Fear of Negative Evaluation Affects Helping Behavior: The Bystander Effect Revisited

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The effect of shyness and fear of negative evaluation (FNE) on helping behavior was examined. Eighty-three students participated in the experiment. Their individual shyness, FNE, and self-monitoring scores were collected prior to participation. During the experiment, participants had the opportunity to help a female confederate in either a social or non-social situation. An interaction of FNE and condition was found to be marginally significant. In the social helping condition, participants who helped showed no difference in FNE scores versus those who did not help. However, in the non-social condition participants who helped had lower FNE scores than those who did not help. The findings are framed in accordance with the bystander effect. A marginally significant interaction of gender and condition was also discovered. Males helped at the same rate as females in the non-social condition, but helped more than females in the social condition. This provides support for the social role theory of helping, based on the socially conditioned mores that a man should help a woman in need.

There is extensive research on shyness, fear of negative evaluation (FNE), and helping behavior as individual topics, but very limited knowledge concerning how these constructs are interrelated. Because shyness, FNE, and helping behavior are prevalent in many facets of everyday life, it is important to investigate the relationship between these variables. In the present study, the effects of shyness and fear of negative evaluation on the likelihood of offering help were examined within a self-presentational paradigm.

Shyness and Fear of Negative Evaluation

Shyness, defined by Pilkonis (1977) as “a tendency to avoid social interactions and to fail to participate appropriately in social situations” (p. 596), is a feeling that has been experienced by the majority of the population at some point in their lives. Much research has been devoted to understanding this common phenomenon through a self-presentational model. The main hypothesis of this model is that shy people are prone to...
anxious self-preoccupation when they are in social situations (Crozier, 1979a). For a shy individual, this process begins prior to actual involvement in a social situation. Crozier (1982) pointed out that shy people do not have a real deficit in social skills, but instead they are consumed by a lack of confidence in these skills. In fact, shyness can be conceptualized as a reaction to one’s fears about social competence or ability to cope, and therefore it is perceived as more of a result of this mindset rather than the cause of it (Crozier, 1979b). The effects of this state of mind are demonstrated in the way in which shy people express lower self-efficacy beliefs concerning their social abilities (Caprara, Steca, Cervone, & Artistico, 2003), and show larger perceived skill deficits than non-shy people (Jackson, Towson, & Narduzzi, 1997; Melchior & Cheek, 1990). It is important to note that shy people do not rate themselves inadequately when considering all of their qualities; this is a perceived deficiency only expressed when assessing social abilities (Crozier, 1981).

There is also evidence that shy people do not hold unrealistically high expectations for their own social interactions in comparison to their expectations held for the performance of others, but the difference between shy and not shy people lies in their self-evaluation of their own social behavior. Clark and Arkowitz (1975) found that socially anxious people held the same standards concerning socially acceptable behavior for themselves and others. However, socially anxious men rated their own performance lower than did judges, while these same men rated the others’ performance the same as the judges. This result suggests that the difference does not lie in the standards shy people hold for themselves versus others, but rather the difference lies in their inferior self-evaluation. It is suggested that because of shy people’s own poor evaluation of their past social performances they are reluctant to engage in future social activities (Crozier, 1979b).

The highly anxious participants in the Clark and Arkowitz (1975) experiment also expected greater negative evaluation from others. This anticipation of poor feedback is another essential part of explaining shyness. Shy people reported having more fear of social evaluation, more negatively biased thoughts about the impression they made on a partner, and showed more negatively biased reactions to feedback provided by a partner (Asendorpf, 1987). Along with the larger perceived skill deficits that shy people expressed, the shy people were more concerned with the disapproval of others. Jackson et al. (1997) found that shyness was predicted by perceived shortcomings in interpersonal skill along with expectations of rejection by others. This finding was echoed in a study by Jackson, Flaherty, and Kosuth (2000), in which the strongest predictors of shyness in both Japanese and American students were perceived
interpersonal competence and heightened expectations of rejection by others.

Further support for the role of FNE in shyness can be discovered in the way that some circumstances are more likely than others to elicit shyness. These occasions include situations that make larger demands on social competence (e.g., meeting a new person), as well as those that have an increased likelihood of criticism or disapproval (e.g., speaking in front of a large audience). These types of occasions underscore the fact that others' evaluations are what may frighten and intimidate shy people, especially because these shy individuals may already believe that they are inept when entering social situations (Crozier, 1979b). Offering more evidence to this finding, Jackson, Fritch, Nagasaka, and Gunderson (2002) found that people with high levels of shyness approached interactions with heightened expectations of rejection, and while participating in a social exercise, these same people tended to be preoccupied with disapproval from others. These findings suggest that instead of paying attention to the actual interaction as a non-shy person would do; the shy person is anxiously focused on signs of social disapproval from others. Additionally, Shepperd and Arkin (1990) pointed out that although people who are not shy aim to present themselves in a socially desirable way and seek approval from others, the main goal of shy people is to avoid disapproval in social interactions. Shy people then approach social situations using a protective self-presentational style in which they choose, modify, or create social contexts in which the social rejection they fear will not occur. Therefore, along with focusing on the evaluation of others during the social interaction, shy people search for ways to avoid their expected outcome of failure or embarrassment in social settings.

This lack of confidence in social skills and perceived inability to perform adequately in social situations has been shown to create a FNE in shy people. These two factors also lead shy individuals to respond to social situations with self-consciousness and high self-monitoring tendencies (Crozier, 1982). Crozier (1979a) stated that shyness can be conceptualized as the cycle of evaluating performance poorly in previous social situations, then in turn reacting with anxious self-preoccupation to future situations. There is much research that supports this idea. Shy people reported spending more time being anxiously preoccupied and self-focused during a social interaction (Melchior & Cheek, 1990), and shy participants completing a Stroop task were more likely to self-report worry and test irrelevant thoughts during the test, sometimes distracting them from focusing on the task (Arnold & Cheek, 1986). This self-focus is shown to affect people's regulation capacities. Specifically, shy people who were self-focused and anxious in social situations had a more
difficult time shifting attention from themselves to others (Eisenberg, Fabes, & Murphy, 1995).

In addition to not being able to easily redirect one's focus on outside sources during an interaction, a self-focused individual incurs other obstacles. People who are made self-aware have lower self-esteem compared to those who are not self-focused. When people's attention is self-focused, they are able to blatantly see the difference between their expectations for a particular event (such as an interaction with another person) and the actual outcome of that situation. This discrepancy causes people to rate their performance poorly and believe they have not behaved appropriately; thus, these people may have low self-esteem (Ickes, Wicklund, & Ferris, 1973). Self-focused attention has also been shown to cause people to make greater dispositional attributions for their own behavior, as opposed to situational attributions (Duval & Wicklund, 1973). Because shy people are highly self-aware in a social situation, they will first see the discrepancy between their intentions and actual outcomes as an indication of failure, and then they will attribute this shortcoming to a deficit in their own social skills, as opposed to the situation. By interpreting one's performance in this way, it is more likely that the person will respond to future social situations with anxious self-preoccupation (Crozier, 1979a). Because their past performances are deemed inadequate, shy people do not want to repeat their previous failures and wish to "stay out of the spotlight" when in social settings (Crozier, 1982).

The main obstacle shy people face is the self-preoccupation they experience when around others. In the majority of cases, shy people have the same social skills as non-shy people (Clark & Arkowitz, 1975; Crozier, 1982), and during social interactions, their performances do not differ from non-shy people. Indeed when outside observers rated socially anxious people's interactions, they were unable to differentiate between the high social anxiety and low social anxiety participants (Clark & Arkowitz, 1975). Through clinical observation, it has been revealed that shy clients display the same behaviors as non-shy people when they are not self-focused, and many times these people are observed to be highly skilled (Henderson & Zimbardo, 2001). However, because shy people automatically focus attention on themselves while in a social situation, they display lack of confidence in their social skills, FNE from others, poor self-evaluation, and in turn avoidance of future social situations.

Helping Behavior

Helping behavior has been viewed through many different perspectives, and several of these theories conceptualize helping through motivations of self-concern. One of these approaches views helping
behavior through a self-presentational model. This model views people’s helping behavior as the means by which the helper creates a desired impression of him- or herself. Iedema and Poppe (1994) used a “bogus pipeline” method to uncover participants’ true feelings about helping behavior. In this procedure, participants are hooked up to a “pipeline” that they believe can reveal their true thoughts and feelings, so that the experimenter could ask them questions and be able to know if the responses they received were true. When participants were asked how they viewed altruism without the pipeline (i.e., when they did not believe the researcher would know if they had lied) they responded by viewing helping behavior in a prosocial manner. However, when participants were attached to the “bogus pipeline” and believed the researcher was aware of their true thoughts and feelings, they reported viewing helping in a proself light. These results suggest that participants truly viewed helping others as a means to benefit themselves.

Some of the support for the self-presentational model lies in the finding that people help more in a public condition and with the presence of an audience (Riordan, James, & Dunaway, 1985), presumably so that their good deeds will be noticed and the witnesses will think highly of the person offering help. The actions of high self-monitors also can show that helping behavior may be used to influence other’s perceptions of the helper. High self-monitors are concerned with the impression they give to others; thus their actions will be more focused towards creating a good image of themselves in the eyes of others. Kulik and Taylor (1981) found that high self-monitors are more influenced by undesirable consensus information concerning helping than low self-monitors. This means that if the social consensus is not to help in a particular situation, high self-monitors are more likely than low self-monitors not to help, showing their desire to remain in good standing with their audience. Research by White and Gerstein (1987) also showed that high self-monitors are more influenced by social consequences that are associated with helping. These people are more likely to help when there are strong positive social consequences linked to helping, and are less likely to help when there was prior knowledge of no social consequences attached. White and Gerstein concluded that the high self-monitors in this experiment were influenced by egoism in their decision to help.

Several other studies have shown that individuals use helping behavior to create positive images of themselves. Cialdini, Darby, and Vincent (1973) found that participants who were exposed to a positive event previous to being given an opportunity to help were then less helpful than those who were not exposed to the event. These results are explained by noting that the people who received positive feedback from an audience already had a positive representation of themselves, and
because their image was already being conveyed in a positive manner, it was therefore not necessary to help. In a similar study, McMillen (1971) reported that participants helped less when they already had feedback that enhanced their self-esteem, presumably because participants who had high self-esteem did not feel the need to restore their self-image by means of helping another person.

Shyness, Fear of Negative Evaluation, and Helping Behavior

The present experiment explored the effect that shyness and FNE have on a person’s helping behavior. As noted, shy people are known to exhibit anxious self-preoccupation in social situations. They highly monitor their words, actions, and thoughts when in the presence of an audience. Because of this high self-focus, it may seem logical to assume that a shy person in a social helping situation (who is highly self-monitoring) would help in order to appear in a positive light to others. However, it is important to remember that shy people experience FNE from the audience (Asendorpf, 1987; Clark & Arkowitz, 1975; Jackson et al., 1997), as well as a somewhat distracting preoccupation with the self during interactions (Arnold & Cheek, 1986; Crozier, 1979a). Because shy people believe that they lack appropriate social skills and in turn expect to perform poorly in social situations, they fear the anticipated negative evaluation of others. An example of this inhibition due to FNE is provided by Guyton (1997). She observed children’s behavioral habits and discovered that shy children had lower helping scores as compared to non-shy children. Guyton suggested that although the shy children may have been empathetic to the children needing help, they might not have been able to overcome their fear of acting inappropriately or failing, and therefore did not help. The hesitation of individuals high in shyness or FNE to participate in social situations is expected to interfere with participants’ helping behavior in the present study.

Because socially anxious people are self-focused around others, they are sometimes consumed with an attentional bias; they are overly concerned with how they look, what they say, and how they perform. Hartman (1983) suggested that while in this state, people cannot concentrate on others, and they lose the ability to participate comfortably and enjoy interactions. As they are so focused on monitoring their arousal, assessing their performance, and appraising other’s perceptions, it is then difficult to also pay attention to others in the interaction. This in turn may have consequences in a situation that could require helping behavior from shy persons. If people are anxiously self-preoccupied and engaged in all of these acts simultaneously, it is possible that they will not give adequate consideration to the current situation, and perhaps not realize there is a need for help. Several studies revealed how self-focused
attention has also been observed to have a debilitating effect on helping behavior. Karylowski (1979) stated that self-awareness does not necessarily increase consistency between internalized prosocial ideas and behaviors, and he observed a deficit in the prosocial acts performed by self-focused persons. Gibbons and Wicklund (1982) discovered this same incapacitating effect on helping behavior when their participants were made to be self-aware. They found that an individual would help in proportion to the extent of the person’s self-focused attention. Participants were found to help when the cue to help was legitimate and salient (creating a need to help that is obvious), and also when they did not have a self-preoccupation that would inhibit thinking about helping.

Taking into account the obstacles of self-preoccupation and FNE that a shy person must overcome to help in a social situation, it appears that self-monitoring and impression management would not be enough motivation to help. It is hypothesized that shy participants will be less likely to help in a social condition. Likewise, it is hypothesized that participants higher in FNE will be less likely to help in a social condition. It is also hypothesized that shy participants in the non-social condition will not differ in their helping behavior from non-shy participants in either the social or non-social condition. Finally, it is hypothesized that participants higher in FNE will not differ from those low in FNE in their helping behavior from low FNE participants in either the social or non-social condition.

METHOD

Participants

The participants consisted of 83 undergraduate students from a small liberal arts college (48 female and 35 male participants). Participants ranged in age from 17 years to 21 years with an average age of 18.54 years. Although participants were not asked to report their race, the sample was comprised of nearly all Caucasian individuals. The students volunteered to take part in the study in exchange for credit toward fulfilling a research participation requirement.

Materials

Prior to the experiment, potential participants (i.e., all introductory psychology students) completed a packet of questionnaires that included Cheek’s (1983) revision of the 13-item Shyness Scale (see Leary, 1991), the Fear of Negative Evaluation Scale (Watson & Friend, 1969), and the Self-Monitoring Scale (Snyder & Gangestad, 1986). These scales have all demonstrated adequate reliability in previous research ($\alpha = .90, .92, \text{ and } .70$ respectively). At the beginning of the experiment the researcher gathered demographic information from each participant through an individual interview. This information was placed with the student’s
scores from the indexes above. Four questions were created (modeled after Tomaka & Blascovich, 1994) to assess participants' stress before and after a timed test. Both the participant and an experimental confederate were given a list of 30 words whose letters had been scrambled out of order. They were asked to rearrange the letters to create a proper English word. The preliminary word list consisted of 80 word scrambles; the majority of the original words were taken from a list of common English words, and several were taken from a practice list of SAT words. From these, 35 words were chosen with varying difficulty levels to comprise the scrambled word task.

Procedure
At the beginning of the semester, all Introductory Psychology students (the potential future participants) were given Shyness, FNE, and Self-monitoring scales. This information was collected prior to their immediate participation so that students would not associate these constructs with the study and in turn would not be thinking about them while participating in the study. When the students signed up to participate in the experiment, their individual scores on these measures were retrieved. Each participant was assigned a number that would serve as his or her identification for the duration of the study, and from this point on all of the data were associated with the participant's number.

The participants believed they were signing up for a study assessing students' puzzle solving abilities. Each participant was run individually. There were two helping conditions: non-social helping and social helping. In the non-social helping condition, the participant and a female confederate would arrive outside the experimental room, and the experimenter would invite the two into the room to begin the study. Two chairs were placed across from each other at a table in the middle of a cluttered room. On the table there were stacks of papers, computer discs, and books. A hidden camera was positioned in a crowded bookshelf towards the back of the room. The two students were asked to take a seat, with the confederate always choosing the same chair, therefore guiding the participant to sit in the chair directly across from the confederate and in the view of the camera.

After the participant and confederate signed an informed consent form, the researcher explained that the experiment was testing the puzzle-solving abilities of college students, and that they would be taking a 10-min timed test on which they would try to correctly solve as many word scrambles as possible. The participants were then told that before they were given the test they would be called out of the room individually to give the experimenter some information, and then the experimenter asked the participant to come out first. The researcher led him or her to another
room and asked about the participant’s demographic information for approximately 3-4 min. Then the participant was led back to the room and the confederate was called out. On the way out of the room, the confederate knocked over a stack of 9 floppy discs from the table onto the floor. The confederate then motioned to pick up the discs, but the experimenter stated that they were running late so she should not worry about the discs and leave the room now to complete the interview. Each disc was labeled with a year (2001, 2002, etc.). Helping behavior was coded as not helping, picking up the discs, or picking up the discs and organizing them into chronological order. Because only three participants organized the discs, this variable will not be presented in the analysis.

After the confederate and experimenter left the room, only the participant would remain in the room sitting in view of the dropped discs. The video camera would then record the actions of the participants. After approximately 3 minutes had elapsed, the confederate and experimenter returned to the room. If the participant had not helped pick up the discs, the confederate would quickly do so. The researcher then handed out a packet containing the stress questions and the word scramble test to both the participant and the confederate. The experimenter read the instructions and answered any questions. The participant and confederate were instructed to answer the pre-test stress questions and then signaled to begin the test. During the testing time, classical music was played with the intention of masking any sounds the hidden camera may have made. After 10 min had passed the researcher asked the participant and confederate to complete the post-test stress questions. The experimenter collected the word scramble tests, thanked the two for their participation, and dismissed them from the experiment.

In the social helping condition the procedure of the experiment was the same as the non-social condition; however there were two more “sub-confederates” (one male and one female) in the experimental room when the participant and confederate entered. The two confederates were sitting in individual desks in the back of the room and appeared to be working on the scrambled word test. The researcher explained that these people were remaining participants from the previous experiment that had begun late, and it was important not to disturb them while they were taking the test. The experiment continued the same as the non-social condition with the only difference being when the confederate knocked over the discs and left, the participant remained in the room with two audience members. This created the same opportunity to help while in a social condition. To keep the sample as naïve as possible toward the goals of the study, all participants were debriefed at the end of the academic year.
RESULTS

When examining the effect of shyness and FNE on helping behavior, several aspects of the experimental measures were tested. These analyses assessed the hypotheses that participants high in shyness or FNE would be less likely to help in the social condition, and that participants high in shyness or FNE would be equally as likely to help in the non-social condition as non-shy or low FNE participants in both the social and non-social condition.

Zero-Order Correlations & Reliabilities

The revised 13-item Cheek Shyness scale (1983), Fear of Negative Evaluation scale (Watson & Friend, 1969), and Self-Monitoring scale (Snyder & Gangestad, 1986) were first analyzed for their reliability. As can be seen in Table 1, the Cronbach’s alpha for each scale was at or above .73. The zero-order Pearson correlations between each of the three measures were also calculated. As predicted, the shyness and FNE scales were positively correlated, $r = .60$, $p < .01$. Self-monitoring was not correlated with either shyness or FNE scales. Because of this lack of relationship between these constructs, self-monitoring analyses will be limited.

<table>
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<tr>
<th>Scales</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<td>1. Shyness</td>
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<td>.85</td>
<td>.60*</td>
<td>-.19</td>
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<tr>
<td>2. FNE</td>
<td>3.02</td>
<td>.68</td>
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<td>.94</td>
<td>.15</td>
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<td>3. Self-monitoring</td>
<td>27.53</td>
<td>3.58</td>
<td></td>
<td></td>
<td>.73</td>
</tr>
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Cronbach's alpha reported on the diagonal

* $p < .01$

Analysis of Helping Behavior

A power analysis was conducted to determine the impact of the relatively small sample size. Although sample size alone does not predict statistical significance, this analysis suggested the possibility that a small sample size was contributing to reduced power (.62). Because of this finding, the range of marginal significance was expanded to $p = .20$.

To predict the dichotomous variable of helping (help vs. no help), a logistic regression was conducted. Experimental condition, shyness, FNE, and self-monitoring scores were entered into the first block. Following the procedure outlined by Aiken and West (1991), interaction terms were created by multiplying the centered shyness, FNE, and self-monitoring scores by condition (social or non-social). The logistic
regression model was not significantly improved when these three interaction terms were entered into the second block, $\Delta \chi^2 (3) = 1.33, p = .72$. In the first block, shyness was not found to be an overall predictor of helping behavior, $b = .17, SE = .46, OR = 1.18, p = .72$. FNE was seen to be a marginal predictor of helping behavior ($b = -.62, SE = .47, OR = .54, p = .18$), indicating that participants with high FNE across both conditions are less likely to help. Condition was also found to be a clear predictor of helping behavior, ($b = 1.05, SE = .47, OR = 2.86, p = .02$), showing participants slightly less than three times more likely to help in the non-social condition than in the social condition.

In this logistic regression the interaction of FNE and condition was not significant in predicting helping ($b = .79, SE = 1.01, OR = 2.21, p = .43$), however due to the power calculation the interaction was investigated further. The effect of FNE in each of the two conditions (social vs. non-social) was then assessed separately. A logistic regression entering FNE for participants in only the social condition revealed no difference in FNE levels of helpers versus non-helpers, $b = .01, SE = .58, OR = 1.01, p = .98$. A point biserial correlation analysis showed no difference between helper and non-helper FNE scores, $r_{pb} = .00, p = .98$. However, a second logistic regression entering FNE with the participants in the non-social condition displayed a marginally significant finding which suggested that participants who had lower FNE helped more than those who had higher FNE scores, $b = -.69, SE = .45, OR = .50, p = .13$. The point biserial correlation coefficient revealed a marginally significant difference between the FNE scores of helpers and non-helpers in the non-social condition, $r_{pb} = .25, p = .12$. Although not significant, the same pattern as above was found with the interaction of shyness and condition in the second block of the original logistic regression, $b = .13, SE = .96, OR = 1.14, p = .89$. There was no difference in shyness scores between helpers versus non-helpers in the social condition ($b = .02, SE = .46, OR = 1.02, p = .96$), with a point biserial correlation of $r_{pb} = -.01, p = .96$. In the non-social condition, although not significant, there was a greater difference in shyness between helpers and non-helpers ($b = -.64, SE = .53, OR = .53, p = .22$), with a point biserial correlation of $r_{pb} = .19, p = .23$.

Logistic regression analyses were run to assess the role of gender in helping, where condition and gender were entered as predictor variables. Here, gender was found to be a marginally significant predictor of helping behavior, $b = .79, SE = .48, OR = 2.21, p = .10$, with males being more than twice as likely to help as females. In a separate logistic regression, condition, gender, and FNE were entered in the first block. The interactions of FNE and condition, and gender and condition were entered in the second block, $\Delta \chi^2 (2) = 4.10, p = .13$. This analysis
revealed the interaction of gender and condition to be a marginally significant predictor of helping as well, \( b = -1.81, SE = 1.00, OR = .16, p = .07 \). This finding was further investigated through Chi-square analysis.

To assess whether there was a difference in helping between males and females, helping (help vs. no help) and gender were entered into a Chi-squared analysis. Gender was first examined in the non-social condition, where no effect of gender on helping behavior was discovered, \( \chi^2 (1, n = 39) = .03, p = .86 \). In the social condition there was a significant effect of gender on helping. Analysis revealed that when in the presence of others, males are more likely to help than females, \( \chi^2 (1, n = 44) = 5.98, p = .01 \). A t-test was conducted to inspect the influence of self-monitoring in this effect, however the analysis revealed no difference in self-monitoring in males who did help (\( M = 28.45 \)) versus males who did not help (\( M = 28.5 \)) in the social condition, \( t (19) = .03, p = .98 \).

**Analysis of Time to Help**

The time participants took to help was coded for all participants who helped. This measure was timed in seconds from when the discs hit the floor until the participant left his or her chair to pick up the discs. Time to help was entered as the dependent variable in a regression in which condition, shyness, FNE, and the interactions of shyness by condition and FNE by condition were entered as predictor variables. The analysis revealed no main effect of shyness (\( t (36) = .17, p = .87, \beta = .09 \)) or the interaction of shyness and condition on time to help, \( t (36) = -.25, p = .81, \beta = -.14 \). Participants’ FNE also did not have an effect on time taken to help either alone (\( t (36) = .84, p = .41, \beta = .43 \)) or in the interaction with condition, \( t (36) = -.14, p = .26, \beta = -.59 \).

**Analysis of Stress Scales**

After the experimenter read the scrambled word test directions aloud, the participants completed 2 questions concerning their stress level (pre-test stress). Two more questions were asked to assess stress after the test was over (post-test stress). A t-test was conducted to investigate the effect of condition on stress levels. This revealed no effect of condition on pre-test stress, \( t (81) = -.61, p = .54 \). The scores in the social condition (\( M = 3.66 \)) were not significantly different than those in the non-social condition (\( M = 3.53 \)). There was also no effect found for post-test stress, \( t (81) = -.57, p = .57 \), showing scores in the social condition (\( M = 4.27 \)) and non-social condition (\( M = 4.10 \)) were not significantly different. ANOVA tests were then used to investigate the interaction of both shyness and FNE with condition on stress levels. There was no significant effect discovered for the interaction of condition and shyness on the pre-test stress (\( F(1, 70) = .60, p = .44 \)) or post-test stress, \( F(1, 70) = .57, p = .57 \).
Finally, no effect was found for the interaction of condition and FNE on pre-test stress \([F(1, 70) = .05, p > .94]\) or post-test stress, \(F(1, 70) = .00, p = .97\). However, through correlational analysis, a positive correlation emerged between FNE and post-test stress, \(r = .26, p < .05\).

**DISCUSSION**

**Zero-Order Correlations and Reliabilities**

Each of the three personality variable scales (shyness, FNE, and self-monitoring) was found to be reliable. The strong correlation found between the shyness and FNE scales both reflects previous research (Cowden, 2005; Towson et al., 1997) and reemphasizes the congruency between the two constructs.

**Helping Behavior**

The purpose of this study was to examine the effect of shyness and FNE on helping behavior. The first hypothesis that participants who showed high shyness scores would help less in the social condition was not supported. The second hypothesis that participants who had higher FNE would also help less in the social condition was not supported as well. People with high shyness and/or FNE scores did not help at a different rate in the social condition than others with lower shyness and/or FNE scores. The third hypothesis suggesting that participants high in shyness in the non-social condition would help at the same rates as participants low in shyness in both conditions was supported. There was no difference found between these groups. The fourth hypothesis that participants high in FNE in the non-social condition would help at the same rate as low FNE participants in both conditions was not supported. A marginal interaction of condition and FNE levels in the non-social condition was discovered.

Several variables were discovered to predict helping behavior. FNE was found to be a marginal predictor of helping behavior regardless of condition, showing that participants with high FNE scores were less likely to help. A logical explanation of this finding is that these participants were more hesitant to pick up the discs because of their fear of other’s evaluation, especially when they are predisposed to believing the appraisal has the strong potential of being negative.

Helping behavior was also found to be significantly affected by condition (social vs. non-social). Participants in the non-social condition were slightly less than three times more likely to help than those in the social condition. The finding in the present study is consistent with the widely-known bystander effect, where people in the presence of others are less likely to help due to diffusion of responsibility than when one is alone and all of the responsibility to help lies only upon him or her.
The experimental design deliberately attempted to remove this effect in the social condition by having the experimenter explain to the participant and main confederate that the two students in the back of the room (the sub-confederates) were taking a timed-test and should not be talked to or disturbed in any way. This manipulation was aimed to remove any accountability to help from the two sub-confederates and place the entire obligation to help on the participant in the social condition, as it was for participants in the non-social condition. The bystander effect has been quite robust in the previous literature, and this is echoed in the present findings. It remains very difficult to remove the effects of this diffusion of responsibility when there is more than one person in the room, even after manipulations have been put in place to do so.

It is important to contrast this effect with the Riordan et al. (1985) finding that participants were more likely to help when in the presence of an audience. In their experiment intent to help by means of completing further questionnaires was the dependent variable measuring help. While there was an audience that was aware of the participant’s response, this audience did not have opportunity to help and therefore the entire obligation was on the participant. This experiment differs from the present study in the way that there was no possibility for diffusion of responsibility, and therefore no bystander effect emerged.

One of the most intriguing findings was the marginal effect of the interaction of FNE and condition on helping behavior. In the social condition there was no difference in FNE in individuals who did help versus those who did not help. However, in the non-social condition participants who helped had marginally lower FNE than those who did not help. This can be interpreted in accordance with the bystander effect. Because of the diffusion of responsibility in the social condition, the participant faces little decision of whether to help or not. Here, FNE does not become an issue, as there is little to no thought of helping, and in turn no apprehension of being evaluated poorly. In the non-social condition the participant is left alone and has all of the responsibility to help, and therefore must make a decision to act or not. Even though the experimenter is not present at the time help is given, there is still an opportunity for evaluation by the researcher when she returns. Participants with a high FNE choose not to help while participants with low FNE (who are not preoccupied with negative appraisals) choose to help. The same suggestion can be applied to the pattern found in the interaction of shyness and condition.

Another interesting finding is the emergence of gender as being a marginal predictor of overall helping. Eagly and Crowley’s (1986) meta-analysis of literature on gender and helping behavior and findings
supporting the social role theory are especially pertinent to the present results. This idea suggests that men are socially predisposed to help women in chivalrous and heroic acts supported by their gender role. Eagly and Crowley's analysis discovered that not only did women receive more help than men, but also that men helped more females than they did males. Men also gave an especially large amount of help to women when under surveillance by onlookers, most likely because an audience is generally regarded as reinforcement to support social norms. Both of these effects are congruent with the present findings concerning males helping behavior towards females.

In the current study, men were found to be twice as likely to help as women. This may have been because both the experimenter and the main confederate were female, and a male may be either socially conditioned to be more willing or to feel a stronger need toward helping a female. A marginally significant interaction with gender and condition was also found. Analysis revealed in the non-social condition there was no effect of gender on helping, but in the social condition males were more likely to help than females. This finding may be congruent with the same social role theory of helping, and here it is seen especially when in front of an audience. These findings may have also indicated that the males who helped in the social condition would be higher self-monitors (as being in the presence of an audience enhanced their actions), but analysis showed no difference in self-monitoring between males who helped and males who did not help.

Time to Help

The time participants took to help was thought to be perhaps a more valid measure of either assertion or hesitancy to act, on the premise that people with high shyness or FNE may want to help and may just be slower to act on their convictions than those with low shyness or FNE. There was no effect found for condition on helping time. There was also no effect revealed for shyness, the interaction of shyness and condition, FNE, the interaction of FNE and condition, self-monitoring, or the interaction of self-monitoring and condition on time taken to help. Although this was a surprising finding, the data showed that 83.8% of participants who helped acted within the first 42 seconds. As the large majority had times within this range, it was seen that most participants helped fairly quickly with only several outliers. However, when these outliers were removed, there were still no significant effects on time to help.

Stress Measures

The pre-test stress and post-test stress scores were examined, revealing no effect of condition on stress. There was also not a significant
effect of the interaction of shyness and condition or FNE and condition on pre- or post-test scores. This may indicate that perhaps the social manipulation was not strong enough. Ideally, the addition of sub-confederates creating a social condition would cause some stress in participants with higher shyness or FNE. Perhaps a more appropriate way to view the two conditions would be public versus private instead of social versus non-social, as the very essence of a psychological experiment such as this is indeed social. Although in the non-social condition the participant was alone in the experimental room for several minutes during the opportunity to help, he or she had previously been exposed to two other individuals, which technically created a social element. The two sub-confederates may have created a public condition rather than social, and the lack of confederates could have been understood in a more private condition as opposed to non-social.

One interesting discovery was the positive correlation between FNE and post-test stress regardless of condition. We suggest this is because at the end of the experiment (when the post-test questions were completed), they were to give their scrambled word test to the experimenter, which they were aware was then to be scored by the experimenter. Because their test scores were reflections of themselves and conceivably their intelligence, participants who were high in FNE naturally showed higher stress levels in this situation.

Limitations and Future Research

The present study examined true helping behavior in an experimental setting. Although the researcher thought it was important to look at actual helping as opposed to intent to help, this desire created some limitations. Manipulating only the social factor was difficult in this experiment, as there was a possibility for many different aspects to affect the participants’ helping behavior. The abundance of possible determinants of helping include both the confederate’s and experimenter’s eye contact and tone of voice (Goldman & Fordyce, 1983), appearance/dress (Schiavo, Sherlock, & Wicklund, 1974; Harris & Bays, 1973), and similarity to the participant (Emswiller, Deaux, & Willits, 1971). An action as simple as the experimenter holding open the door for a participant may later lead to reciprocal helping (Moore, 1984) performed by the participant. Although these confounds were controlled for as much as possible, these variables may have still affected participants’ behavior.

Another limitation was ensuring the participants or potential participants were not aware of the true aim of the study. In a small liberal arts college setting, it was difficult to guarantee naïve participants, as many of the participants lived in close quarters with much contact to one another and had numerous opportunities to discuss the experiment.
Participants’ helping behavior may have also been somewhat influenced by guilt. When the confederate knocked over the discs and motioned to pick them up, the experimenter instructed the confederate not to worry about them but instead to quickly leave the room for her interview because “We are running late.” Because some of the participants were in fact tardy to the experiment, they may have felt responsible for the experiment running late, and therefore picked up the discs out of guilt. Both theory and research support the notion that inducing guilt leads to increased helping (e.g., Salovey, Mayer, & Rosenhan, 1991) and reparative behavior to reduce feelings of guilt (Hoffman, 1998; Walter, 2001). In addition, participants may have been affected because they had just seen the confederate attempt to clean them up but they were instructed to leave them. The students may then have been hesitant to touch the discs because they might have viewed it as going against the experimenter’s instructions.

Finally, the small sample size may have been a limiting factor in finding significance at the customary .05 level. We took the small sample size into account and adjusted our criteria for significance. Replication with larger samples will provide a better understanding of the true nature of the relationship between fear of negative evaluation and helping.

There are many aspects of shyness, FNE, and helping behavior that would be beneficial to examine. Designing an experiment with a stronger social manipulation or with differing levels of social manipulation may yield interesting results. Delving further into the gender effects through the use of all male or all female confederates may also produce interesting results and perhaps clarify the motives behind gender differences in decisions to help.

REFERENCES


**Author Note:** Lori M. Karakashian, Mark I. Walter, Andrew N. Christopher, and Todd Lucas, Department of Psychology, Albion College, Albion, Michigan. Todd Lucas is now a postdoctoral fellow at the Center for Behavioral and Decision Sciences in Medicine in Ann Arbor, Michigan. This article is based on a senior thesis conducted by the first author. Portions of this article were presented at the 17th annual convention of the American Psychological Society, Los Angeles, California, May, 2005. This research was supported by a grant from the Albion College Foundation for Undergraduate Research, Scholarship, and Creative Activity.

Footnote¹ Due to a data handling error, twenty-seven students completed the shyness, FNE, and self-monitoring scales after they had completed participating in the experiment.