

The Effects of Abstract Thought on Perceived Closeness to Others

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Abstract

Fitzsimons and Shah (2008) demonstrate that relationships are used as instruments to further goals, and that helpful others are drawn closer than those harmful others. Other research looks at when goals are more likely to be pursued (Fujita, Trope, Liberman, & Levin-Sagi, 2006). Abstract thought leads to better goal pursuit than concrete thought. People thinking abstractly should show the pattern found in Fitzsimons and Shah (2008) more than those at the concrete level. One should form relationships more strategically at the abstract level than a person who is thinking concretely. To test this, my study design included a questionnaire of goals and asked for names of Helpers and Hurters of those goals. A task was completed to invoke a tendency for abstract or concrete thought. Participants list a category (abstract) or an exemplar (concrete) for a given word 40 times. Finally, a closeness questionnaire asked participants to rate closeness to the Helpers and Hurters listed previously. Fitzsimons and Shah's (2008) work was replicated, but level of abstraction did not have an impact on closeness ratings.

Dedicated to my dad, for his support and constant encouragement.

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## The Effects of Abstract Thought on Perceived Closeness to Others

Throughout one's life many relationships form and others dissipate. Relationships can vary from brief acquaintances to lasting romantic partnerships. It is unclear to what extent outside motivations influence relationships or why some relationships last longer than others. Goal pursuit may be one determining factor that influences views of others. Research has looked at these ideas in different parts. One study has made a connection between perceived closeness to others and their instrumentality toward current goals (Fitzsimons & Shah, 2008). Other research has shown that goal pursuit varies depending on the level at which one thinks, or his mental abstraction (Fujita, Trope, Liberman, & Levin-Sagi, 2006b). In the study described below, I intend to explore the opening questions by connecting existing research involving goals to show that there is a connection between mental abstraction and closeness to others. In other words, construal levels will impact when a person chooses to draw others closer or push them away. Mental abstraction should increase the likelihood that people will draw helpful others closer.

### *Construal Level Theory*

A construal is a subjective mental representation of an event, object or situation. Construals vary by person, and can explain why two people can watch the very same sporting event but come away from the game with two very different views of what they just watched (Hastorf & Cantril, 1954). Being a diehard Ohio State Buckeyes fan, my view of a football game may differ from a fan of the opposing team, say a Michigan football fan for example, as a result of our different construals of the same event. To



show this idea experimentally, Hastorf and Cantril (1954) had participants watch a Dartmouth versus Princeton football game. While watching, they tabulated the amount of penalties that occurred during the game and stated whether the penalties were “mild” or “flagrant.” Students at Princeton reported that Dartmouth had more than twice as many penalties than Princeton and that more of them were flagrant as opposed to mild penalties, while Dartmouth students reported seeing just the opposite. What school they were from impacted their construals of the same game.

The above example explains how construals can vary by person. Research also suggests that construals can vary within the same person. Specifically, Trope and Liberman (2003) state that temporal distance affects individuals’ construals of future events. Temporal distance can be explained as when an event occurs in time, either near-future or distant-future, as well as near- and distant-past (Trope & Liberman, 2003). They show that temporal distance can change reactions to events in the distant-future by altering the way the events are construed.

Construal Level Theory (CLT; Trope & Liberman, 2003; Trope, Liberman, & Wakslak, 2007; Liberman, Trope, & Stephan, 2007; Liberman & Trope, 2008) proposes that there are two levels of abstraction at which one can construe events: the high level and the low level. High level construals are used to describe more distant-future events while low level construals are used to describe more near-future events. The high level can be described as abstract, simple, primary, and goal-relevant; whereas, the low level is more concrete, complex, secondary, and goal-irrelevant. These characteristics are used to explain how events are construed. The basic idea of CLT (Trope & Liberman, 2003) is

that temporal distance influences how one represents a certain event, either abstractly or concretely, and explains when and why people make use of one level over the other.

To exemplify how temporal distance affects mental construal, Liberman, Sagristano, and Trope (2002) had participants group objects associated with near- and distant-future events into various categories. Those in the distant condition were predicted to respond with fewer, broader, and more abstract categories than those in the near future condition. Participants were presented with scenarios such as camping or moving out and were provided the time the event would take place. They were then asked to group a list of objects related to the event (e.g., camping trip: tent, sleeping bag, boots). Results confirmed that objects were categorized into fewer, more abstract categories when participants imagined the events occurring in the distant rather than near future, suggesting that people's construals became more abstract with time.

To demonstrate the effects of construal on judgments and decisions, Trope and Liberman (2000) presented participants with one of two vignettes: one about a more interesting job with an uninteresting training and the second about an uninteresting job with a more interesting training. They were asked to imagine thinking about these jobs in the near-future, which is represented more concretely, or distant-future, which is represented more abstractly. Participants were then asked to say which job sounded more interesting to them on a scale of 1 (not at all) to 9 (very much). Findings show that the interesting job became more desirable in the more distant condition while the uninteresting job was favored less with time. This shows that those thinking abstractly were more likely to choose a desirable job over those thinking concretely.

Sagrignano, Trope, and Liberman (2002) also look at preferences and construal level by applying construals to the idea of gambling. They were able to show how temporal distance can impact how one makes a decision. They explain this as follows; “Temporal distance changes gambling preferences because people think of probability as more important in the near-future and of pay offs as more important in the distant-future” (p. 370). They showed this by having participants read descriptions of gambles that would take place either that day or two months later. Twelve bets were presented to the participants with three levels of probability and four levels of expected value. Participants were then asked to provide three reasons why they would or would not like to play each of the gambles. The results reflect the idea that near-future (low level) gambles are made in terms of the probability of winning and distant-future (high level) gambles are made in terms of the payoffs of each gamble (Sagrignano et al., 2002).

Beyond time, a variety of other psychological distances have also been shown to impact which construal level is used. The more distant an object is in time, space, social distance or hypotheticality, the more abstractly (vs. concretely) it is viewed (Trope, Liberman & Wakslak, 2007). Fujita, Henderson, Eng, Trope, & Liberman (2006a) showed this idea by having participants watch a video of two students interacting with one another. Participants were asked to write a written description of what went on in the video. Participants were in one of two conditions: the spatially near, the students in the video were from the same campus as the participants, or the spatially distant where the students in the video were from the same campus but on a study abroad trip in another country. Those in the distant location condition used more abstract language when writing their descriptions of the video than those in the spatially near condition. This

suggests that other psychological distances beyond time, such as spatial distance, can also impact construals in a manner consistent with CLT (e.g., Trope, Liberman, & Wakslak, 2007).

*Construal Levels, Goal Pursuit, and Self-Control*

CLT (Trope & Liberman, 2003) can also be applied to decision-making in terms of goal pursuit, particularly in the context of self-control conflicts. Fujita et al. (2006b) suggest that self-control requires sacrificing local (near) rewards in favor of global (distant) goals. One should be better able to deal with a self-control conflict at the high level of abstraction than at the low level because at higher levels one places a greater weight on global goals over local rewards. Being aware of the two levels, and maintaining high over low, is very beneficial in the pursuit of a goal. For example, two students, Abby and Mike have an exam coming up. Abby is thinking abstractly and recognizes that studying now will lead to a better grade and she is focused on a broader global goal of academic success. Mike, on the other hand, is at the low level and thinking concretely. He is distracted by the thought of going to a party instead of studying for the exam. He is thinking more narrowly on local goals and disregarding the more global concern of the consequences of not studying for the exam. Thus, when one is construing events at the high level of abstraction, he is more likely to see these events as they relate to his global goal, and he would then display better self-control in pursuit of that goal. At the low level, one is more likely to focus on the local reward and lack the self-control needed to reach that goal (Fujita et al., 2006b).

An important contribution of Fujita et al. (2006b) was to demonstrate empirically that self-control can vary as a function of construals. When one is at the high level, one is more focused on global goals and able to look past the local rewards that conflict with the global goal. Fujita et al. (2006b) used many methods of manipulating construal level. Each task gets participants to progressively think more abstractly (high level) or more concretely (low level). One manipulation they used was the why/how task (Freitas, Gollwitzer, & Trope, 2004). This task asks participants to discuss *how* they engage in actions towards a goal or *why* they do so. The why question activates the high level of abstraction and the how question activates the low level of abstraction. Another way to manipulate construal level is through a category and exemplar task (Fujita et al., 2006b), which I adopt in the present study. Participants are presented with 40 objects and are asked to list either a category to which the object belongs or an example of that object. Listing categories activates the high level of abstraction and listing examples activates the low level of abstraction.

Fujita et al. (2006b) showed that these manipulations of high levels led to greater self-control than low levels in a number of studies. For example, in one study, participants were first told they would be completing a personality study and that squeezing a handgrip would be the measurement used. The longer participants were able to squeeze the handgrip, the more data could be collected. A baseline squeeze time was taken for each participant. Participants were then given the why/how task to induce a level of manipulation. Following the manipulation, they were asked to grip the handgrip a second time for as long as they could while dummy electrodes were attached to them. Participants were told the electrodes would relay information to the experimenter about

their personalities. Participants were told the longer they held the handgrip the more likely an accurate reading would be taken from the electrodes. It was found that participants in the high level condition were able to hold the handgrip on average 11.1 seconds more than the baseline, while low level participants held the handgrip 4.9 seconds shorter than the baseline. This study is supporting evidence that high level construals induce a tendency to focus more on the global goal (holding the handgrip as long as possible to receive the most accurate data possible). Fujita et al. (2006b, Study 1) also showed that at the high level, participants were more likely to make preferences reflecting self-control than those at the low level.

Additionally, how much one values the goal should be a determining factor in the effect of construal level on self-control. If a goal is not valued, it is not important to achieve the goal and therefore does not create a self-control conflict. People should exert self-control only in situations in which they want to achieve valued goals. An example of this can be seen in Fujita et al.'s research (2006b, Study 4). Participants were manipulated to construe at high and low level construals and then were asked to evaluate a variety of temptations. At the high level participants rated temptations less positively than those at lower levels. However, this was only true of those participants who valued the global goal. If the goal was not valued, there was no construal difference found on how the temptations were evaluated.

In summary, all of this research suggests that construals can vary between people as well as within a person. CLT (Trope & Liberman, 2003) states that there are two main levels, the high and the low, at which individuals can construe events. CLT also provides an explanation of when these levels are more likely to be used. Fujita et al. (2006b)

suggest that high level construals promote self-control. What is less known is by what process high level construals increase people's self-control. I examine this question by looking at the impact of construal levels on people's strategic use of their social relationships.

### *Relationship Research*

In the area of social relationships, goal pursuit can be helped or hindered by social relationships. Fitzsimons and Shah (2008) have examined how people manage their closeness to others to promote their goals. They suggest that actions within relationships are influenced based on how much these relationships are beneficial and instrumental to achieving goals (Fitzsimons & Shah, 2008). These researchers showed that in the pursuit of a goal, a person will feel closer to someone who is beneficial to one's goal than to one who deters them from that goal.

Friendship is an important determining factor in how close one views others. Fitzsimons and Shah (2008) show that in the pursuit of a goal, however, friendship may not be the only determining factor of closeness. An enemy may be pulled closer if that enemy can advance the pursuit of a goal. A good friend may be viewed as more distant than the enemy if they do not help with the goal pursuit. Thus, closeness ratings based on goal pursuit should be independent of friendship. If a person is not beneficial to goal pursuit, whether a friend or enemy, that person will be avoided and seen as more distant (Fitzsimons & Shah, 2008).

To illustrate this idea, suppose a hypothetical character named Jane and her two coworkers, Bob and Joe. Jane is on a diet and has been avoiding fast food. During lunch

breaks, Bob wants to go out to lunch at burger places, whereas Joe brings a healthier lunch option from home. According to Fitzsimons and Shah (2008), Jane should feel closer to Joe than to Bob who is detrimental to her goal of dieting. If Jane is serious about obtaining her goal, she will associate herself with Joe because he provides support in her progress toward her goal.

Fitzsimons and Shah (2008) were able to demonstrate this basic example in their studies. The goal of their experiments was to show that individuals engage in relationships, whether with a friend or not, to better aid the pursuit of current goals. They were able to do this by priming an achievement goal or a control, and then had participants rate closeness to an achievement goal helper or an achievement goal hurter. Specifically, participants were asked to list one person who helps achieve an important goal and one person who does not. After completing several fillers, participants completed a scrambled sentence task, which primed either an achievement goal or a control. Unscrambling sentences containing words focusing on achievement has been shown in past research to promote a goal achievement state of mind (e.g., Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001). Participants then completed a questionnaire that included questions about closeness and importance of each relationship that they listed earlier. Results showed that the instrumental other was rated significantly closer than the non-instrumental other following the goal prime. The control condition (no goal prime) participants did not have any significant differences in their closeness ratings. Importantly, relationships with instrumental others were also rated as more important than relationships with non-instrumental others even when controlling for liking.



*The Present Research*

Connecting the above research, I plan to explore the question of whether high or low level construals interacting with people's current goals can affect the closeness people feel to others in their social interactions. Depending on level of abstraction, individuals may choose who to form relationships with, and from whom to distance themselves, in an effort to achieve an important goal. I hypothesize that when thinking abstractly, or at the high level, one forms relationships more strategically than a person who is thinking concretely, or at the low level. When thinking at the low level, one is less likely to think about goals and is less likely to draw closer to those who would help achieve his goals. For example, a student's mother may pester him to get his homework done, but because the student is thinking at the low level and focusing more on the local outcomes (his happiness), he does not see his mother as being beneficial to him. It is more likely that when thinking abstractly the student would appreciate how others might promote his goals (such as getting into a good college). In appreciating that help, one feels closer to the other person and tries to further that relationship to get closer to the goal held. How close a person is kept is all in an effort to achieve a goal or to avoid not achieving that goal. To show that abstractness of thought can motivate changes in perceived closeness to others, research will be conducted using methods as described above.

## Method

### *Overview*

This study was based on the work of others (Fitzsimons & Shah, 2008; Fujita et al., 2006b). By making this study similar to work previously done, I hoped to replicate similar relational closeness results found by Fitzsimons and Shah (2008) and to show construal level (Fujita et al., 2006b) to be a potential cause for my findings. In a preliminary session, participants were asked to provide three goals they were currently pursuing. For each goal, they were then asked to list one person who helps them achieve the goal and one person who hurts them from achieving each goal. Participants then came into the lab about a week later and were asked to complete a construal level manipulation. This manipulation induced a high or low level construal, with each condition randomly assigned. After the manipulation, participants were asked to rate how close they felt to each of the individuals they listed in the preliminary session. I predicted that those in the high level condition would rate those who help goals closer and those who hurt goals farther than those in the low level condition.

### *Participants*

Participants were 87 undergraduate students at The Ohio State University who received partial course credit for their participation. Upon registering for the study, they were sent an email containing a link to complete an online survey. They were then brought into the lab about one week later in groups of 15-20 to complete the manipulation and closeness survey. Participants were randomly assigned to condition.

### *Materials and Procedure*

*Preliminary Session.* Upon volunteering for the study, participants were sent a link to complete an online preliminary session. Participants were asked to list three goals they were currently working towards. For each goal, participants were then asked to name people who support and aid that goal (referred to from here on as Helpers) as well as people who undermine and deter them from that goal (Hurters). I was sure to tell participants that those listed as hurters did not mean they were bad people or not friends with them, just that they were not beneficial to goal pursuit. Participants were then asked to rate how important each goal was to them, as well as how much each person listed helps or hurts them from achieving the corresponding goal. Each set of ratings was on a scale of one through seven (1 being “not important at all”, and 7 being “very important”). A total of six names were collected for use in the second portion of this study. Participants were later asked how close they felt to each of the people they listed in this section. The preliminary session took place before participants came into the lab and was conducted on the participant’s own time and in a location of their choosing. A sample of the survey questions used in the preliminary session can be found in Appendix A.

*Lab Session.* Upon coming to the lab setting in groups of 15-20 students, participants were randomly assigned to construal level (high or low). They then completed the construal level manipulation and dependent measures. Fujita et al. (2006b) supplied the manipulation of abstractness exercise for each participant. Previous research has indicated that this task induces a tendency to construe subsequent events at high and low levels of abstraction (Fujita et al., 2006b). In this exercise, participants were presented with 40 category and exemplar questions (see Appendix B for actual question samples). For example, the word “dog” was given to the participant. At the high level of

abstractness the participant was asked to provide a broader category of the example given by answering the following statement, “Dog is an example of what?” The participant would respond with something like “Animal.” When in the low level condition, the participant was also given the word “dog”, but was asked to give a more specific example of this category. The question would be, “An example of a Dog is what?” The participant would say something like “Poodle”. This category and exemplar task manipulated the level of abstractness of each participant in preparation for the next questionnaire that dealt with the dependent variable.

All participants were then presented with another survey that asked questions about how close the participant felt to the people he or she listed in the preliminary session. This questionnaire (found in Appendix C) closely follows the methods used by Fitzsimons and Shah (2008). Participants were asked the question, “On a scale of 1-7, how close do you feel to (Person) (1 being “not close at all”, and 7 being “very close”)?” The person listed in the question was taken from the individual participant’s preliminary session answers and inserted beforehand into each individualized questionnaire. The closeness survey questions were randomly ordered so Helpers and Hurters were mixed and in no particular order. It was expected that a relationship beneficial to achieving one’s goal would receive a closeness score higher than a non-beneficial relationship. I expected this trend to be even stronger when one was in the high level condition more than when one was in the low level condition. This demonstrates the strategic use of significant others in the pursuit of an important goal. Fitzsimons and Shah (2008) also made use of Aron, Aron, and Smollan’s (1992) Inclusion of Others in the Self (IOS) scale. I used this as well as a second measure of closeness. This measure asks participants

to choose from several overlapping pairs of circles which pair best depicts their level of closeness with the people listed in the preliminary session. The extent to which the circles overlapped reflected the closeness felt to the person. Choosing the first set of circles that did not touch would suggest a distant rating of closeness. To show extreme closeness the participant would select the seventh set of circles which overlapped almost completely. A sample of this questionnaire can be found in Appendix C. Once the survey was completed, participants were debriefed and dismissed from the session.

## Results

I was interested in knowing if closeness rating to others based on goal pursuit would be impacted by construal level. I asked participants about three goals and helpers and hurters of each of the goals. After completing the manipulation, participants rated closeness to the helpful and hurtful people on two scales. I predicted that helpers would be viewed closer and hurters farther when people construed at high, not low, level construals. The results are as follows.

### *Manipulation Checks*

To begin, I ran several checks to verify participant responses. I wanted to check goal importance and whether or not the people listed were actually helpful or hurtful to achieving the goal. These factors were important to verify so I could make assumptions necessary for my later analyses.

*Goal importance.* Analyses were run to verify that the goal listed was important to the participant. Each goal's importance was rated on a scale of one to seven, with seven being very important and one being not at all. Goal one had a  $M = 6.83$  ( $SD = .39$ ) with a maximum of 7.00 and a minimum of 5.00, goal two had a  $M = 6.35$  ( $SD = 1.05$ ) with a maximum of 7.00 and a minimum of 2.00, and goal three had a  $M = 5.95$  ( $SD = 1.19$ ) with a maximum of 7.00 and a minimum of 3.00. All of these ratings were significantly above the scale midpoint of 4, all  $t_s(86) > 15.18$ ,  $p_s < .001$ , suggesting that people did indeed list goals that were important to them.

A paired samples t-test was run to see if the importance of each of the three goals was rated significantly different from each other. Goal one importance was higher than

goal two, which was higher than goal three, with all  $t_s (86) > 2.71$ ,  $p_s < .01$ . I will discuss the implications of these significant differences in goal importance below in the context of my primary analyses.

*Helpers & Hurters.* I also looked at whether or not the people listed by the participant were truly helpful or hurtful in achieving the goal. Recall that I used a seven-point scale, with 7 = very helpful and 1 = not helpful at all. Helper 1 had a mean helpful rating of 5.77 (SD = 1.34) with a maximum of 7.00 and a minimum of 1.00. Helper 2's mean helpful rating was 5.75 (SD = 1.07) with a maximum of 7.00 and a minimum of 4.00. Helper 3 was rated as  $M = 5.51$  (SD = 1.16) with a maximum of 7.00 and a minimum of 3.00. Ratings of hurters were also done on a seven-point scale, with 7 = being very hurtful and 1 = not hurtful at all. On average, Hurter 1 was rated as  $M = 3.36$  (SD = 1.55), Hurter 2 was rated as  $M = 3.40$  (SD = 1.55), and Hurter 3 was rated as  $M = 3.30$  (SD = 1.55). There were no significant differences by goal number. A within-subjects analysis of variance revealed there was no significant difference between the helpfulness ratings,  $F(2, 172) = 1.58$ ,  $p = .21$ , and no differences between the hurtfulness ratings,  $F(2, 172) = .14$ ,  $p = .32$ , as a function of the goal.

#### *Data Aggregation*

There were high correlations between the scale rating of closeness and the IOS rating of closeness ( $r$ 's  $> .89$ ,  $p$ 's  $< .001$ ), so I can justify averaging the two rating styles into one mean rating of closeness. All subsequent reported analyses used this mean closeness rating.

*Primary Analyses*

As there were some differences in the mean importance rating of the goals (i.e., goal 1 was rated significantly more important than goal 2, which in turn was significantly more important than goal 3), I adopted two analysis strategies. I first analyzed closeness ratings as a function of construal levels and person (hurt vs. help) aggregating ratings across all three goals. I also analyzed each goal separately to observe any differences by goal. They all have similar findings, but I present all analyses for completeness.

I began by looking at the mean closeness ratings for all three goals averaged together by performing a 2 (construal level; high and low) x 2 (person: hurter vs. helper) mixed-design ANOVA, with construal level as a between subjects variable and person as a within subjects variable. Consistent with findings of Fitzsimons & Shah (2008), there was a main effect of person (hurt vs. help) on closeness ratings,  $F(1, 85) = 29.23, p < .001$ . This showed consistent evidence with Fitzsimons and Shah's (2008) findings that helpers are viewed as closer than hurters. Contrary to my predictions, however, there was no interaction of person (hurt vs. help) and construal level condition on closeness ratings,  $F(1, 85) = 1.52, p = .22$ . There was also no significance of the construal level (condition) effect,  $F(1, 85) = .73, p = .40$  (see Figure 1).

Given significant differences in the rated importance of each goal, I analyzed each goal separately, performing parallel 2 (construal level; high and low) x 2 (person: hurter vs. helper) mixed-design ANOVA, with construal level as a between subjects variable and person as a within subjects variable. Looking at just goal one, there was the predicted main effect of person (hurt vs. help) on closeness ratings,  $F(1, 85) = 17.75, p < .001$ . Once again, helpers were viewed closer than hurters, replicating Fitzsimons and Shah's



(2008) findings. There was, however, no interaction of person (hurt vs. help) and construal level condition on closeness ratings,  $F(1, 85) = 1.59, p = .21$ . There was also no significance of the construal level (condition) effect,  $F(1, 85) = .005, p = .95$  (see Figure 2).

Continuing on to just goal two, there again was a main effect of person (hurt vs. help) on closeness ratings,  $F(1, 85) = 8.52, p = .005$ . Again, helpers were viewed as closer than hurters, replicating Fitzsimons and Shah's (2008) findings. The predicted interaction between person (hurt vs. help) and construal level condition on closeness ratings was not statistically significant,  $F(1, 85) = .50, p = .48$ . There was also no significance of the construal level (condition) effect,  $F(1, 85) = .88, p = .35$  (see Figure 3).

Finally, I looked at goal three. Again, there was the predicted main effect of person (hurt vs. help) on closeness ratings,  $F(1, 85) = 15.15, p < .001$ . Fitzsimons and Shah's (2008) findings of helpers being rated closer than hurters was replicated here as well. Again, contrary to my predictions, however, there was no statistically significant interaction between person (hurt vs. help) and construal level condition on closeness ratings,  $F(1, 85) = .26, p = .61$ . There was a significant construal level (condition) effect,  $F(1, 85) = 5.95, p = .02$  (see Figure 4). Both helpers and hurters were rated as closer in the high level than in the low level.

## Discussion

My hypothesis was that construal levels would impact when a person chooses to draw others closer or push them away based on their instrumentality for valued goals. I thought that those at higher levels would be more likely to draw helpful others closer and to push hurtful others away. My results did support this hypothesis. In general, I found that Helpers were rated as closer than Hurters, regardless of construal level condition. This would suggest that I was able to replicate the findings from Fitzsimons and Shah (2008) in that helpful others are rated as closer than hurtful others. As Fitzsimons and Shah (2008) argued, when a friend is beneficial to achieving one's goal, he or she should be viewed as closer than a person who is hurtful to achieving one's goal. It would be in a person's best interest to be surrounded by those beneficial to their goals and to push away those who are not.

Contrary to my predictions, however, I found little evidence that construal level could impact how and when these closeness ratings were made. Two out of three of our studies did not show the interaction I was looking for. However, goal three had slightly different results. Both helpers and hurters were rated as closer more in the high level than in the low level condition. This finding is not entirely in line with my predictions, as I expected only helpers to be rated as more closely, and not hurters, at high level construals. One explanation for this could be the goal importance rating that was collected in the preliminary session. Recall that goal three was rated as less important than goal one or two. This may suggest that goal importance plays a role in closeness ratings. Perhaps goal three was so low in goal importance that other factors (such as friendship) dominated people's closeness ratings.

The design of my study attempted to bring together two areas of research and potentially use one (Fujita et al., 2006b) to understand when findings from another (Fitzsimons & Shah, 2008) would be relevant. This was not the case, and there are several potential limitations for why the results made have come out the way that they did.

One possible limitation is the effectiveness of the manipulation used. A way to test a manipulation's effectiveness would be to include a manipulation check and my study did not include this step. Based on previous studies utilizing this same manipulation task, I assumed it would be effective and therefore not necessary to include a manipulation check. The absence of a manipulation check makes it unclear whether the manipulation of construal level was effective or not in this study. If it was not, then it is perhaps why the results were not consistent with my predictions. There are possible ways to test the manipulation that may be useful in future studies. One such way would be to have participants answer a questionnaire following the completion of the manipulation. Vallacher and Wegner (1989) developed the Behavioral Identification Form (BIF), which includes multiple-choice questions revealing the action identification level one is at. There are many ways to interpret an event, and they believe these interpretations take on a cognitive hierarchy from low to high level of actions. The low level is focused on how one acts and the high is more of why one acts. Questions would be similar to, "When holding a book, what are you doing?" Participants would then select from two possible responses, "gripping bound pages" or "reading to enhance my knowledge." The first choice would be indicative of the low level (how) and the second choice would be indicative of the high level (why). Depending on these responses, one could check to see

if the participant's responses correspond to the high or low level condition that was intended by the manipulation. Many studies utilize the BIF as a way of measuring at which level a participant is at (Fujita et al., 2006a; Fujita et al., 2006b; Smith & Trope, 2006; Wakslak, Trope, Liberman, & Alony, 2006; Liberman & Trope, 1998).

Another limitation with the present study has to do with whether people were actually viewing closeness of others as a way to promote their goals. My results did suggest that helpers were seen as more close than hurters. However, it is not clear whether this reflects people being strategic with their closeness to others, or it reflects some confound. Fitzsimons and Shah (2008), a main source of replication in my study, have shown that people perceive hurters and helpers farther or closer irrespective of friendships. However, due to my study design, I cannot tell if in my study helpers were indeed more likely to be friends, and hurters less likely. Rather than reflecting strategic closeness to others because of goal pursuit, it may simply reflect the nature of the friendships that participants listed. This problem could be addressed by more closely replicating Fitzsimons and Shah's (2008) original design: priming achievement goals or a control. I chose not to include a goal priming task because I was not aware how it would interact with the construal level prime already included in my study. However, the control condition in such a design would test the possibilities of a friendship confound. Hurtors and helpers should not be viewed any closer or farther away when goals are not activated. One way to add a goal priming condition to my current study design might be to combine the two primes into one. The construal level manipulation, for example, could contain more goal achievement words to prime goals as well as construal level.

Another potential solution to manipulate the goal vs. control during the second session would be to use vignettes, or short stories. In a vignette I could mention (or not mention) the goal and then ask how close the friends would feel to the participant if the story had actually happened. Again, the control condition would allow us to see if the ratings reflected goal pursuit or some other confound.

If the ratings did not reflect goal pursuit but instead reflected some confound like friendship ratings, then it is also possible that I did not get the results I was expecting because the goal context was not strong enough in the lab setting. Perhaps the goal was too weak in the lab to show the impact of construal levels on closeness to others. For example, I thought it was best to run the study in two separate sessions to avoid a demand effect in rating closeness. I did not want participants to list a goal, list a person who helps or hurts with that goal, and then immediately rate closeness to the listed person. I felt allowing time between asking about the goal and when they ranked the person would ensure that the construal level manipulation would have greater impact on the closeness ratings. The time allowance may have led to a disconnect between the person listed and the goal he or she was listed for. When asking for closeness ratings of the person during the second session, I did not provide a goal context. I only asked, "How close do you feel to (person)?" This may have led participants to see the listed name, possibly of a good friend or even enemy, and rate closeness solely on friendship goals or feelings toward the person and not in regards to the listed goal. I assumed that seeing the person's name would remind people of the goal context, but perhaps this did not happen. Again, adopting procedures that more closely match Fitzsimons and Shah's (2008) goal priming manipulation or using some kind of vignette study might address these problems.

Although I did not get the results I predicted, given all of the limitations of the study that I ran, I still believe that construal levels may impact the perceived closeness of others. Getting people to feel closer to those that help their goals and farther from those that hurt have important implications. For example, consider therapy situations. Weight loss and smoking cessation are two popular areas right now. It may be beneficial to induce high level construals in patients so they are more goal oriented and thinking at the high level. This would lead them to draw helpful others closer and push away those who do not help their goals. It is important for these people to be surrounded by helpful others. Creating a group of supportive others would be very beneficial to accomplishing the goal. Weight loss and smoking cessation are just two areas of goal pursuit and decision-making. Being more able to understand who people interact with and why can shed a great deal of light into the area of decision-making.

In conclusion, I was unable to provide supporting evidence of my hypothesis. I have provided several limitations of the study and many possible future directions to address said limitations. I still believe CLT can be an explanation for when one uses certain strategies for relational closeness. I look forward to future work being done in this area.

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Appendix A

Preliminary Session Questionnaire

1. Think about any and all of the goals you are currently working towards. In the space below, list one of the goals you are currently pursuing. You may paraphrase the goal to two or three words. For example, "become senior partner."

2. How important to you is this goal?

1      2      3      4      5      6      7

Not at all important to me      Somewhat important to me      Very important to me

3. Think of people who help you achieve this goal. When we say that they help you achieve this goal we simply mean these peoples' existence in your life makes it easier for you to make progress towards achieving the goal. Think of a person who helps you achieve this goal. In the space below, please type the FIRST NAME of a real person in your life who helps you with this goal. Again, please be as specific as possible. For example, "Paul".

4. How much does the person you listed in Question 3 help you in reaching your goal?

1      2      3      4      5      6      7

Not very much      Somewhat      Very much

5. Think of people who hurt you from achieving this goal. When we say these people hurt you from achieving your goal we do not imply anything negative about this person or your possible friendship with them. We simply mean the person's existence in your life makes it harder to make progress toward achieving your goal. Please think of a person who hurts you from achieving your goal and list his/her first name in the space below.

6. How much does the person you listed in Question 5 hurt you from reaching this goal?

1      2      3      4      5      6      7

Not very much      Somewhat      Very much

## Appendix B

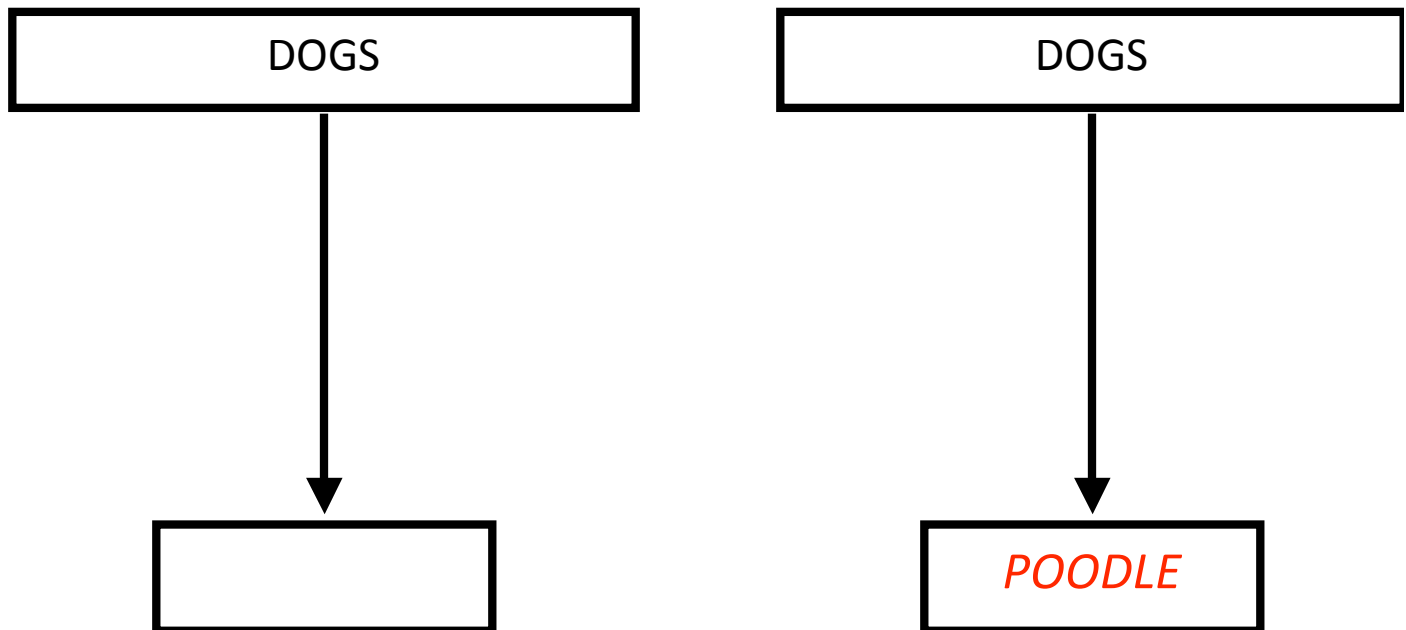
### Construal Level Manipulation

#### Low Level – Concrete

The first exercise you will be completing is a short word generation task. In this task, you will be provided with a series of words. Your task will be to type a word that is an example of this word. That is, ask yourself the question, “An example of [provided word] is what?” and type the answer you come up with. For example, if we gave you the word “DOGS,” you might write down the example “POODLE” or even “PLUTO” (the Disney character). Be creative, and try to think of as specific an example of the category as you can.

Each word to be exemplified will be presented in top box (see the left example).

Please type the example you come up with in the lower empty box (see right example) then hit continue to move to the next screen.



Appendix B – continued

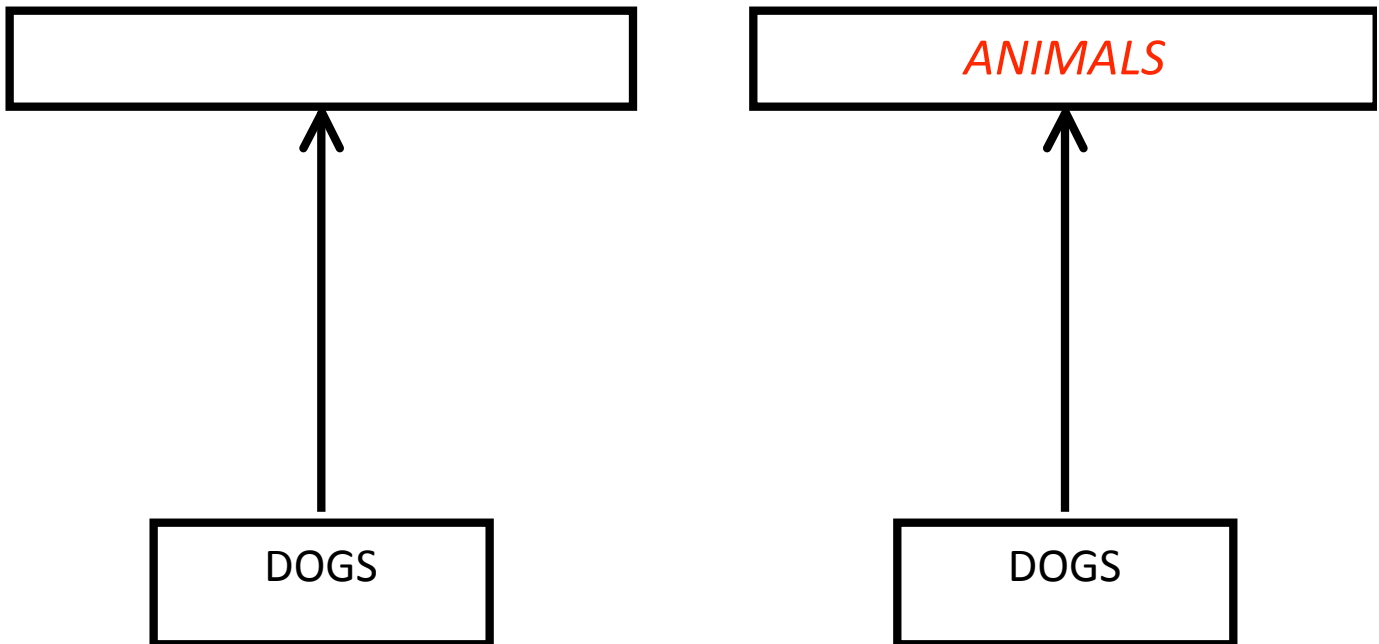
Construal Level Manipulation

High Level - Abstract

The first exercise you will be completing is a short word generation task. In this task, you will be provided with a series of words. Your task will be to write a word that you think each provided word is an example of. That is, ask yourself the question, “[Provided word] is an example of what?” and then write down the answer you come up with. For instance, if we gave you the word “POODLE,” you might write down “DOGS” or even “ANIMALS,” as a poodle is an example of a dog or animal. Be creative and come up with the most general word for which the provided word is an example.

Each “example” word will be presented in bottom box (see the left example).

Please type your answers in the box above the “example” word (see right example) then hit continue to move to the next screen.



Appendix C

Closeness Questionnaire

Directions: Please read each of the following questions carefully and in order. Answer each question. Feel free to let the experimenter know if you have any questions or concerns. Return to the computer screen when you are finished.

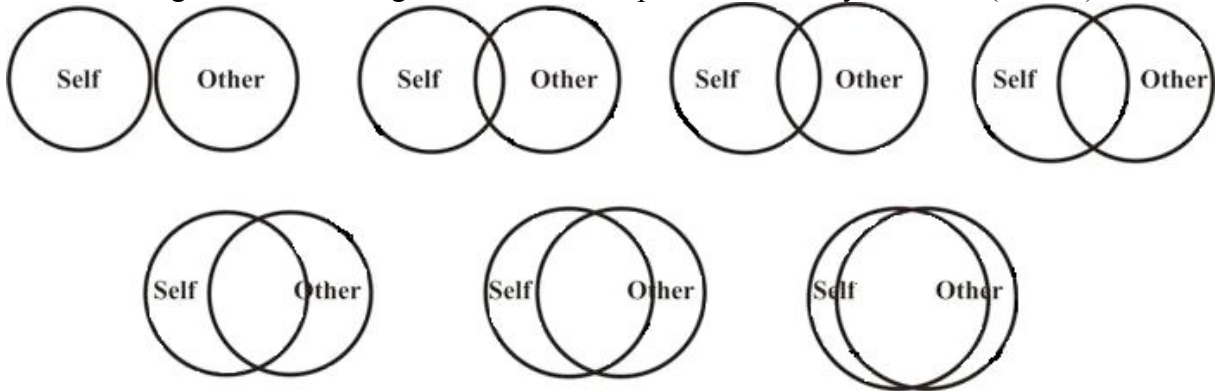
1. You mentioned (Person) in the online survey portion of this study. On a scale of 1-7, rank how close you feel to this person at the present time by circling the number below.

1      2      3      4      5      6      7

Not close at all

Very close

2. Place a large X over the diagram below that depicts how close you feel to (Person).



### Figure Citations

**Figure 1:** This figure shows all three goals combined. Helpers are rated closer than hurters in both the high and low level. Person type and construal level (high or low level) did not interact, and there is no significance of construal level.

**Figure 2:** This figure looks at closeness ratings for only goal one. As with the mean of all three goals, Helpers are rated closer than hurters in both the high and low level. Person type and construal level (high or low level) did not interact, and there is no significance of construal level.

**Figure 3:** This figure looks at closeness ratings for only goal two. As with two prior graphs, Helpers are rated closer than hurters in both the high and low level. Person type and construal level (high or low level) did not interact, and there is no significance of construal level.

**Figure 4:** This figure looks at closeness ratings for only goal three. As with the prior graphs, Helpers are rated closer than hurters in both the high and low level. Person type and construal level (high or low level) did not interact. This graph is unique because there is a significant construal level effect. Both helpers and hurters were rated as closer in the high level than in the low level condition.

Figure 1

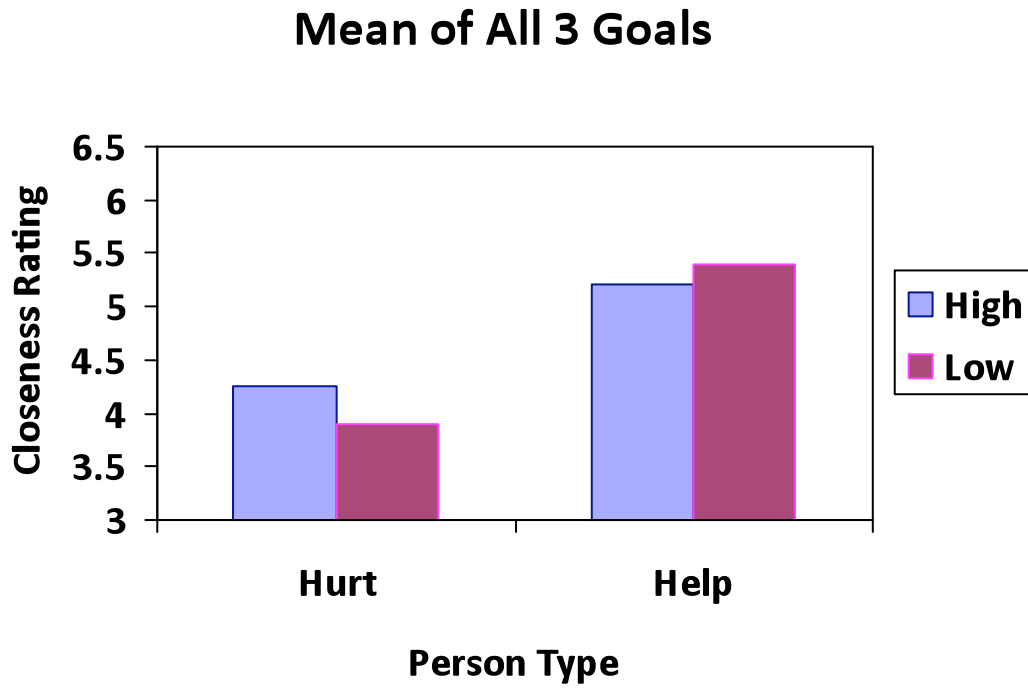


Figure 2

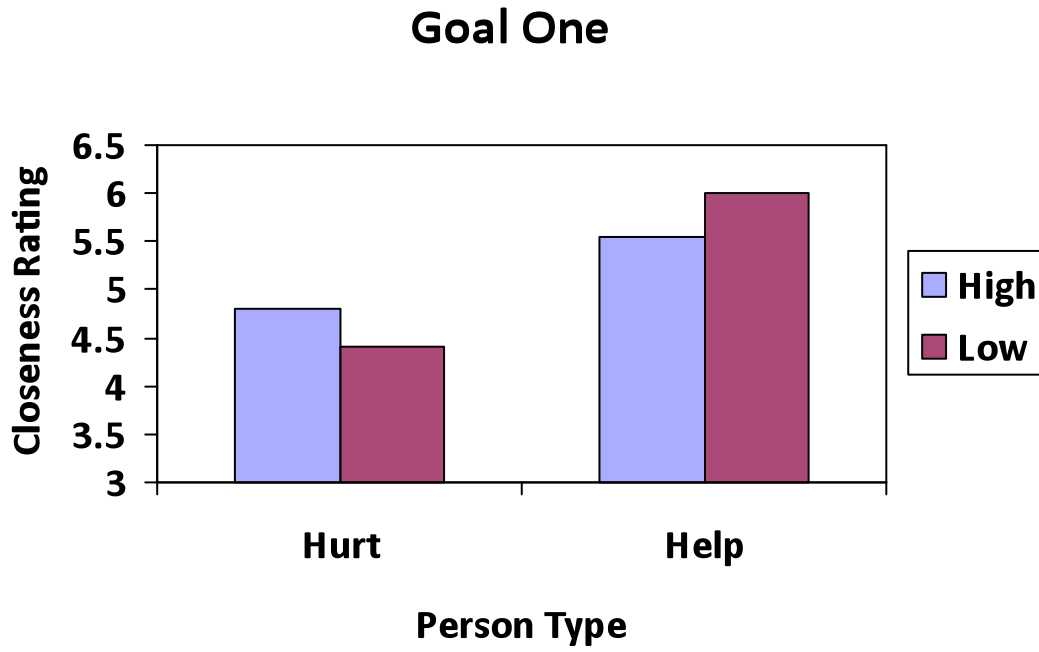




Figure 3

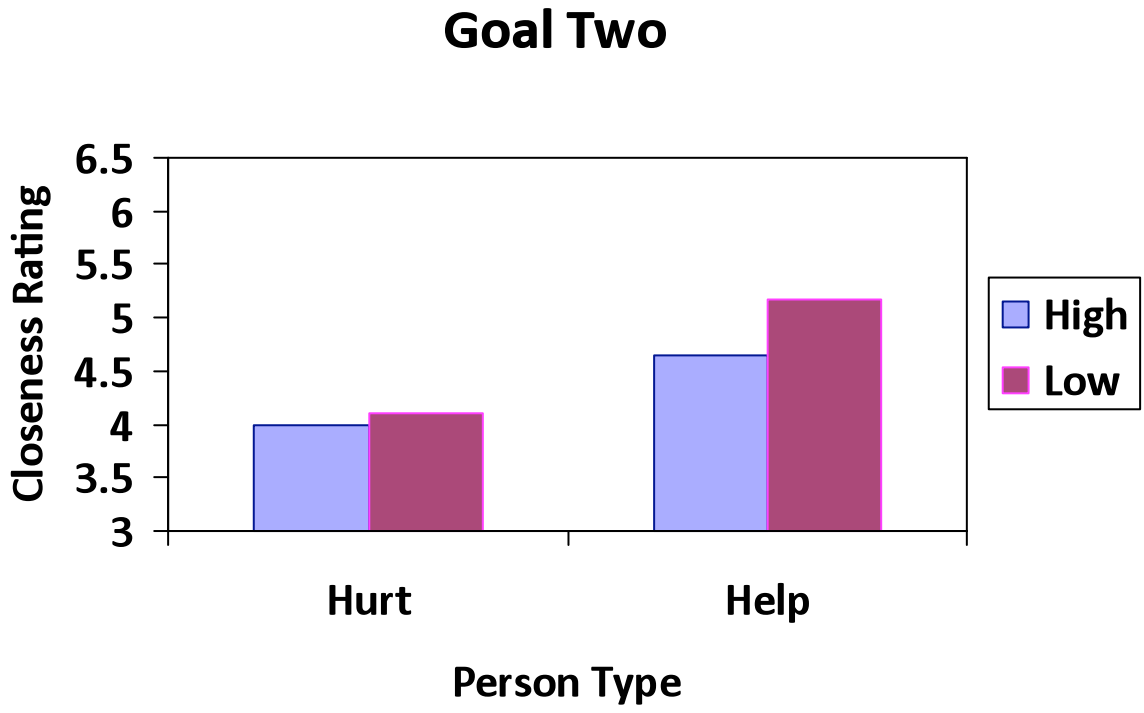


Figure 4

