Yes  ___ No

I am currently doing volunteer work.
  ___ Yes  ___ No
The message I just read encourages the reader to apply for Americorps…

in the near future 1 2 3 4 5 6 7 in the distant future

The message I just read offers benefits to…

me 1 2 3 4 5 6 7 others

Please indicate your age: __________

Please indicate your gender: ___ Female ___ Male ___ Prefer not to answer

What is your class standing?

___ Freshman ___ Junior ___ Graduate Student

___ Sophomore ___ Senior

What racial or ethnic group best describes you?

___ Asian ___ Hispanic or Latino ___ White

___ Black ___ Native American ___ Other

Are you an international student? ___ Yes ___ No

Please return the questionnaire to the investigator.
Thank you for your participation!