The Bystander Effect in Non-Emergency Situations: Influence of Gender and Group Size

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Abstract

Although research on the bystander effect spans 50 years, the influence of some variables on prosocial behavior are still unclear. In a field experiment, I tried to replicate the basic bystander effect in three non-emergency situations, and studied the impact of bystander and "victim" gender on helping behavior. I successfully replicated the basic bystander effect; bystanders who were alone were significantly more likely to help than bystanders with one or more than one companion. In addition, when people noticed the need for help, a male and a female confederate were helped equally as often. Finally, women were more likely to help both confederates than men, but that men were more likely to help the female confederate than the male confederate.

Keywords: bystander effect; gender; prosocial behavior; helping; non-emergency

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Prosocial behavior is behavior that primarily benefits another, rather than oneself (Batson & Powell, 2003). Although there are many influences on prosocial behavior, of particular interest to many researchers is the number of other people present who could act prosocially, but likely won't. The probability of a bystander helping someone in need is inversely related to the number of bystanders present (Aronson, Wilson, Akert, & Sommers, 2016). This bystander effect has been documented in many well-known experiments (e.g., Darley & Latané, 1968; Darley, Teger, & Lewis, 1973; Latané & Darley, 1968). However, there are many other variables that influence bystander intervention, including whether or not the situation is an emergency (a danger is posed to a victim or bystanders, or situations in which a villain has infringed upon the rights of others and prompt action is necessary; Latané & Nida, 1981), and the sex of both the person in need and the bystander. In this study, I conducted research to replicate the basic bystander effect in non-emergency situations (situations in which help is needed, but there is no danger to victims or other bystanders, and no one's rights are being infringed upon), and also examined the effect of bystander and "victim" gender on intervention.

In an early review of all psychology experiments published over a ten-year span that examined the effect of group size on helping behavior, Latané and Nida (1981), found that in 48 of 56 experiments, more people helped when alone compared to when there were others present, confirming the bystander effect. Overall, 53% of those tested with others present exhibited helping behavior while 75% of those alone helped (Latané & Nida). More recently, in a review of the bystander literature over the past 50 years, including 53 articles with 7,000 participants, Fischer and colleagues (2011) also found that the more bystanders present lead to a larger bystander effect, but also that this effect was smaller in emergency situations.

The influence of gender of both the bystander and the person in need of help on the bystander effect is less clear. According to social-role theory of sex differences, men are primed to help in heroic ways, while women are primed to help in more nurturing ways (Eagly & Crowley, 1986). Although Latané and Nida (1981) looked at the gender of bystanders in their review of the literature, they found no clear gender differences in helping behavior. Meta-analyses investigating sex differences in helping behavior find that men help more often than women (Eagly & Crowley; Fischer et al., 2011); however, this may be more particularly true when the situation is defined as an emergency, allowing men to act in more heroic ways (Eagly & Crowley). On the other hand, in everyday situations, gender differences in helping behavior may be less likely.

If men exhibit heroic and chivalrous helping behavior, according to the social-role theory of gender and helping, then one would think that women would receive more help than men. Although earlier researchers found that women were helped more often than men (Howard & Crano, 1974; Latané & Dabbs, 1975), in their review, Latané and Nida (1981) found that in some experiments women were helped more, while in other experiments women and men were helped equally. Although Eagly and Crowley (1986) found that women were helped more often than men, supporting a social-role view of prosocial behavior, more recently Fisher et al. (2011) found that women were *not* helped more than men. Again, the type of situation probably interacts with helping behavior, but this has not been well-addressed. It is likely that women are more likely to receive help in emergency situations (likely from male bystanders), but similarly, gender differences in receiving help may disappear in non-emergency situations.

In the current study, I conducted research to replicate previous findings regarding the overall effect of bystander group size on helping behavior in three non-emergency situations, and

to clarify the effects of both bystander and "victim" gender on helping behavior. The first hypothesis was that the fewer witnesses to a situation in need of help, the more likely those witnesses would be to assist (Darley & Latané, 1968; Darley & Teger, 1973; Fischer et al., 2011; Latané & Darley, 1968; Latané & Nida, 1981). The second hypothesis was that women and men would be equally likely to receive help, based on the most recent meta-analysis (Fisher et al., 2011), and because these were non-emergency situations. Finally, because it is unclear whether men or women are likely to help more often in non-emergency situations, this will also be examined. The research question examined in the current study was whether one gender would exhibit helping behavior more frequently than the other in non-emergency situations.

Method

Design

The study took place on a midsized, mid-western college campus after IRB approval. I conducted a naturalistic field experiment with a quasi-experimental between-subjects design. The independent variables consisted of the group size a bystander was in when they were observed (alone, in a group of two, or a group containing more than two), the perceived gender of the bystander (male or female), and the sex of the person who was in need of the help (male or female). Those observed while alone had no one near them within approximately 20 feet. The dependent variable was how helpful the person was. Bystanders were categorized as not seeming to notice the person in need of help, noticing but not helping, or making an effort to help. Making an effort to help consisted of an observed person helping by picking up papers, opening a door, or picking up thumbtacks. This design is similar to that used by Levine, Martinez, Erase, and Sorenson (1994).

I and a male confederate conducted 192 trials, including observations of 76 individuals

by themselves, 62 individuals who were in a group of two and 54 individuals who had two or

more companions. People who had at least one free hand were chosen to be observed. This

precaution was taken to exclude any person who might not have helped because their hands were

full. In the alone condition, we observed 44 women and 32 men. In the group of two condition,

we observed 34 women and 27 men. In the larger group condition, we observed 33 women and

21 men.

Procedure

All trials were conducted by myself, a female, or a male confederate of the same age and

ethnicity. We dressed similarly in casual clothes, such as jeans and a t-shirt. The study took

place during weekday business hours during the fall semester on campus. Most trials took place

between 12:00 and 1:00 PM, when students tended to have more of a break on campus, and we

usually collected data for 30 minutes to an hour at a time. Three different scenarios were created

to test helping behavior. All scenarios took place in different buildings on campus. In the first

scenario we "accidentally" dropped 10 loose-leafed papers in front of a person or group of

people walking in the opposite direction. We dropped the papers once an observed person, in the

desired group size, walking in the opposite direction, came within 10-15 feet in front of us. The

second scenario consisted of the researcher standing in front of a bulletin board, attempting to

put up flyers. Once an observed person or people in the desired group size came within 10-15

feet of us, we "accidentally" dropped precisely 15 thumb tacks that we were using to put up the

flyers. The third scenario consisted of the researcher with full arms approaching a door in need

of another to open the door. Once an individual, a group of two, or a group of more than two

coming in the opposite direction came within 10-15 feet of us, we would approach the same door

with full arms. Three scenarios were created so that we didn't replicate the same trial so many

times that people guessed the purpose of the study.

While one researcher created the helping situation, the other researcher stood

approximately 20-30 feet away, and observed the trial and took notes. This distance guaranteed

those that were observed would not look to the confederate for help.

Results

My first hypothesis was that the fewer witnesses to a potential emergency, the more

likely those witnesses would be to help. The quasi-independent variable was group size (alone,

in a group of two, or a group containing more than two). Helping behavior was also classified

into three categories, including not seeming to notice the person in need of help, noticing but not

helping, or making an effort to help. To test this hypothesis, a chi-square test of independence

was conducted using SPSS. Group size was significantly related to helping behavior, $\chi^2(4) =$

16.94, $p = .002$, $\varphi = .297$. The smaller the group a person was in, the more likely they were to

engage in helping behavior (see Table 1). However, it was very apparent that in the larger group,

people were much less likely to notice a need for help. I also wanted to see whether there was

still a difference in behavior when those who did not appear to notice the situation ($N = 34$) were

excluded from analyses. The results of a second chi-square were still significant, $\chi^2(2) = 7.34$, p

$= .026$, $\varphi = .216$. This hypothesis was supported. The larger the group, the less likely people

were to help, even when they noticed that there was a need for help.

My second hypothesis was that because these were non-emergency situations, women

and men would receive help equally as often. The quasi-independent variable was the sex of the

researcher, male or female, and the dependent variable was again the target person's helping

behavior. To test this hypothesis, a chi-square was again calculated. The relationship between

the sex of the researcher and helping behavior approached significance, $\chi^2(2) = 5.86$, $p = .054$, φ = .176. However, this appeared to be due primarily to differences in noticing a need for help – fewer people appeared to notice the female researcher in need of help across conditions (see Table 2). When those who did not notice the need for help were removed from the analysis, there was no difference in whether the male or female research was helped more often, $\chi^2(1) =$ .24, $p = .621$, $\varphi = .039$. This hypothesis was mostly supported. When people noticed the need for help, they were not more likely to help the female researcher more than the male researcher.

My research question was whether one gender would exhibit helping behavior more frequently. The quasi-independent variable was the perceived gender of the helper (male or female) while the dependent variable was helping behavior. Helping behavior was categorized the same way as it was in the first two hypotheses. To test this hypothesis a chi-square was again used to compare the frequency of helping behavior between women and men. There was one trial in which the gender of the observed person could not be determined, and that trial was excluded from the analysis. Overall, there was a marginally significant relationship between bystander gender and helping behavior, $\chi^2(2)= 5.95$, $p = .051$, $\varphi = .176$. Women helped more often than men (see Table 3), but there did not appear to be a difference between men and women in whether they noticed the situation. When those who did not notice were excluded from analysis, the relationship was significant, $\chi^2(1) = 5.94$, $p = .015$, $\varphi = .195$. Overall, women were more likely to help than men. However, I examined only people who did notice and who actually helped the experimenter to see if there was an interaction between the sex of the researcher and the gender of the person who helped. Of the men who helped ($N = 24$), they were more likely to help the female researcher ($N = 18$) than the male researcher ($N = 6$), while

women were fairly equally likely to help either the female researcher (N = 22) or the male

researcher (N = 29), $\chi^2(1) = 6.66$, $p = .010$, $\varphi = .287$.

Discussion

There are many variables that affect whether a person helps another. Among these

variables are group size, gender of the observed, and gender of the person in need of help. These

variables were the focus of the current study. I wanted to replicate the basic bystander effect;

that the more people around, the less likely any one person is to help, particularly in non-

emergency situations. My first hypothesis was supported; college students who were alone were

more likely to assist the researcher in need than those with companions. This was even true after

excluding from analysis the people who did not seem to notice the need for help. This finding

supports the basic bystander effect. The difference in noticing need based on group size also

lends support for Latané and Darley's bystander intervention model (1970), in which the first

step to bystander intervention is noticing the need for intervention. When in larger groups,

people are more involved with each other, and possibly less aware of their surroundings. In the

current study, people who noticed a need for help were still more likely to help if they were

alone, compared to with companions.

My second hypothesis, that women and men would receive the same amount of help in

non-emergency situations, was mostly supported. When only taking into account those who

appeared to notice the need for help, both I and my male confederate were equally likely to

receive help, which replicates the overall findings of the most recent meta-analysis on this topic

(Fischer et al., 2011). Because these scenarios involved non-emergency helping situations, it is

still unclear whether women will in fact receive more help in emergency situations, but the

results of my study suggest that gender differences in who receives help depend on the type of

situation (emergency or non-emergency). On the other hand, it is unclear why there was a difference in the number of people who noticed the female vs. male researcher's need for help. This could have been due to the specific researchers in the study; some aspect of the male confederate may simply have been more noticeable. Future research could be conducted with multiple male and female confederates.

Past research on whether one gender exhibits helping behavior more frequently has been unclear, at least in non-emergency situations. I sought to answer whether men or women would help more in non-emergency situations. I found that women who noticed the need for help were actually significantly more likely to help than were men who noticed, at least in these particular situations. However, when researcher sex and participant gender were examined together, it was clear that men were more likely to help the female researcher than the male researcher, which may support a social-role theory of sex differences regarding prosocial behavior.

There were several limitations of my study. As a result of conducting the experiment on a college campus, most people observed were around the same age. Older adults (or children) may have responded differently. A college campus is also an environment where everyone is usually busy and in a hurry. This might have lowered the number of people who helped, or who noticed the need for help, because they were too busy. In this study, each condition (papers, thumbtacks or full arms) was conducted on a different day, although in different buildings on campus, and this introduces history as a potential threat to internal validity. We started collecting data before the 2016 presidential election, and ended after the election. Specific events such as these could have affected people's helping behavior. Future researchers can easily address these limitations by better counterbalancing the order of their trials.

Overall, this study adds to the literature about the circumstances in which people will help one another. Although many people recognize the bystander effect, it is not simply the number of bystanders in a situation that will determine their behavior. My research suggests that not only the gender of both the person in need for help and of the bystanders matters, but also that behavior will also depend on whether the situation is or is not an emergency. Although older research found that men were overall more likely to help (Eagly & Crowley; Fischer et al., 2011), in my study, women were actually more helpful. Although it is likely that this is because these were non-emergency situations, this study should help change the idea that men are more helpful.

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Appendix

Table 1

Crosstabulation of Group Size and Helping Behavior

Size	Not notice	Notice not help	Help	Total
Alone	8	29	39	76
1 companion	9	28	25	62
2+ companions	17	26	11	54
Total	34	83	75	192

Table 2

Crosstabulation of Researcher Sex and Helping Behavior

Researcher	Not notice	Notice not help	Help	Total
Female	25	41	40	106
Male	9	42	35	86
Total	34	83	75	192

Table 3

Crosstabulation of Gender of Person Observed and Helping Behavior

Gender	Not notice	Notice not help	Help	Total
Female	20	40	51	111
Male	14	42	24	80
Total	34	82	75	191