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About the Author

Matthew Silveri is receiving Bachelor of Science in Psychology with a concentration in the clinical field. After graduation, Matt plans to find a job in an area that will allow him to apply the skills and knowledge that he acquired throughout his undergraduate education. Matt’s ultimate goal is to attain his doctorate of philosophy in Clinical Psychology with a focus on Neuropsychology, allowing him to conduct research, inspire others through education, and become a practicing clinician. He was the Vice President of his class in the 2006 school year, student representative on the judicial panel, orientation advisor, member of the psychology club, member of Psi Chi National Honor Society, and member of Delta Epsilon Sigma National Honor Society for Catholic Universities. Matt would like to thank every teacher that taught with passion and enthusiasm. It was these teachers that instilled in him a love for education and fervor for achievement. Matt would also like to express his gratitude for all the support and love his family offered throughout the last four years. Additionally, Matt would like to personally acknowledge Marywood University as a true hidden gem of private universities.
An Analysis of Helping Behavior
Matthew Silveri

Abstract

The scientific study of prosocial behavior has led to a number of models designed to explain the helping process. The current studies examined one such model, the arousal: cost-reward model. The arousal: cost-reward model posits that a person chooses to help, after cognitively weighing several variables in a specific situation. The arousal: cost-reward model predicts that individuals will be most likely to help in a situation when the costs of helping are the lowest; conversely, individuals will be least likely to help when the costs of helping are the highest. Participants’ subjectively and objectively reported individual likeliness to help across several situations. Objective and subjective scores were analyzed with actual helping behavior. The results of the study provided further evidence that this model can successfully predict helping behavior.

An Analysis of Helping Behavior

The scientific study of prosocial behavior finds roots in the ancient and ongoing philosophical debate of man’s nature (Schroeder, Penner, Dividio, 1995). This battle has been flaring for over a millennium, each side championed by numerous philosophers and great thinkers (Frost, 1942). The debate has spilled over into the present-day scholarly search for man’s underlying motivation for helping behavior. According to Schroeder et al., the study of prosocial behavior, as a science, began in 1908 with McDougall’s publication of social psychology. However, after the initial publications, prosocial behavior did not receive much attention until the late 1960’s when a plethora of research was generated by Latané and Darley (1968) classic study on bystander intervention (Schroeder et al., 1995). Latané and Darley (1968) original research prompted the scientific community to delve into analysis of “bystander intervention” in emergency situations.

Several constructs have been developed to explain the process of helping behavior or prosocial intervention, including the empathy-altruism hypothesis (Batson et al., 1991; Batson et al., 1997) and the negative-state relief model (Cialdini et al., 1987). With his empathy-altruism hypothesis, Batson concludes that the ultimate goal of intervention or helping, under specific
circumstances, is to solely improve the welfare of another. This model is known as an altruistic model, because it suggests that there exists selfless motivation to help in certain situations. In opposition of altruistic hypotheses are the egoistic models. An egoistic model of helping behavior states that the ultimate motivation for helping is to improve the well being of one self. Cialdini’s (1987) negative-state relief model posits that bystanders intervene in order to reduce an internal negative-affective state elicited by the helping situation. Both models have yielded convincing and contradictory evidence (i.e., Batson et al., 1997; Bierhoff & Rohmann, 2004; Cialdini et al., 1987; Cialdini et al., 1997). However, the model of specific interest to this study is the arousal: cost-reward model (Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991).

The arousal: cost-reward model is another egoistic model, which operates in accordance with an individual’s cognitive decision-making process. This theory holds that the ultimate determinate of helping is subjective mental calculation. People will be most likely to help when the costs of helping are low, and the costs of not helping are high. Helping can be viewed as an economic behavior based upon the weighing of situational and intrinsic variables. For example, time required and diffusion of responsibility can be considered costs, moreover, if the time required is low (1 hour) and the individual is unable to diffuse responsibility, then it is likely that this individual will help. In summary, there exist variables which through a subjective weighing process will determine whether or not a person will help (Dovidio et al., 1991; Schroeder et al., 1995).

The arousal: cost-reward model includes two categories concerned with the cost variables: the costs of helping and the costs of not helping. The costs of helping, as mentioned previously, can be cues or variables such as time required, time available, and discomfort in helping. Examples of the costs of not helping are requester’s deservingness to help or diffusion of responsibly (Schroeder et al., 1995). These variables are considered costs of not helping because of the affective state that is often elicited within individuals as a result of not helping. For example, in a given situation, if no others have agreed to help, an individual is unable to diffuse responsibility and thus is more apt to endure feelings of guilt for not helping. People will be more likely to help when the costs of helping are low (e.g. effort) and the costs of not helping are high (e.g. requester deserves the help).

The arousal: cost-reward model was originally designed for emergency situations, but several studies have applied this theory to non-emergency situations. (i.e., Dovidio, 1982; Otten,
Penner, & Waugh, 1988; Fritzsche, Finkelstein, & Penner, 2000). These studies have provided evidence that this theory can successfully be applied to a variety of helping situations.

One strategy cleverly applied to the arousal: cost-reward model by Fritzsche et al. (2000) was policy capturing; the mathematical description of a person’s cognitive process. Because of the cognitive nature of this theory, it is often difficult to quantify the subjective weights of an individual’s costs and rewards. Policy capturing is a statistical methodology that allows researchers to analyze a person’s decision-making process mathematically (Donnelly & Bownas, 1984). Applying this methodology to helping situations provides insight into individuals’ decision-making processes. This strategy allows participants to subjectively weigh the importance of cues or variables in a scenario. Fritzsche et al. (2000) found that the subjective weights of the cues were significantly predictive of helping.

Similar to Fritzsche et al. (2000), the present study examines a non-emergency scenario. However, in order to analyze our helping situations, rather then utilizing policy capturing, the researchers decided to perform a conjoint analysis. McCullough (2002), states that conjoint refers to “considering jointly”; individuals choose to act after jointly considering all the variables in a situation. Conjoint analysis is a statistical strategy utilized by marketing teams to determine how attributes (variables) of a product influence the consumer’s likeliness to purchase (Curry 1996). There are application possibilities to any choice based behavior scenario. The present study examined how situational attributes influence individuals’ likeliness to offer assistance.

In Batson et al. (1997), the researchers used the scenario of “Katie” an orphaned college student, who was in need of financial assistance after the recent passing of her parents. The participants were informed that the university has provided her with a list of hundreds of contacts to request aid. Unfortunately, she was having difficulty finding time to mail the letters; as a consequence, she needed assistance with the mailing process. With several alterations, the current study used this fictitious scenario as the basis for a conjoint analysis. Participants of the current study were led to believe that “Katie”, a fellow student at the University, who recently had suffered a family tragedy, inspired this study. They were also informed that she was in need of assistance in the form of writing letters. Similar to this study, Fritzsche et al. (2000) tested the influence of several factors in a helping scenario in the context of the arousal: cost-reward model.
Although, conjoint analysis has became an item of controversy (Gibson 2003) our study attempts to provide support for this type of analysis by comparing each participant’s objective computer-collected scores with an actual agreement to help. To the researcher’s knowledge, no precedent study has incorporated an actual opportunity to help when examining helping behavior in the context of the arousal: cost-reward model. If there is a correlation between an “actual” agreement to help and an identical objectively derived rating for likeliness to help, then we can further validate the use of conjoint analysis. If this correlation exists, then the researchers will also have additional support that the arousal: cost-reward model adequately predicts helping behavior.

In this study, participants were presented with 16 different situations consisting of 4 variables (time constraints, comfort, diffusion of responsibility, and time required). The situations were all derived from the orphaned “Katie” scenario. The variables were identified in research with similar helping situations (Fritzsche et al., 2000; Otten et al. 1988) and recognized by Schroeder et al. (1995) as significant for influencing helping behavior.

Time constraint is a cost of helping that refers to the participant’s availability or busyness of schedule. A participant’s comfort with helping is also a cost of helping that characterizes an individual’s comfort in performing the behavior requested. If an individual does not feel at ease working with the physically or mentally disabled, then for that individual helping has a high cost. Diffusion of responsibility was coined by Latané and Darley (1968). The term refers to an individual’s ability to perceive others as equally accountable for certain social actions. For example, in the current study participants are either informed that no other person has agreed to help (not able to diffuse responsibility) or that 3 other individuals have agreed to help (able to diffuse responsibility). Diffusion of responsibility is labeled as a cost of not helping, because as a result of not helping individuals may experience a negative affective state (i.e. guilt). Time required is the amount of time requested. As time increases, the likeliness for helping decreases. Requestor’s deservingness is a cost of not helping. (Schroeder et al., 1995).

**Method**

**Participants**

The current enlisted 32 Marywood University psychology students who received credit for a course or extra credit for participation.
Procedure

Each participant was presented with 16 situations randomly derived from a 2 x 2 x 2 x 2 within-subjects factorial design. These variables were: Time Required, Comfort with Helping, Time Allowances, and Diffusion of Responsibility. These variables can be categorized into costs of helping and the costs of not helping. The costs associated with helping were: (1) Time Required: The researcher will request for 1 hour (low) or 3 (high) hours of assistance; (2) Discomfort in Helping: The participant must imagine that they are either comfortable (low) or uncomfortable (high) with mailing letters; (3) Time Available: The participant will either have a full schedule and helping would be inconvenient (high), or have a free schedule and helping wouldn’t be inconvenient (low). The costs associated with not helping are: (1) Diffusion of Responsibility: Other participants have already agreed to help (low) or no others have agreed to help as of yet (high). The participants objectively indicated on a Likert scale from 1 to 5 their likeliness to help in each situation (1 indicating not very likely; 5 indicating extremely likely). Next, each participant was asked to subjectively weigh the variables’ influence on their helping decision, by distributing 100 points over the five variables.

Lastly, the participants were asked if they would be willing to help in an actual situation. Instead of indicating their likeliness to help, the participants actually had an opportunity to help during the upcoming weekend. Each participant indicated through writing, his or her discomfort in helping and time available. The other variables were held constant (i.e. 1 hour of time required and no others agreed to help).

Results

Across all 16 situations, the average likeliness to help was above halfway (M=2.84, SD=1.33). As predicted by the arousal: cost-reward model, the situation that had the lowest costs of helping and the highest costs for not helping, scored the highest for likeliness to help (time required 1 hour, not a busy schedule, participant was comfortable with helping, and no others helping), while the situation that had the highest costs of helping and the lowest costs for not helping, scored the lowest for likeliness to help (time required 3 hours, busy weekend schedule, participant was not comfortable with helping, and 3 others were helping). The average rating to
help on a scale from 1 to 5 for the lowest cost situation was 4.41 (SD=.86); whereas, the average rating to help for the highest cost situation was 1.91 (SD=1.10).

A conjoint analysis provided the researchers with closer look at the influence that the variables had on helping. The objective computer-collected data indicated that the average influence of variables was as follows: comfort with helping (.39); time allowances (.24); time required (.23); diffusion of responsibility (.13); Influence of these variables is depicted graphically in Figure 1.

In addition, a significant difference was not found between the objective computer-collected data and the subjectively-reported distribution of points for each of the 4 variables. The researchers did not find a significant correlation, between subjective and objective time allowances, comfort, time required, or diffusion of responsibility.

The researchers calculated an expected likeliness to help by attributing 1 or 0 to each of the variables, depending on whether the variable was or was not inducive of helping. For example, if time required was only 1 hour, it was assigned the number 1, because it was more favorable, than 3 hours, which would be less inducive of helping. The researchers found that there was a significant correlation ($r=.86$) between averaged responses of likeliness to help and expected likeliness to help. See Figure 2. It was also found that there was a significant relationship between objective computer-collected data and an agreement to help in the final written situation ($r=.57$). Each of the participants’ agreement to help was assigned either a 1 for a no response or a 5 for a yes response. These numbers were compared to the participants’ responses in each parallel objective situation. 4 situations were possible depending on if the participant indicated for comfort with helping and time available. See Figure 3.

**Discussion**

There are several factors that could create error in the current study. First, past research has used population pools closer to 400 (i.e., Fritzsche, 2000; Otten, 1988), where as the present study has only collected data from 32 participants. Second, past studies were able to test mass subjects in one sitting, while in this experiment participants were assessed over a few weeks. Because of the ongoing nature of the research, participants may have been able to converse about the study, which could have lead to contamination of the results. Also, the conjoint analysis did not compute the responses of one participant because of the repetition of the responses. This
participant indicated in all situations a likeliness to help of 5. It is possible that the variables that this study was examining had little or no influence over this participant’s helping decision. It would be of interest to add an “other” variable to the equation in order to see if individual’s believe there are other factor’s that are influencing the choice to help.

A significant difference was found between the objective computer-collected data and the subjectively-reported distribution of points for each of the 4 variables. This provides evidence that the participants lacked insight pertaining to the influence of the variables. Similar results were found in other research (Fritzsche, 2000).

The researchers found that there was a significant correlation ($r=.86$) between averaged responses of likeliness to help and expected likeliness to help. As predicted by the arousal: cost-reward model, as costs of helping decrease and costs of not helping increase average reported likeliness to help increased.

There was a significant relationship between our final written situations and the parallel computer situations ($r=.57$). This data provides support for the arousal: cost-reward model and the use of conjoint analysis for describing helping behavior in the context of non-emergency situations. Individuals’ objectively reported scores can effectively be used to predict likeliness to help in various situations. Just as market research can predict likeliness to buy, psychologists can also predict likeliness to behave in various situations including helping situations.
Figure 1

Influence of Variables

Importance Value

0 10 20 30 40 50

<table>
<thead>
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<th>Variables</th>
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<tr>
<td>Time Required</td>
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<tr>
<td>Comfort with Helping</td>
<td>40</td>
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<tr>
<td>Time Available</td>
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<td>Diffusion of Resp.</td>
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Figure 2: *Expected likeliness vs. Average Responses to Help Across 16 Situations*
References


