

Running Title: Personality and the Bystander Effect

The Effect of Self-Esteem and Prosocial Tendencies on  
Helping Behavior in the Bystander Effect

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## ABSTRACT

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While there has been considerable research on the bystander effect, little is known about how personality moderates the process. The current study examines the ways in which prosocial behavior and self-esteem moderate the bystander effect. In this study, participants were asked about their self-esteem and prosocial tendencies using the Rosenberg Self-Esteem Scale and the Prosocial Tendencies Measure, respectively. While completing their work, participants were exposed to an emergency situation in which the researcher apparently fell ill. The participants' responses to the emergency were recorded. Surprisingly, participants lower in prosocial behavior were more likely to help than participants higher in prosocial behavior. The findings in this study, while not in accordance with the hypotheses, lead to an opportunity for further testing. Furthermore, exploration of the negative state relief model might answer some questions about the surprising results.

## The Effects of Personality on Helping Behaviors in the Bystander Effect

In times when the evening news is progressively frightening and morbid, crime is more horrific, and tragedies such as school shootings are increasingly common, many people find solace in the belief that there are good people behind all of society's evils. While this belief may be true and there very well may be benevolent individuals, research on the bystander effect suggests that individuals are less likely to help strangers in critical situations when passive bystanders are present (Darley & Latane, 1968). Good or bad, people often refrain from helping in emergency situations.

### **Latane and Darley's Bystander Research**

On March 13<sup>th</sup>, 1964, a 31-year-old woman, Catherine Susan "Kitty" Genovese, was stabbed and murdered outside of her home in New York City (Rosenthal, 1964). Although Genovese was alone at the time of her murder, 38 people heard the attack and her cries for help yet refrained from intervening, calling for assistance, or notifying emergency officials. The murder of Kitty Genovese is an early example of a psychological phenomenon known as the bystander effect, or lack of helping behavior from bystanders brought on by the presence of other passive bystanders. This phenomenon sparked a great deal of psychological research.

Immediately following the 1964 murder and several other instances of bystander inaction, psychological research began focusing on bystander intervention. In the first experiment of its kind, Latane and Darley (1968) examined the bystander effect in a controlled experiment in which participants believed that they were interacting with several other people through an intercom. Participants were each directed into a room with an intercom and told that they would be discussing personal problems associated

with college life in an urban environment. Participants were informed that the discussion would be conducted over an intercom to avoid the embarrassment that might occur from a face-to-face discussion. The participants were then told that the experimenter would not be present for the discussion so that the discussion could transpire without the worry of the experimenter listening in. The discussion was organized such that each person would talk in turn and the other discussants would comment on what that person said. The groups were either two-person, consisting of the seizure victim and participant, three-person, consisting of the victim, a confederate, and the participant, or six-person, comprised of the victim, the participant, and four confederates. Additionally, participants were informed that the only intercom turned on would be the one of the person who was speaking and all other discussants would not be heard. During the discussion, the participants were exposed to what sounded like someone having a severe epileptic seizure. The victim's speech grew louder and more incoherent. In actuality, a recording of a seizure was being played over the intercom. During the apparent seizure, participants were unable to hear if the other discussants had intervened in the emergency. Latane and Darley studied how long it took for the participant to report the emergency to the experimenter (dependent variable) based on how many other people the participant thought were present (independent variable). After the participant exited the cubicle to get help, or six minutes had passed, the experiment was terminated and the participants were debriefed.

In this groundbreaking study, Latane and Darley (1968) hypothesized that the more bystanders in an emergency, the less likely, or more slowly, any one bystander will intervene. Specifically, the researchers predicted that the participants in the two-person

and three-person groups would respond faster than would the participants in the six-person condition. The results showed that the number of people the participant perceived to be present indeed had a significant effect on the likelihood of the participant reporting the emergency. Eighty-five percent of participants in the two-person group intervened while the victim was still having the seizure, while only 31% of participants in the six-person group did so. Additional findings showed that all participants in the two-person group reported the emergency after the victim has stopped seizing, while only 62% of participants in the six-person group did so. These findings allowed for the development of research regarding helping behavior. While this study corroborated that the bystander effect exists and created a platform for further bystander studies, the findings raise an important, unanswered question: *Why don't people intervene in emergencies?*

After Latane and Darley (1968) drew such novel conclusions regarding people's helping tendencies in emergency situations, further research was conducted to elaborate on why the bystander phenomenon occurs. As pioneers in the field, Latane and Darley (1970) used their 1968 study to determine three different psychological processes responsible for inaction from bystanders. Latane and Darley drew on their previous findings regarding bystander interventions to conclude that a mechanism called *diffusion of responsibility* contributes to the inaction of bystanders. Diffusion of responsibility occurs in both emergency as well as nonemergency situations in which someone needs help. The researchers explained this mechanism as one in which a bystander feels all of the responsibility, as well as all of the guilt, when alone. However, when other bystanders are present, Latane and Darley explained that the "finger of blame points less directly at any one person" (Latane & Darley, 1970, p. 90). Further exploration of the bystander

effect in the abovementioned study led Latane and Darley to identify *evaluation apprehension*, a phenomenon that occurs when a bystander fears being judged by other bystanders when helping. Responses from questionnaires in the 1968 study allowed the researchers to make the determination that fear of being judged and ridiculed hinders the individual from acting in a critical situation. Lastly, the researchers explained the final process as *pluralistic ignorance*. Based, again, on the above study, when participants were unable to hear if other people had responded, they refrained from responding. This is the generalized tendency to gauge the severity of a critical situation by the reactions of other bystanders. Latane and Darley further explained pluralistic ignorance as occurring when another bystander cannot be closely observed thus additional helping actions might be redundant or unnecessary (Latane & Darley, 1970).

### **Situational Moderators**

While the findings from Latane and Darley's research were reproduced in several studies and corroborated the validity of the bystander effect, it was later found that various situational elements can change the reactions of bystanders. Subsequent research has focused on how situational moderators influence the outcome of the bystander effect.

Fischer, Greitemeyer, Pollozek, and Frey (2006) explored the effects of danger on bystander responses. These researchers predicted that dangerous emergencies are perceived as genuine and therefore increase the bystanders' costs for not helping the victim. The researchers proposed that in witnessing a dangerous emergency, the bystander would empathize with the victim's distress and thus intervene to eliminate this distress, according to the *arousal: cost-reward model*. To test these hypotheses, the researchers employed participants between the ages of 18 and 34 years old. The

independent variables in this study were the presence of a bystander (yes or no), the prominence of danger (low or high), and the sex of the bystander (male or female). Participants were each asked to observe and evaluate three cross-gender interactions. Participants were taken into a room with a television projecting the apparent communications between a male and female from within another room. The males and females interacting with each other were confederates. The participant observed as the first interaction transpired; the couple got acquainted for five minutes. After five minutes had elapsed, the television screen showed the experimenter dismissing the couple. The participant then watched a second interaction, which was exactly like the first. The third interaction manipulated danger. In the high potential-danger condition, a confederate with a petite build played the female and a strong, muscular man with a thug-like demeanor played the male. The beginning of the interaction played out normally, but the male grew increasingly violent, verbally abusive, and sexually harassed the female while she screamed to be let go. Next, the male pushed the female to the floor and the participant's screen shut off. Participants in the low potential-danger condition experienced the same interaction. In this condition, the male was of much smaller stature and therefore less intimidating. Another manipulation was the presence, or lack thereof, of a bystander. In the bystander condition, participants reviewed the videos along with a confederate-bystander who showed no intent to react to the third interaction.

The researchers recorded the time it took participants to intervene after the final interaction. Results showed that 37% of participants attempted to help the victim. More people intervened in the high potential-danger condition than in the low potential-danger condition. Additionally, half of the participants in the no-bystander condition tried to help

the victim while only six percent of participants in the bystander condition made an attempt to help. Results supported the hypothesis such that participants in the high potential danger group intervened faster and more consistently than participants in the low potential danger group. The findings of this research support the arousal: cost-reward model in terms of the bystander effect, and demonstrate the first instance of testing the effect of danger *and* the presence of a bystander on bystander intervention.

Although Fischer, Greitemeyer, Pollozek, and Frey's (2006) findings deal solely with the moderating effects of danger on the bystander effect, these findings provide support that many other situational factors can moderate the bystander effect. To follow up on the findings in the study regarding danger, Fischer et al. (2011) conducted a meta-analysis to investigate how other situational factors moderate the bystander effect. The researchers hypothesized that various moderators would influence the outcomes in the bystander effect. Moderators are defined as "variables that systematically affect the magnitude of the mean effect size" (Fischer et al., 2011). To conduct this analysis, the researchers first searched "bystander", "prosocial", "help", "diffusion of responsibility", "evaluation apprehension", "pluralistic ignorance", "social influence" and other related keywords into PsychINFO, Educational Resources Information Center (ERIC), PubMed, PSYINDEX, Dissertation Abstracts International, and Google Scholar. All research included in the analysis was published between 1961 and 2010. The researchers also contacted several psychologists in the field to gather any unpublished research regarding the bystander effect. A total of 52 studies included in the meta-analysis. All 52 studies were written in either English or German, contained an empirical study, used a relevant measure for the bystander effect, and included sufficient statistical data. Next, the

researchers coded for fifteen categorical variables and assessed if these variables moderated the magnitude of correlation between presence of additional bystanders and helping a victim or person in need. The following moderators were included in the analysis: (1) sex of participant, (2) number of present bystanders (3) relation between bystanders, (4) sex of victim, (5) proximity between bystander and victim, (6) perpetrator present versus not present, (7) expected physical danger for bystander, and (8) potential danger to victim.

The researchers identified several factors that reliably moderate the bystander effect. The effect was decreased when the victim was male and therefore less needy, the perpetrator was present versus not present, and there was potential danger to the victim. Additionally, the bystander effect was decreased when the passive bystander present was a naïve bystander rather than an instructed confederate, and when the bystanders knew each other rather than when the bystanders were unfamiliar. The effect was also decreased when there was only one bystander present rather than two or more, and when all bystanders were male rather than heterogeneous or all female. In cases in which the cost for the bystander to intervene was higher, the bystander effect was reduced and the bystander was more likely to intervene. Based on the findings in this analysis, it can be inferred that several situational factors can moderate the bystander effect. Although Fischer et al.'s (2011) analysis addressed 15 moderators, the findings provide evidence that additional variables may moderate the bystander effect.

While copious evidence supports that danger can influence the bystander effect, danger is not the only situational moderator that influences this effect. Building upon the idea that situational differences can change the outcome of the bystander effect, Schwartz

and Clausen (1970), examined the impact of social norms on the bystander effect. The researchers hypothesized that the speed of helping a victim in an emergency would be greater when an explicit and instructional statement calling for action was given to the bystander, indicating to the bystander that it was appropriate to intervene. This hypothesis was based on the theory that giving explicit directions would minimize evaluation apprehension, thus increasing helping behavior. To test their hypothesis, Schwartz and Clausen told the participants that they would be conversing with other participants in different rooms through the use of headphones and a microphone. While the participants believed other participants were involved, a confederate was actually conversing with the participant. In the informed condition, the confederate mentioned to the participant that he had a seizure disorder and that his medication was in his coat pocket. In the uninformed condition, the confederate did not include information about a seizure disorder. After conversing for a few minutes, the confederate suffered an apparent seizure while the participant overheard through the intercom. From the moment the seizure began, the researcher timed how long it took the participant to intervene. The researchers found the majority of participants in the informed condition to respond to the emergency, regardless of the number of bystanders present. The researchers also noted that participants in the control condition were more likely to help when there was only one bystander present. These results validate that situational factors can moderate the bystander effect. Social norms, in this research, moderated the effect such that regardless of the severity of the emergency situation, one will hesitate to breach social norms.

If danger and social norms both moderate the bystander effect, one must wonder what other factors have an influence on the effect. To answer this question, Ross and

Braband (1973) tested if the presence of a blind person, representing someone dependent in an emergency situation, would influence the helping behavior of bystanders. This research explored feelings of responsibility when another person, unaware of an emergency, is present and dependent. The dependent other received no cues to an emergency situation (Ross & Braband, 1973). Ross and Braband predicted that when the blind person was aware of the threat, diffusion of responsibility would occur and the participant would not intervene. On the other hand, when the blind person was not aware of the threat, the participant would take responsibility for the blind person and intervene in the emergency as if he were alone. To test the hypotheses, the researchers led each participant into a room with a blind, second participant. The second participant was actually a confederate. The researchers then left the participant and the blind person in the room for 30 minutes to ostensibly go set up the experiment. During this 30-minute waiting time, participants experienced one of two conditions. In the first condition, participants were exposed to a recording of people working in a nearby laboratory. After eight minutes of the tape, the people in the laboratory discuss if something was secure and then left. Immediately after the exit of the people in the tape, the researchers placed dry ice in a heater to direct odorless smoke into the experimental room with the participant and the blind person. In the second condition, participants and a blind person were exposed to a tape of a man doing construction, sawing, and hammering. After a few minutes, the man injures himself with one of his tools. Sounds of groaning and cries of pain play for five minutes. In both the smoke condition and the scream condition, the blind person did not respond to the emergency and the dependent measure of how long it took the participant to respond was recorded. Ross and Braband (1973) found support for

their hypotheses. Participants were less likely to intervene in the scream condition because the blind person heard the scream and refrained from reacting. A diffusion of responsibility occurred in the scream condition. Participants were more likely to intervene, however, in the smoke condition. The blind person could not detect the smoke or the emergency so the participant intervened in the emergency as if he were alone, experiencing no diffusion of responsibility. The findings in this study can be generalized such that someone will respond in an emergency even if a passive bystander is present if the bystander is dependent or does not detect the emergency cue. This phenomenon occurs when people with disabilities or children are present.

### **Dispositional Moderators**

According to prior research, the bystander effect can be moderated by a variety of different factors. Building on the research addressing situational moderators, another avenue for psychological research is to assess dispositional factors and their influence on the bystander effect.

The research conducted in Fischer et al.'s (2011) meta-analysis was not the only study to show a moderating effect of gender on helping behavior. Tice and Baumeister (1985) investigated the effects of masculinity and femininity on intervention behaviors. The researchers predicted that highly masculine bystanders would be less likely to intervene in an emergency situation and highly feminine bystanders would be more likely to intervene. The study found that highly masculine males to feel the need for poise and dominance and that helping behaviors threaten and diminish such poise (Lubinski, Tellegen, & Butcher, 1983). The prediction that female bystanders would present increased helping behaviors was based on previous research indicating that females are

more empathetic and empathy is a necessary trait for intervention (Aderman & Berkowitz, 1970). Tice and Baumeister (1985) asked all participants to complete the Bem Sex Role Inventory (Petenhazur & Tetenbaum, 1979) earlier in the school year. Later in the year, participants were told that they would be partaking in a simulated nuclear disaster study and that they would be one of four people to determine who would be allowed in a safety shelter to survive. The participants were told that the study was exploring group processes. Each group consisted of one male confederate, one female confederate, the victim confederate, and the participant. The members of the group were all separated in individual rooms with intercoms to be used for communication. During the conversation between the three confederates and the participant, one of the confederates began to apparently choke while gasping for help over the intercom. The researchers recorded how long, if at ever, it took the participants to intervene or check on the choking individual. The results from the sex role inventory were analyzed alongside the reactions to the choking emergency. The results showed a positive correlation between masculinity and reaction times, such that those higher in masculinity took longer to react. The results for females were negligible. Although the findings are not in complete support of both hypotheses, Tice and Baumeister's research provides evidence that dispositional factors, such as gender identity, influence the bystander effect.

Aside from gender research, there is minimal research investigating potential dispositional moderators of the bystander effect. While a wealth of information has been uncovered regarding situational moderators, a gap in the research remains where dispositional moderators, such as personality traits, have yet to be explored. In fact, to

date, psychological research has yet to study the moderating effects of self-esteem or prosocial behavior on the bystander effect.

### **The Current Research**

According to the abovementioned research on the bystander phenomenon, there are five steps that must take place for a bystander to intervene in a critical situation (Latane & Darley, 1970). The first is that the bystander must notice a critical situation. The second step is that the bystander must believe the situation to be an emergency. Third, he or she must develop a feeling of personal responsibility. The fourth step is to believe that he or she possesses the skills necessary to succeed. Lastly, the bystander must consciously decide to help. While several studies have investigated situational moderators and their influences on the first steps, there is less research on the moderating effects of dispositional factors, such as self-esteem or prosocial behavior, on the latter steps. Specifically, the fourth step, stating that the bystander must believe he or she possesses the necessary skills to succeed, can be greatly influenced by dispositional effects like self-esteem. The current research aims to uncover the effects of dispositional moderators on the bystander phenomenon.

### **Methods**

#### **Participants**

Sixty-seven Union College students participated in this study either for course credit or monetary compensation. Grade point average (GPA) ranged from 2.0 to 3.95 ( $M = 3.24$ ) on a 4.0 scale. Of the 67 participants, 45 were female (67.20%) and 22 were male (32.80%).

#### **Procedure**

Participants entered a research laboratory in groups no larger than four and were each given an informed consent form to complete. The laboratory consisted of one main room and four small rooms branching from the larger room. In each of the smaller rooms was a computer and an intercom. After completing the informed consent, each participant was asked to enter one of the small rooms and shut the door behind. The researcher remained in the main room and communicated with the participants through the intercom, which was set up in each room to receive noise but not to transmit noise back to the researcher in the larger room. The computer monitors in the individual rooms were set up with a welcome and instruction screen to guide the participants to begin completing the computerized surveys. Once the participants clicked that they understood the directions, a white noise began playing and the first survey appeared on the screen, one question at a time. The white noise accompanied each survey to inhibit the participants from listening to each other from within their rooms. While the noise kept the participants focused on their own surveys, it was not too loud to interfere with anything the researcher said through the intercom.

The first survey was the Measure of Prosocial Behavior for Late Adolescents (Carlo & Randall, 2002; See Appendix A) for descriptions and question examples). After reading each statement, participants indicated how accurately they felt the statement described them on a 5-point scale, anchored with *does not describe me at all* and *describes me greatly*. Once the participants completed the first survey, instructions for the second survey appeared on the screen. Once participants indicated that they understood the directions, their screens were redirected to Rosenberg Self-Esteem Scale (Rosenberg, 1965; see Appendix B). Participants were asked to indicate how strongly they agreed or

disagreed with general statements regarding feelings about the self. The questionnaire used a 4-point scale anchored with *strongly agree* and *strongly disagree*. After the participants completed this survey, instructions for the anagram task, the final component, appeared on the screen. Among the 40 anagrams the participants were asked to solve, only seven were real. This task was included as a filler to allow the participants who took longer on the surveys to catch up with participants who completed the surveys more quickly. As each participant finished the surveys and began working on the anagrams, a bell rang briefly to let the researcher know that the participant was working on the filler task.

Once the researcher knew that all of the participants were working on the filler task, she began to stage the “emergency”. The researcher spoke into the intercom following a brief script, saying “Hi, Participants. I’m not feeling very well. I’m feeling pretty faint. I’m going to step out and get some water but you may continue your work.” As the researcher spoke she sounded faint, exasperated, and weak and her voice trailed off to a breathy whisper toward the end of her comments. Once the researcher spoke, she left the intercom on so the participants could hear what was going on in the main room. The researcher then created a very loud bang and thud and then continued to moan, “help” as if in pain. Unknown to the participants, the researcher was in fact unharmed and timing the participants’ reactions to the “emergency”. The researcher then recorded if a participant emerged from the individual room to respond to the emergency and how long it took him or her to respond. Once a participant emerged to help, the researcher told him or her that she was okay and to go back into the individual room. The white noise in each of the participants’ rooms hindered them from hearing if other participants

responded to the emergency. After four minutes, the researcher knocked on each of the individual door to let participants know that the study was over. All of the participants exited their individual rooms and joined in the main room for a debriefing. During the debriefing, the researcher informed the participants that she was unharmed and that her fainting spell was actually part of the study. The researcher then asked all of the participants to sign a confidentiality contract indicating that they would not share what the experiment was about to their peers and other participants.

### **Results**

I explored the relationship between different personality traits and helping behavior. I first assessed the extent to which self-esteem monitored responses to the staged bystander emergency. I predicted that those higher in self-esteem would be more likely to respond in the emergency situation. Contrary to my prediction, The participants who helped more were those with lower self-esteem ( $M = 18.23$ ) while those who helped less had higher self-esteem ( $M = 20.05$ ),  $t(65) = 1.62$ ,  $p = .11$ , though this trend did not reach statistical significance.

Next, I explored the relationship between prosocial behavior and helping behavior. While I predicted that participants would be more likely to help if they were higher in prosocial behavior, participants who helped were lower in prosocial behavior ( $M = 63.96$ ) and participants who did not help were higher in prosocial behavior ( $M = 69.27$ ),  $t(65) = 2.40$ ,  $p = .02$ .

I also tested the extent to which self-esteem, prosocial behavior, and GPA were correlated. Neither self-esteem, nor GPA, nor prosocial behavior was correlated to each other ( $r_s < .14$ ,  $p_s > .28$ ).

Next, I ran linear regressions with self-esteem, prosocial behavior, number of participants, and GPA. I first submitted the variable indicating whether or not participants helped to a linear regression in which self-esteem, number of participants, and an interaction term served as predictors. Self-esteem did not predict helping behavior ( $\beta = -.34, t = -.99, p = .33$ ), participants did not predict helping behavior ( $\beta = -.32, t = -.59, p = .56$ ), nor did the interaction term ( $\beta = .30, t = .45, p = .65$ ). I then submitted the variable indicating whether or not participants helped to a linear regression in which prosocial behavior, number of participants, and an interaction term served as predictors. Prosocial behavior did not predict helping behavior ( $\beta = -.33, t = -.81, p = .42$ ), participants did not predict helping behavior ( $\beta = -.19, t = -.18, p = .86$ ) nor did the interaction term ( $\beta = .07, t = .06, p = .95$ ). Next, I submitted the variable indicating whether or not participants helped to a linear regression in which self-esteem, GPA, and an interaction term served as predictors. Self-esteem did not predict helping behavior ( $\beta = -.31, t = -.25, p = .80$ ), GPA did not predict helping behavior ( $\beta = -.24, t = -.34, p = .74$ ) nor did the interaction term ( $\beta = .17, t = .12, p = .90$ ). Lastly, I submitted a variable indicating whether or not participants helped to a linear regression in which prosocial behavior, GPA, and an interaction term served as predictors. Prosocial behavior did not predict helping behavior ( $\beta = -.54, t = -.48, p = .64$ ), GPA did not predict helping behavior ( $\beta = -.37, t = -.37, p = .71$ ), nor did the interaction term ( $\beta = .40, t = .25, p = .80$ ).

Finally, I ran linear regressions with self-esteem and gender, as well as prosocial behavior and gender. I first submitted the variable indicating whether or not participants helped to a linear regression in which self-esteem, gender, and an interaction term served as predictors. Self-esteem did not predict helping behavior ( $\beta = .30, t = .71, p = .48$ ),

gender did not predict helping behavior ( $\beta = .45, t = .88, p = .38$ ), nor did the interaction term ( $\beta = -.83, t = -1.15, p = .26$ ). Next I ran a linear regression in which prosocial behavior, gender, and an interaction term served as predictors. Prosocial behavior did not predict helping behavior ( $\beta = -.28, t = -.62, p = .54$ ), gender did not predict helping behavior ( $\beta = -.15, t = -.17, p = .87$ ), nor did the interaction term ( $\beta = .03, t = .03, p = .97$ ).

### **Discussion**

Understanding personality traits is important because it helps us understand how people relate to one another based on similarities and differences in personality. Other important information can be gathered from understanding personality traits, however. Through the study of personality traits, specifically self-esteem and prosocial behavior, one can predict helping behaviors in emergency situations.

Previous research has suggested that many situational factors can influence ones likelihood to intervene in an emergency situation. Situational moderators, such as danger (Fischer et al., 2011), social norms (Schwartz & Clausen, 1970), and characteristics of the victim (Ross & Braband, 1973) were all found to influence the bystander effect. While there is a wealth of research regarding situational moderators of the bystander effect, minimal research explores the dispositional moderators. The few studies that have addressed dispositional factors explore the effects of gender of both the victim and the bystander (Tice & Baumeister, 1980). In attempt to fill the gap in this field of research, the current study explored how the dispositional moderators, self-esteem and prosocial tendencies, influence the likelihood of helping behaviors in an emergency situation in which a peer needed medical assistance.

In the current research, we examined if certain personality traits could predict helping behaviors. We hypothesized that people higher in self-esteem would be more likely to help than people lower in self-esteem. In addition, we predicted that people high in prosocial tendencies would help more than those low in prosocial tendencies. The hypotheses were not supported and results in exact opposition to the hypotheses were found with marginal significance. Results indicated that those lower in self-esteem were more likely to help than participants higher in self-esteem. Similarly, the results showed that participants lower in prosocial behavior were more likely to help than those higher in prosocial behavior.

This research suggests that people lower in self-esteem will be more likely to help in an emergency situation. While the findings fail to explain why this result occurred, prior research regarding the Negative State Relief Model (Miller & Carlson, 1990) can help to explain this phenomenon. According to the Negative State Relief Model, individuals often feel better about themselves when helping someone else. It can be proposed that participants lower in self-esteem were more likely to help than those higher in self-esteem because helping behavior can help increase self-esteem. While the Negative State Relief Model theory accounts for the surprising findings regarding self-esteem, it does not explain the increase in helping behaviors from participants lower in prosocial behavior.

The results regarding prosocial behavior were exactly opposite of the hypothesis. While we predicted that participants higher in prosocial behavior would help more, we found participants higher in prosocial behavior to help less. These surprising findings may be a result of some of the limitations mentioned below. While the current research

did not present the expected results, the information gathered can be extremely useful when understanding students' motivations for helping, and the effects of self-esteem and prosocial tendencies on helping behaviors.

### **Limitations**

There were several limitations that may have contributed to the lack of significant findings. Perhaps the most notable limitations occurred in the sample. Although the sample was randomly selected, the sample size was small ( $n = 67$ ). Had the sample size been greater, there may have been more diversity in the responses to the emergency. With the Bystander Effect, specifically, few people respond to emergency situations. With a larger  $n$ , of 150 or 200 participants, a greater number of participants would have responded to the emergency and we would have had more data to study.

The second limitation in this study also resulted from the sample. Of the 67 participants in this study, 60 of them participated for credit in their psychology courses. While their attendance was voluntary and they were permitted to leave at any time, many participants acted annoyed or rushed, as if they wanted to complete the study as fast as they could. We ensured that all surveys taken were legitimate through the use of reverse coding but the lack of desire to be there may have negatively influenced participant's attention to the presented emergency. If the participants were not required to attend, they may have been more internally motivated and participated wholeheartedly.

Another shortcoming in the current study was the use of intercoms. Participants were placed in private rooms and were exposed to the emergency situation through the intercom from the main room. The use of intercoms could have caused problems if it was

difficult to hear the emergency clearly. Additionally, the study may have been more affective if the participants were exposed to the emergency through a visual medium, such as a television screen or window. Perhaps the visual stimulation would have been more effective for presenting the emergency situation because the participants would have physically seen the victim in need of assistance. A visual projection would have also removed some of the ambiguity of the emergency and made it more obvious to the participants that they should intervene.

Unlike in Latane and Darley's bystander research (1970), the participants in this study were aware of the number of participants present in the other research rooms. Although the current study provided each participant with a private, soundproof room to complete their surveys and hear the emergency situation, the knowledge of other participants may have influenced their reactions. Participants had the ability to sign up for various time slots; while some slots filled to a capacity of 4 participants, others filled to just one. When the participants arrived for the study, they were able to see if others joined them or if they were alone. The knowledge of the other participants, or bystanders, could have influenced the participants' reactions, as well as their likelihood of intervening. This study would have been more consistent if each time slot was run with 4 participants or if the participants in the study were unaware of others present.

The last major limitation was the use of impossible anagrams as the filler task. The impossible anagrams served the intended purpose of stalling the participants who rushed through the surveys to give the slower participants a chance to catch up. Although the anagrams were helpful, they may have had some negative effects on the participants state self-esteem. At the beginning of the study, participants answered the Rosenberg

Self-Esteem Scale (1965) to indicate their self-esteem. After completing this survey however, participants completed a series of impossible anagrams that may have lowered participants state self-esteem. State self-esteem, which indicates self-esteem at any given moment, could have influenced the participants' likelihood to intervene in the emergency. This manipulation of self-esteem may have accounted for the surprising findings that those lower in self-esteem were more likely to help in the emergency. To elaborate, participants who indicated that they were higher in self-esteem were then exposed to a stimulus that lowered their self-esteem and may have hindered them from helping while participants who said they were low in self-esteem were unaffected by the negative stimulus so they were able to offer help in the emergency. To fix this limitation, a more neutral filler task, such as drawing a picture, should be used. An additional solution would be to use a state self-esteem measure after participants attempt the impossible anagrams to monitor how the difficult task affects their self-esteem. This change may show the more predictable result with those higher in self-esteem intervening.

### **Directions for Future Research**

An interesting avenue for future research is to study other dispositional moderators with the bystander effect. This study focused specifically on self-esteem and prosocial tendencies but there are several other personality traits that would be interesting to explore. The Big Five personality traits (John & Srivastava, 1999), including openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism could serve as dispositional factors to study in both the bystander and the victim. Based on prior research, it can be expected that bystanders high in these factors would be more likely to

intervene that participants low in these factors. Further research is necessary to determine which of the five factors or personality predict or moderate helping behavior in the bystander effect.

Future research can test if the bystander effect, among those high and low in self-esteem, is influenced by the age of the victim. In the current study, the participants and the victim were of the same age. A future study might explore how those high in self-esteem and low in self-esteem respond when the victim is younger than the bystander or older than the bystander. Based on Latane and Darley's necessary steps for intervention (1970), a bystander must feel he or she possesses the skills necessary to intervene. It can be predicted that this feeling will be enhanced if the bystander is older than the victim. With more strength, size, and education, older bystanders will most likely feel more able to intervene in a helpful way. It can also be predicted that this effect will be moderated by self-esteem such that those higher in self-esteem will intervene more than those lower in self-esteem.

To date, research regarding the bystander effect has been limited to live, televised, or audio emergencies. To take this research in a more modern direction, future researchers could test if the effects of self-esteem on the bystander effect occur in an online setting with social media. Researchers could expose participants to a series of Facebook pictures of several people and ask the participants to verbally comment to the pictures about something, such as the weather, in each photograph. The emergency component is that in some of the pictures of people the subjects will be suffering from an obvious eating disorder. For example, the subject will be extremely skinny, have thin hair, yellowed teeth and hollowed eyes. The researchers could record how many

participants commented with concern regarding the subject with the eating disorder. Participants' responses to the Facebook "emergency" could be studied in comparison with their responses to the Rosenberg Self-Esteem Scale (Rosenberg, 1965) and Measure of Prosocial Behaviors for Late Adolescents (Carlo & Randall, 2002) to explore how self-esteem and prosocial behavior moderate the intervention in cyber-emergencies.

### **Conclusion**

There is a wealth of research and real-life scenarios demonstrating that while the bystander effect consistently occurs in emergency situations, many situational factors can influence bystander intervention. The current study aimed to explore the moderating effects of dispositional factors on bystanders. Although the findings were not in accordance with the hypotheses, novel information regarding the intervention tendencies of college-aged bystanders was discovered. Those lower in self-esteem were more likely to intervene, indicating a potential desire for an increase in self-esteem found in helping others. These findings show that while one with low self-esteem may not feel worthy of herself, she feels that others are worthy of help. The information found in this study can be used on college campuses to help implement programs teaching students the importance of helping a peer when needed.

"I affirm that I have carried out my academic endeavors with full academic honesty."

Signed, *Alexandra J. Napp*

## References

- Aderman, D., & Berkowitz, L. 1970. Observational set, empathy, and helping. *Journal of Personality and Psychology, 14*, 141-148.
- Carlo, G., Randall, B. A., 2002. The development of a measure of prosocial behaviors for late adolescents. *Journal of Youth and Adolescence, 31*, 31-44.
- Darley, J. M., & Latane, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology, 8*, 377-383.
- Fischer, P., Greitemeyer, T., Kastenmüller, A., Kreuger, J. I., Vogrinic, C., Dieter, F., ... Kainbacher, M. (2011). The bystander-effect: A meta-analytic review on bystander intervention in dangerous and non-dangerous emergencies. *Psychological Bulletin, 137*, 517-537.
- Frischer, P., Greitemeyer, T., Pollozek, F., & Dieter, F. (2006). The unresponsive bystander: Are bystanders more responsive in dangerous emergencies? *European Journal of Social Psychology, 36*, 267-278.
- John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2, pp. 102–138). New York: Guilford Press.
- Latane, B. & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help?* New York, NY: Appleton-Century-Croft.
- Lubinski, D., Tellegem, A., Butcher, J. N. (1983). Masculinity, femininity, and androgyny viewed and assessed as distinct concepts. *Journal of Personality and Social Psychology, 44*, 428-439
- Miller, N., & Carlson, M. (1990). Valid theory-testing meta-analyses further question the negative state relief model of helping. *Psychological Bulletin, 107*, 215-225.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NY: Princeton University Press.
- Rosenthal, A. M. *Thirty-eight witnesses*. New York: McGraw-Hill, 1964.

- Ross, A. S., & Braband, J. 1973, Effect of increased responsibility on bystander intervention, II:  
The cue value of a blind person. *Journal of Personality and Social Psychology*, 25, 254-258.
- Schwartz, S. H., & Clausen, G. T. (1970). Responsibility, norms, and helping in an emergency.  
*Journal of Personality and Social Psychology*, 16, 299-310.
- Tice, D. M., & Baumeister, R. F. (1980). Masculinity inhibits helping in emergencies: Personality does predict the bystander effect. *Journal of Personality and Social Psychology*, 49, 420-428.

## Appendix A

### Measure of Prosocial Behaviors for Late Adolescents (Carlo & Randall, 2002)

Below are a number of statements that may or maynot describe you. Please indicate how much each statement describes you by using the following scale:

- 1 (Does not describe me at all)
- 2 (Describes me a little)
- 3 (Somewhat describes me)
- 4 (Describes me well)
- 5 (Describes me greatly)

1. I can help others best when people are watching me.
2. It is most fulfilling to me when I can comfort someone who is very distressed.
3. When other people are around, it is easier for me to help needy others.
4. I think that one of the best things about helping others is that it makes me look good.
5. I get the most out of helping others when it is done in front of others.
6. I tend to help people who are in a real crisis or need.
7. When people ask me to help them, I don't hesitate.
8. I prefer to donate money anonymously.
9. I tend to help people who hurt themselves badly.
10. I believe that donating goods or money works best when it is tax-deductible.
11. I tend to help needy others most when they do not know who helped them.
12. I tend to help others particularly when they are emotionally distressed.
13. Helping others when I am in the spotlight is when I work best.
14. It is easy for me to help others when they are in a dire situation.
15. Most of the time, I help others when they do not know who helped them.
16. I believe that I should receive recognition for the time and energy I spend on charity work.
17. I respond to helping others when the situation is highly emotional.
18. I respond to help others when they ask for it.
19. I think that helping others without knowing is the best type of situation.
20. One of the best things about doing charity work is that it looks good on my resume.
21. Emotional situations make me want to help needy others.
22. I often make anonymous donations because they make me feel good.
23. I feel that if I help someone, they should help me in the future.

## Appendix B

## Rosenberg's Self-Esteem Scale (Rosenberg, 1965)

The scale is a 10-item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School juniors and seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1. On the whole, I am satisfied with myself.
- 2.\* At times, I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
- 5.\* I feel I do not have much to be proud of.
- 6.\* I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on an equal plane with others.
- 8.\* I wish I could have more respect for myself.
- 9.\* All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

Scoring: 1=Strongly Disagree; 2=Disagree; 3=Agree; 4=Strongly Agree  
Items with an asterisk are reverse scored.

Sum the scores for the 10 items. The higher the score, the higher the self-esteem.