NAME: Sarah J. Kerper

DEGREE: Masters of Arts

DEPARTMENT: Experimental Psychology

TITLE OF THESIS: Identifying Predictors of Faculty Prosocial Behavior: The Influence of Empathy, Perceived Similarity, Causal Attribution, and Self-Efficacy

THESIS ADVISOR: Dr. Jenessa Steele

NUMBER OF PAGES IN THESIS: 60

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Dean, College of Graduate and Professional Studies

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Date
IDENTIFYING PREDICTORS OF FACULTY PROSOCIAL BEHAVIOR: THE INFLUENCE OF EMPATHY, PERCEIVED SIMILARITY, CAUSAL ATTRIBUTION, AND SELF-EFFICACY

by

Sarah J. Kerper

A thesis submitted to the faculty of Radford University in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Psychology

Thesis Advisor: Dr. Jenessa Steele

April 2012

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___________________  ______________
Dr. Jenessa Steele  Date
Thesis Advisor

___________________  ______________
Dr. P. Niels Christensen  Date
Committee Member

___________________  ______________
Dr. Hilary Lips  Date
Committee Member
ABSTRACT

Out-of-class communication often involves students meeting with instructors during office hours, about an academic problem, which ends in self-disclosure of personal problems as a form of help-seeking. In the current study, causal attribution, perceived similarity, self-efficacy, and empathy were hypothesized as predictors of instructor prosocial tendencies. Using a questionnaire method, 138 instructors participated in the study. Results indicated significant positive associations between perceived similarity, self-efficacy, empathy, and prosocial tendencies. Further analyses revealed empathy partially mediated the relationship between self-efficacy and prosocial tendencies. These findings indicated that instructors were more helpful in situations where they were more empathetic towards the student, as well as when instructors felt self-efficacious in helping students. Implications for instructor training and future research are discussed.

Keywords: prosocial, helping, student, instructor, empathy, self-efficacy, attribution, similarity.

Sarah J. Kerper, M.A.
Department of Psychology, 2012
Radford University
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STATEMENT OF THE PROBLEM

According to the American College Health Association (2008), the suicide rate among young adults, ages 15-24, has tripled since the 1950s. A separate study found nearly 1 in 3 students between the ages of 12 and 18 reported being bullied in school (DeVoe & Bauer, 2010). These statistics have led educators to reconsider methods of intervention and the role teachers play in detecting and preventing possible dangerous outcomes in the lives of their students (Novick & Isaacs, 2010). However, when students who have been experiencing these problems at a high school level graduate and go to college, these undetected problems may follow them. Without the presence of parents and friends, who they may feel comfortable confiding in, to whom will these students turn to disclose their problems?

Universities across the country are experiencing increased numbers of sexual assault, drug and alcohol abuse, mental health issues, students coping with disabilities, as well as academic and financial issues. Each academic year, for every 5,000 female college students there are an estimated 146 sexual contacts by force or threat of force, 121 rapes by coercion, 97 rapes by force or threat of force, and 80 attempted rapes (Department of Justice, 2000). Across 127 mid-sized public universities, there were 3,294 drug abuse violations and 16,374 liquor law violations, for which students were given disciplinary action on-campus (U.S. Department of Education, 2009). Also, 25.6% of male college students and 31.7% of female students reported on at least one occasion in the last year, they had felt so depressed it was difficult to function (ACHA, 2008). In relation to these staggering statistics, college students may seek out their instructors, teaching assistants, and faculty as a means of asking for help with both personal and academically-related problems. Teaching staff are often faced with moral dilemmas outside the classroom, where meeting with students during office hours may lead to student self-disclosure.
Various factors may come into play regarding the professors’ reaction to such information, including their own individual characteristics, the students’ characteristics, attribution of responsibility, history with similar experiences, and so on. Whether or not the professor decides to help the student often hinges on these determining factors. Research investigating these aspects and possible outcomes stemming from such situations, such as retention rates and consequences for individual students, is crucial in determining the level of training needed for faculty of higher education institutions. In addition, empirical studies involving the student-instructor interaction are needed in order to supplement school policies and existing guides (Waldeck, 1999; Keith-Spiegel, 1999; Rossi, 2008) utilized by instructors when deciding to help in these situations.
CHAPTER 1- INTRODUCTION

Prosocial Behavior

In social psychology, the act of helping others is known as prosocial behavior. Prosocial research traditionally focused on when people helped, at an interpersonal level, with one person helping another (Penner, Dovidio, Piliavin, & Schroeder, 2005). Foundational work by Latanè and Darley (1970) premised whether or not a person would help depending on specific necessary steps, including: noticing a situation, interpretation of the situation as requiring help, taking responsibility for providing help, planning the helping response and then helping. Although it was reported any interruptions in the scheme of helping could possibly result in no help given at all, it was apparent the nature of these influential intruding factors could range anywhere from the number of people present during the situation where help may be needed (Darley & Latanè, 1968), to characteristics of the helpee and costs to the helper (Piliavin, Piliavin, & Rodin, 1975), and whether the situation was in fact an emergency (Fisher, Greitmeyer, Pollozek, & Frey, 2006), all of which may lead to either the increase or reduction in the chances of helping. In the context of dyadic helping situations, other factors such as feelings of empathy felt toward the helpee, perceived self-other similarity, causal attribution assigned to the situation, and self-efficacy of the helper, and the gender of the potential helper may all contribute to the likelihood of helping. In a dyadic interaction, such as the one that occurs outside of class between a faculty member and a college student, these characteristics may have significant importance in determining possible outcomes for the people involved.
Empathy & Prosocial Motivation

The motivation to help another person is at the root of the decision making process of prosocial behavior. Previous theories of motivation have examined the basis of why people help others, from potential costs and rewards to the helper (Piliavin, Rodin, & Piliavin, 1969), to promotion and prevention-based decision making (Gebauer, Riketta, Broemer & Maio, 2008). These frameworks may be acceptable explanations for stranger interactions, but the familiarity of the student-faculty relationship is often accompanied by preconceived concepts and feelings, such as compassion and sympathy, which contribute to the dynamics of the situation. The empathy-altruism model of motivation (Batson et al., 1991) posits that empathic feelings arouse selfless (altruistic) motivation with the primary goal of improving the welfare of another person (Penner, et al., 2005). According to Batson et al. (1981), if the motivation associated with the feeling of empathy for the person in need is altruistic, then people who feel a high degree of empathy should help regardless of whether alternative options in dealing with the situation are possible. This particular theory is most applicable in prosocial interactions. The importance of empathy in helping has led to many strains of the empathy-altruism hypothesis, including the attribution-empathy model (Betancourt, 1990) which emphasizes the importance of empathy and attribution of responsibility in the decision to help, and the empathic-joy hypothesis, which proposes empathic concern predicts helping only when feedback on helping is anticipated and the helper experiences positive emotions as a result (Smith, Keating, & Stotland, 1989). Therefore, the relationship between empathy and helping has been established in various ways throughout the prosocial literature. However, this relationship has yet to be substantiated in the context of the student-faculty interaction. The current study proposes an investigation of the
importance of empathy in academic settings, much of which has been previously neglected in the social psychological research.

**Perceived Similarity**

In addition to empathy, the interpersonal effect of similarity on helping is one of the most notably accepted concepts in prosocial literature, centered on the idea a person is more likely to help someone who is similar to one’s self than those who appear to be different (Emswiller, Deaux, & Willits, 1971). In interpersonal helping, the unequal distribution of roles, with one person needing help and the other with the resources to provide assistance, contributes to a dissimilarity between the people involved, even before recognizing differences in appearance (Penner, et al., 2005). These perceptions of similarities or differences are defining characteristics that associate individuals with specific social groups, categories and ethnic identities. Those individuals who are similar to oneself can be viewed as belonging to an in-group, while those who are different can be associated with out-groups. According to social identity theory, when the interactions between two or more people are determined by the social groups they belong to, this intergroup behavior can create in-group bias in which members favor fellow in-group members over out-group members (Tajfel & Turner, 1979). The most recent direction of prosocial research has incorporated social identity as playing an important role in the decision to help.

Although in-group bias can lead to the helping of others who are similar to oneself, it can also result in discrimination against those who belong to out-groups. The defining characteristics that contribute to a sense of ‘us’ versus ‘them’ and favoritism versus discrimination, include but
are not limited to visual cues, such as gender, ethnicity, race, and age. Demonstrations of helping according to in-group bias include same-race helping, which occurs more frequently than other-race helping in mixed-race groups (Piliavin et al., 1969), lending money to others more similar in appearance (Emswiller, et al., 1971), and intervening in an emergency situation when a common group identity is salient (Levine, Prosser, Evans, & Reicher, 2005). Sturmer and Snyder (2010) reported levels of empathy increased when people perceived another person as similar to themselves, therefore motivating people to help while the costs and benefits to oneself became irrelevant to the cause. Similarity constructs are not only significant in interactions where the decision to help must be made, but also when the decision to seek help is made. According to Noel and Smith (1996), White, Black, and Latino students were willing to disclose more to faculty of their own ethnicity than to out-group faculty members. Additionally, in general, individuals were also found to self-disclose less to dissimilar others (Stephan, Stephan, Wenzel, & Cornelius, 1991).

However, in many real-life situations, discrimination against other groups is still often the result of intergroup interactions (Tajfel & Turner, 1979). Unlike in-group members who are viewed as distinct individuals, and therefore more similar to oneself, out-group members often experience deindividuation that can lead to discrimination (Brewer, 1991). Based on the cost-reward model, when individuals discriminate against members of other social groups, helping does not seem justifiable to the helper (Saucier, McManus, & Smith, 2010). In accordance with these findings, perceived dissimilarity decreases empathy, and the motivation to help out-group members becomes dependent on the potential benefits the helper will receive as a result of assisting an out-group member (Sturmer & Snyder, 2010). Previously, empathy has been noted
as important in increasing the likelihood of helping, but when empathy is absent due to perceived
dissimilarities of others, out-group members in need of help are at a disadvantage. Thus, faculty
members’ recognition of similarity to themselves in their students, in helping situations, may be
beneficial to the outcome of the situation by enhancing the likelihood of a positive outcome.

Causal Attribution and Helping

Due to the dyadic nature of the student-faculty helping situation, student characteristics,
perceived by faculty, should play an important role in instructor helping behavior, for instance,
the amount of responsibility and controllability of the personal problem a professor may perceive
of the student. Thus, associated with prosocial behavior research, which investigates why people
help others, is determining whether the person in need is responsible for the reason they require
help. Weiner (1980) described another person’s need for help as giving way to the potential
helper’s assessment of “why,” which meant determining if the person in need was in control of
the reason they needed help, or if the circumstances were uncontrollable. From this assertion,
Weiner formed the attribution-emotion-action model, in which interpersonal emotions such as
pity and sympathy were mediated by attributions for a person’s need to be helped. Results
stemming from application of the model supported the idea that when a person’s need is due to
controllable causes, it elicits feelings of anger on behalf of the helper, which then inhibits
helping, whereas when a person’s need is due to uncontrollable causes, feelings of empathy are
felt, which increases helping (Weiner, 1980). In addition, Higgins & Shaw (1999) supplied
evidentiary support of Weiner’s model, reporting the attribution style of potential helpers
moderated the impact of causal controllability information on helping behavior and in the end,
the tendency to help non-negligent targets was greater. Interestingly, they also found that for unsupportive individuals, the reason for help was completely necessary in the decision to help, whereas for supportive individuals, the reason for need was not important in deciding to help or not (Higgins & Shaw, 1999). These assertions may be important in determining which factors may come into play for potential helpers in situations of need because some people may be predispositioned to help others, regardless the cause of need, whereas others may weigh the cause as a crucial component in deciding to help or not.

Also important in the discussion of attribution is when potential helpers are dealing with stigmatized individuals. In relation to Weiner’s model, Pryor, Reeder, Monroe, and Patel (2010) found when individuals’ stigma was viewed as uncontrollable, negative reactions were reduced, invoking sympathy and increasing helping. However, when the stigma was viewed as controllable, anger was increased and the decision to help decreased. These results are applicable to situations of determining the likeliness to help stigmatized victims or people whose membership in a social category questions the extent of their humanity, which is often encountered in real-life scenarios (Crocker, Major, & Steele, 1998). Assertions about the different degrees of attribution are important in the context of the student-faculty relationship, due to the fact that a faculty member may assess the situation or problem presented by the student, as stemming from the student’s control over the situation. Whether faculty speculate that the source of the student’s problem is within the student’s control, or preventable, may determine the outcome of helping or choosing not to help the student.

**Self-efficacy**
Another variable that may be related to faculty helping behavior is faculty’s perceived self-efficacy in a situation. Self-efficacy is one’s belief about his or her ability to affect an outcome (Anker, Feeley, & Kim, 2010). In the context of a student disclosing information about a personal problem to a faculty member, self-efficacy would be defined as the professor’s belief about his or her ability to assist the student with that problem. Therefore, as Bandura (1977) reported, the stronger perceived self-efficacy one feels about themselves, the more active the efforts. In relation to prosocial behavior, the degree to which a person helps another would be dependent on how capable he or she views oneself as a potential helper.

Research investigating the relationship between self-efficacy and prosocial behavior has supported the influential relationship between self-efficacy and empathy. As previously stated, the relationship between empathy and helping behavior has been strongly supported (Penner et al., 2005). More recent research has developed the relationship in accordance with self-efficacy. Caprara et al. (2010) emphasized the importance of the confidence one feels in their ability to empathize with others, as a crucial component in comforting and meeting others’ needs. Empathy has also been shown to mediate the relationship between self-efficacy beliefs and prosocial tendencies (Alessandri, Caprara, Eisenberg, & Steca, 2009). In relation to these results, gender differences in empathetic self-efficacy have also been found. Accordingly, females have been found to score higher in empathic self-efficacy and in prosociality (Caprara, et al, 2010; Alessandri et al, 2009). Researchers have credited these gender differences to the socialization of empathizing, a feminized gender role in which females are more likely to experience feelings of empathy and perceive themselves as more efficacious in experiencing the emotion and applying it to helping situations. Once again, these differences may be apparent in the student-faculty
interaction in which there may be a difference not only in perceived self-efficacy among faculty members, but also a gender difference in female and male professors’ efficacious helping abilities.

Lastly, other factors which may affect faculty member’s perceived self-efficacy in helping students with personal problems include the amount of time the professor has spent teaching and previous experience with such situation. According to Bandura (1977), people get involved in situations and behave confidently when they judge themselves as capable of handling situations that would otherwise be intimidating. Thus, if a professor feels secure in their profession, due to years of experience, and has encountered previous situations in which students have disclosed personal information about themselves as a form of help-seeking, that professor could be expected to have high self-efficacy in that specific situation, compared to a younger, inexperienced faculty member. In contrast, younger professors may feel a closer kinship to the student, therefore similarity would affect the amount of self-efficacy that faculty member felt, enhancing the likelihood to help.

**Gender and Prosocial Behavior**

In addition to similarity, another identifiable category in prosocial behavioral research is gender. The social-role theory of gender entails that males are more likely to help in situations where they may be deemed as heroic and chivalrous, whereas females help more in situations which require more nurturing and caring skills (Eagly & Crowley, 1986). This line of research strays from the similarity perspective of helping behavior. Instead of males being most likely to help fellow men, they would be more likely to help women, and females would help more due to
the context of the situation and their skills than the gender of the person to be helped. Accordingly, when males received a call from a stranger in need, they were more likely to offer to help female callers than male callers (Bostrom, Humphries, & Roloff, 1981). Yet, in a dropped-pencil task, females were more likely to help those who they believed they shared a commonality of fate with than males (Hayden, Jackson, & Guydish, 1984); and in an emergency group situation when a victim was male, inhibition of helping response in other males was attributed to fear of embarrassment (Tice & Baumeister, 1985). Many of these outcomes are linked to the socialization of gender roles, with both males and females responding to helping situations according to the roles society has promoted as acceptable. In a meta-analysis of gender and prosocial behavior, Eagly (2009) relates differences in helping between the sexes to gender roles. Since women are thought to be communal, they are often found to be more prosocial if the interaction is relational, and they are more likely to engage in helping situations involving empathy and self-disclosure (Eagly, 2009). Compared to women, Eagly asserts that men are perceived as more agentic and would engage in more helping situations which involved gaining status for their help, were more collective, or dangerous (2009). Even though most studies showed men were more likely to engage in prosocial behavior, Eagly reported in an earlier study (Eagly & Crowley, 1986) much of the prosocial literature was heavily based on encounters with strangers and emergency situations, of which men, due to their gender roles, thrive. In contrast, most examples of “female” helping occurs in close relationships, which was absent from the literature. Even though research supports males as the more helpful sex, they were found to be far less likely to seek out help for mental, personal, and psychosocial problems due to gender socialization and construction of masculinity (Addis & Mahalik, 2003). However, when they did
seek out help, male students had a 71% preference for women, as did 76% of female students, which is in line with women’s helping strengths (Eagly, 2009). These statistics support the notion women are favored in interpersonal helping situations. In conclusion, the helping literature supports the notion gender roles are important in determining who will be more likely to help others, as well as who others will seek help from. In respect to the student-faculty out-of-class interaction, the relational quality of the interaction would promote feminine gender roles as being likely to facilitate positive outcomes, according to the relationship between gender roles and helping.

Overall, there are various underlying predictors involved in the decision to help. Whether helping situations involve other people or are purely dyadic, the motives of the potential helper and the person seeking help, as well as the individual characteristics of the people involved are all significant factors contributing to the outcomes of the situation. In the context of helping in the academic setting, faculty empathy towards students, the similarity they feel towards their students, how masculinized or feminized they are in their gender roles, the amount of responsibility they place on the student for their personal problem, and how self-efficacious faculty feel in the helping situation, may all contribute to the outcome of the situation. In the investigation of student and faculty interactions, some or all of these predictors may have a role in determining who the student will seek help from, if the faculty member will choose to help them, and, in the end, the degree of helping faculty members deem feasible.

*Student-Instructor Interactions*

Prosocial research is largely based on the behavior of individuals, frequently undergraduate college students, who participate in controlled experiments for course credit.
Although these experiences are supposed to resemble everyday life, many fail to model
situations which actually occur on a college campus. Ironically, one of the interactions that
naturally takes place and has rarely been investigated in prosocial literature is the interaction
between students and instructors in environments outside of the classroom. Specifically, these
situations involve the student either self-disclosing a personal problem to a faculty member or
asking his or her instructor for help with a personal matter which may be affecting the student’s
performance in class. In this interpersonal helping situation that leads the student to approach or
divulge information to the instructor, very little research has investigated the predictors that are
involved in the instructors’ assessment of the situation, their decision to act, and the outcomes or
forms of helping which result from the interaction.

**Out-of-Class Communication.**

Although the psychological literature on helping is largely void of college-level
investigation on the outcomes of student-teacher interactions, communication studies have
displayed an interest in the type of communication that goes on between a student and their
professor outside of the classroom. There have been various terms applied to this type of
communication. “Extra-class-communication” or ECC was termed by Bippus, Brooks, Plax, and
Kearney (2001) as “informal faculty-student interaction that occurs beyond the realm of formal
in-class instruction, occurring before or after class, in or outside the classroom setting,
spontaneously on campus, during official office hours, by appointment or via telephone or the
internet” (p. 16). In addition, Nadler and Nadler (2001) used the term “Outside of Class Contact”
or OOC and described it as “impromptu office visits, scheduled advising sessions and chance
meetings” (p. 242). Finally, Jaasma and Koper (2002) defined “Out-of-Class-Communication” or OCC as “student-faculty communication in the instructor’s office, informally on campus, or before/after class” (p. 119). For this discussion’s sake, the term ‘OCC’ will be used to describe the communication between students and faculty. Notably, the literature on OCC focuses on the nature, frequency, faculty perceptions of interactions with students, guidelines for faculty, rate and determinants of student self-disclosure in such interactions, and the benefits of such interactions for students.

OCC is often the product of a student’s need for self-disclosure and in turn, help-seeking. Self-disclosure is the act of divulging information about oneself that is not evident or easily attained through other channels (Pearce & Sharp, 1973). In respect to the student-faculty relationship, self-disclosure of the student’s issues would not be readily available to the faculty member within the enclosure of the classroom. Within the confines of a university setting, faculty members are among the few superiors undergraduates interact with on a daily basis. Although various studies have reported student’s infrequency in engaging with faculty outside of the classroom (Fusani, 1994) and their readiness to self-disclose to their same-sex friends and dating partners, before authority figures (Mathews, Derlega, & Morrow, 2006), students sometimes take advantage of course instructors’ office hours for assistance with both academic and personal issues.

Although academic issues are often reported as the primary reason for seeking help from faculty outside of class (Nadler & Nadler, 2001; Bippus, Kearney, Plax & Brooks, 2003; Cotten & Wilson, 2006), other issues can rise to the surface of the conversation during OCC as contributors to academic problems. Some of the more general issues undergraduates deal with at
the university level include mental health problems (Miller, 2004; Hunt & Eisenberg, 2010),
substance use and abuse (Prendergast, 1994), disabilities (Cook, Rumrill, & Tankersley, 2009;
Hong & Himmel, 2009), and sexual assault (Bingham & Battey, 2005). In a 1984 survey
investigating faculty’s past experiences with medical students’ personal issues, Brown and
Barnett found among the problems most often encountered during OCC were financial concerns,
emotional health, and relations with other faculty. Faculty also reported the most difficult issues
they encountered with students included topics concerning marriage, peer interactions, and
financial situations (Brown & Barnett, 1984). These results suggest an occurrence of non-
academic related self-disclosure by students during OCC with faculty; however, what factors
influence a student’s decision to initiate such personal-oriented discussions with faculty?

According to Bippus, et al. (2003), 41.8% of students initiated face-to-face OCC
encounters with faculty. Numerous communication studies investigating students’ willingness to
engage in OCC have reported important factors which determine students’ decisions in choosing
who they will turn to in times of need. Bingham and Battey (2005) reported students’ view of
faculty as ‘weak ties’ in their social networks as a potential motivator in seeking help from their
professors; since faculty members do not usually interact with students’ family and friends,
knowledge of students’ personal issues may not result in the formation of negative impressions
of the student in the eyes of the people who are most important to them. Other important
characteristics and qualities of instructors which play a role in increasing OCC and self-
disclosure from students and were correlated with student satisfaction with these encounters
include: competence, trustworthiness, and credibility (Nadler & Nadler, 2001), instructor
immediacy (Fusani, 1994; Jaasma & Koper, 2002), intimacy and control (Dobransky & Frymier,
2004), approachability (Bippus et al., 2003) as well as faculty’s show of a sense of humor and self-disclosure from faculty during class time (Cotten & Wilson, 2006). Furthermore, the size of the instructor’s class was often found as a predictor of the willingness of a student to seek out a faculty member (Fusani, 1994; Cotten & Wilson, 2006). In addition, employment status also played a role in student’s perception of the availability of faculty members. It was reported that although students were not inherently aware of part-time versus tenure/tenure-track faculty members’ status, in a survey about interactions with faculty, it was discovered they viewed part-time faculty members as being more capable of dealing with students’ personal problems, in addition to course-related issues (Bippus, et al., 2001). This range of possible predictors, which influence the student-faculty interaction, show the complexity of such an exchange, especially when faculty members are sought out to assist with non-academic issues.

Associated with the literature on prosocial behavior, both gender and ethnicity-related predictors have been reported in student-teacher OCC interactions. In accordance to the communal and relational qualities of female helping behavior previously reported, both Nadler and Nadler (2001) and Jaasma and Koper (2002) reported that among college students existed a preference for female faculty members when engaging in OCC. Also, a same-sex preference for student-teacher interactions was found (Nadler & Nadler, 2001). This finding is also related to the similarity hypothesis set forth by the prosocial literature regarding intergroup behavior. Social groups often provide stability, security, reassurance, and social support (Jetten, Haslam, Iyer, & Haslam, 2006). Due to this support, students often self-disclose to instructors of the same ethnicity. Noel and Smith (1996) found students from White, Black, and Latino ethnic groups
were more willing to self-disclose to faculty of their own ethnicity than to out-groups, and intergroup anxiety may decrease self-disclosure altogether.

**Faculty Helping Behavior**

Beyond the determinants for why students choose particular faculty members to which they self-disclose and in their own way seek help from, determining how faculty responds to students during OCC, which may result in helping, is an important aspect of prosocial research which is lacking. However, communication studies have provided information about potential faculty reactions by reporting faculty’s own perspectives on OCC, the nature of their past experiences with students’ personal problems and the outcomes of those past experiences.

Previously, it has been reported that per week, medical school faculty spent on average 48 minutes discussing personal problems with students. The participants who returned the survey commonly offered help towards the students who presented personal problems to them in the forms of listening, asking questions to draw out the student, offering support, sympathy and empathy (Brown & Barnett, 1984). Bingham and Battey’s (2005) study of professor’s responses to a student’s sexual harassment by another faculty member reported problem-solving as the type of help offered 92% of the time. The differences in forms of helping between the two studies may be contextual in that more general problems may elicit passive forms of helping, whereas specific and serious problems may elicit active forms of helping. Nonetheless, as a result of such helping behavior, the faculty sampled from the first study reported feeling pleased, encouraged to help in future situations, supportive of their students and sympathetic. Negative feelings such
as frustration, helplessness and puzzlement stemmed from faculty’s lack of training and confidence in dealing with non-school issues (Brown & Barnett, 1984).

In another study, of the 231 college lecturers who responded to a survey involving their experiences helping distressed students, 97% reported having counseled distressed students in an academic setting, 32% felt like the number of help-seeking students was increasing, 76% felt helping students was part of their job description and, although 69% felt helping students was rewarding and important, 36% wished they knew more about helping students to do so efficiently (Easton & Van Laar, 1995). Also from Easton and Van Laar’s (1995) survey, younger lecturers wished they had more information on helping students than older lecturers. The point to be made from these statistics is although each situation is unique and dependent very much on the experiences of the lecturers, it is apparent that dealing with students’ personal problems is a part of the majority of college professors’ one-on-one interactions with their students.

Overall, positive experiences with faculty members during OCC with students have been correlated with greater academic development, higher educational aspirations and greater levels of integration into the university community (Williams & Frymier, 2007). Feeling supported by faculty has also been related to increased confidence in individual abilities, emotional well-being, greater satisfaction with higher education, and a higher rate of attainment of a bachelor’s degree (Sax, Bryant, & Harper, 2005). Other potential results of OCC may include increased retention rates, improved grades for the student and more in-class participation. Positive outcomes such as these are examples of the possible benefits of OCC. However, in order to determine the likelihood of such positive outcomes, one must assess the factors involved in faculty’s decision to help students who come to them for help with personal problems.
Primary Hypotheses

Hypothesis 1: Instructors’ perceived similarity to their students, perceived self-efficacy in dealing with student personal problems, and empathic concern towards students was expected to be significantly, positively related to instructor prosocial tendencies.

Rationale for 1: According to Emswiller, Deaux, & Willits (1971), a person is more likely to help someone who is similar to one’s self than those who appear to be different, therefore more helping should occur in situations in which perceived similarity between the self and the other person is greater than in situations where less self-other similarity is perceived. In addition, Caprara et al. (2010) has reported that helping occurred more when a person perceived themselves to be more self-efficacious in a situation. Therefore, the more perceived self-efficacy an instructor feels dealing with students and their personal problems, the greater their tendency to be prosocial. Lastly, empathy has been shown to be positively correlated with prosocial behavior in numerous studies (Batson et al., 1981; 1991). Hence, the same positive relationship is expected between empathic feelings toward students and prosocial tendencies.

Hypothesis 2: Internal causal attributions of the student’s personal problem was expected to be significantly, negatively related to instructors’ empathic concern and prosocial tendencies, whereas external causal attributions of the student’s personal problem was expected to be significantly, positively related to instructors’ empathic concern and prosocial tendencies.

Rationale for 2: According to the attribution-emotion-action model (Weiner, 1980), when people are faced with a decision of whether or not to help another person, the responsibility for the problem they need help with often determines the end result. Thus, if a person’s problem was viewed as controllable or internal, people often feel anger towards that person and the likeliness
of helping decreases. In contrast, if the potential helper views the needy person’s problem as uncontrollable or external, they would most likely feel empathy towards that person, which would ultimately increase the likeliness of helping.

**Hypothesis 3:** Significant gender differences were predicted to be present at the levels of the predictors; specifically, female instructors were expected to have significantly greater levels of empathic concern and prosocial tendencies, than male instructors.

*Rationale for 3:* The social-role theory of gender entails that males were more likely to help in situations where they might be deemed as heroic and chivalrous, whereas females help more in situations which require more nurturing and caring skills (Eagly & Crowley, 1986). Therefore, in respect to the interpersonal context of the proposed student-faculty interaction, there should be gender differences at the various levels of the predictors, especially at the level of self-efficacy and empathy in respect to female faculty members, who in accordance with the gendered skills of caring and support, should experience higher levels in comparison to males.

**Exploratory Hypotheses**

**Hypothesis 4:** Empathic concern would mediate the impact of similarity, causal attributions, and self-efficacy on instructor prosocial tendencies.

**Hypothesis 5:** Empathic concern would be significantly maximized by increased similarity, external causal attributions, and increased self-efficacy.

**Hypothesis 6:** Empathic concern would be minimized by internal causal attributions, decreased similarity, and decreased self-efficacy.

*Rationale for 4-6:* According to the empathy-altruism model (Batson et al., 1981), if the motivation associated with the feeling of empathy for the person in need is altruistic, then people
who feel a high degree of empathy should help regardless of whether escape from the situation is a possibility. In addition, the hypothesized mediating role of empathy on the relationship between possible predictors and prosocial behavior has been substantiated in the literature. Specifically, Sturmer and Snyder (2010) reported levels of empathy increased when people perceived another person as similar to themselves, therefore motivating people to help. Also, the relationship between attribution, empathy and prosocial behavior has been promoted by the attribution-emotion-action model (Weiner, 1980). Here, Weiner postulated that perceptions about the cause of behavior affected either anger or empathy, which in turn gave rise to prosocial actions. Results stemming from application of the model supported the idea that when a person’s need for help is due to uncontrollable causes (external attribution), feelings of empathy are felt, which increases helping. In contrast, when a person’s need for help is due to controllable causes (internal attribution), less empathy should be felt, and in some cases replaced by anger, therefore resulting in a decrease in the possibility of helping. Furthermore, in respect to self-efficacy, empathy has been shown to mediate the relationship between one’s perceived efficacious abilities and subsequent prosocial behaviors. Caprara et al. (2010) emphasized the importance of the confidence one feels in their ability to empathize with others, as a crucial component in comforting and meeting others’ needs, while empathy has also been shown to mediate the relationship between self-efficacy beliefs and prosocial tendencies by Alessandri, Caprara, Eisenberg, and Steca (2009).
CHAPTER 2 - METHOD

Participants

Participants were 138 university teaching instructors, of various status, from a mid-size (enrollment approximately 8,300 undergraduate students), public southeastern university in the United States. Participant gender, age, race/ethnicity, years spent teaching, teaching status, and average class size was collected through a demographic survey (Appendix F) given at the end of the questionnaire. A majority of the subjects were female (67%), with 33% being male. In addition, 92% of the participants were Caucasian and the average age was 45.17 (SD = 12.33) years old. The majority of participants had taught for 0-10 years (47.9%), with 29% teaching 10-20 years and 23.2% teaching for 20 or more years. Teaching status was as follows: tenure (23%), tenure-track (15%), associate (7%), assistant (16%), part-time/adjunct (12%), graduate teaching faculty (7%) and other (19%). Lastly, the average undergraduate class size was 33.7 (SD = 15.89) students and the average graduate class size was 15.5 (SD = 7.74) students.

Measures

Empathy. The Interpersonal Reactivity Index (IRI) (Davis, 1980) is a 28-item multidimensional individual measure of empathy, with 4 subscales including fantasy, perspective-taking, empathic concern, and personal distress (Appendix A). For the purposes of this study, only items from the empathic concern (EC) subscale were used. The EC subscale consisted of 7 items and assessed participants’ emotional reactions to the negative experiences of others (Davis, 1980). In this study, “students” were substituted for “other people.” Each item was rated on a 5-point scale, from 1 (Does Not Describe Me Well) to 5 (Describes Me Very Well). An example of an item from the EC subscale is, “I sometimes try to understand my students better by
imagining how things look from their perspective.” Internal consistency for the empathic concern score was good, $\alpha = .74$.

*Perceived similarity.* The Perceived Similarity Scale (PSS) (Zellhmer-Bruhn, Maloney, Bhappu, & Salvador, 2008) is an 8-item measure of perceived similarity (Appendix B). The items were rated on a 7-point scale from 1 (Disagree Strongly) to 7 (Agree Strongly). For the proposed study, “students” were substituted for “co-workers” in each item. An example of a typical item from the scale included, “My students and I share similar ethnic backgrounds.” The Cronbach’s alpha for faculty’s perceived similarity to their students was good, $\alpha = .74$.

*Self-efficacy.* The Generalized Self-Efficacy Scale (GSE) (Schwarzer & Jerusalem, 1995) is a 10-item unidimensional measure of perceived self-efficacy (Appendix C). The items were rated on a 4-point scale of 1 (Not True) to 4 (Exactly True). For the proposed study, “students” were added to the items to make the scale specific to the student-professor context. An example of an item from the GSE is, “I can always manage to solve difficult problems with students if I try hard enough.” Internal consistency for the self-efficacy score was good, $\alpha = .84$.

*Prosocial tendencies.* The Prosocial Tendencies Measure (PTM) (Carlo & Randall, 2002) is a 23-item measure which assesses 6 types of prosocial behavior, including: public, anonymous, dire, emotional, altruistic, and compliant (Appendix D). For the purpose of this study, public and anonymous items were eliminated. The 10 items used were rated on a 5-point scale from 1 (Does Not Describe Me At All) to 5 (Describes Me Greatly). Also, for the purpose of the proposed study, “students” was substituted for “people.” An example of an item from this prosocial scale includes, “When students ask me to help them, I don’t hesitate.” Internal consistency for the prosocial tendencies score was good, $\alpha = .85$. 

23
Causal attribution. The Attribution of Problem Cause and Solution Scale (Stepleman, Darcy, & Tracey, 2005) is a 44-item measure of responsibility for problem cause (external: items 1-11 & internal: items 12-24) and problem solution (external: items 25-28 & internal: items 29-44) (see Appendix E). For the purpose of this study, only the problem cause subscale was used. The items were rated on a 7-point scale from 1 (Very Strongly Disagree) to 7 (Very Strongly Agree). Also for the purpose of this study, “I” and “my problem” were substituted for “student’s problem,” and “others” was substituted for “me”, since the measure was being used to assess the student’s controllability over the cause of the personal problem in the situation. An example of an item from the external cause dimension was, “The student did not cause the problem” and an example item from the internal cause dimension was, “The student’s behavior caused this problem.” Cronbach’s alphas for the internal cause of the problem subdimension was high, α = .94, and the internal consistency for the external cause of the problem subdimension was good, α = .87. The internal consistency for the total scale was also high, α = .94. Before beginning this measure, participants were asked to recall the most recent situation they had experienced with a student’s personal problems and then to answer the items with the specific problem in mind. Student characteristics and reactions to the situation were assessed prior to the participants completing the measure.

Demographics. A questionnaire (see Appendix F) was used to assess participant demographics, including: gender, age, years spent teaching, teaching status, ethnicity, average class size, and additional questions referring to past experiences with students’ personal problems. An example item from the exploratory question section included, “On average, how often do students come to you about non-academic personal problems?”
Procedures

All teaching instructors at Radford University were recruited to participate in the study. Participants were recruited through an outreach program by on-campus mail in which 700 notification cards were delivered two weeks prior to the distribution of the questionnaire, informing instructors that they would be receiving a questionnaire about student-instructor interactions in the upcoming weeks and encouraging their participation. Data collection began the first week of October 2011, in order to ensure that teaching instructors would have had opportunities to interact with students outside of class and possibly have had experienced similar situations to those the researchers were drawing upon in the measures, so the participants could draw upon those recent encounters when answering the items. Seven hundred hard copies of the questionnaire were distributed to all teaching instructors’ on-campus mailboxes, along with an unmarked return envelope. Following this initial outreach, after an appropriate period of response time had passed (approximately three weeks), a reminder card was placed in all instructors’ mailboxes who had initially received the questionnaire, asking for the full completion and return of the form, and also providing an email address at which the researchers could be contacted in case instructors needed an additional copy of the questionnaire to complete.

Each questionnaire was accompanied by a cover letter stating the importance of the research, importance of the respondent, anonymity, confidentiality, and a thank you from the researchers for participation. The researchers’ contact information also accompanied the packet, in order for the participants to contact the researchers, if they had any questions about
participation. Participants were asked to consider prior instances with their students in which they interacted outside of class and the student had disclosed a personal problem. The questionnaire, with six inventories, took approximately 20 minutes to complete. Participants were then able to return the completed questionnaire in an unmarked return envelope to the researchers.

By mid-November, 103 copies of the paper version of the questionnaire had been returned. Taking into consideration the projected power of 150 participants in the initial proposal of this study, the researchers attempted a second approach, by making the questionnaire available on Qualtrics. After submitting a revision of methods and receiving approval from the IRB and the department chair, a university wide email was sent to all faculty members with a link to the survey, asking for those instructors who had yet to complete the survey, to now do so online. The online questionnaire was accompanied by the same cover letter as the hard copy version, with similar statements of importance of the research, respondent, anonymity of respondent, confidentiality of responses and a thank you from the researchers for participation. Also, all of the measures were identical to the measures in the paper version of the questionnaire.
CHAPTER 3 - RESULTS

Analysis Strategy Overview

For the analysis, descriptive statistics and correlational analyses between predictors were performed. Independent *t*-tests determined whether there were differences in the survey methodology, which were non-significant. They were also used to analyze whether gender differences were present in empathic concern or prosocial tendencies. Significant relationships between the predictors that would be used in the path analysis were also determined from these preliminary analyses. A path analysis, as outlined by Baron and Kenny (1986), was performed in order to investigate the exploratory hypotheses and proposed model of prosocial behavior while examining both the direct and indirect effects of the independent variables. With the revised model, mediation hypotheses were tested using the traditional 4-step procedure (see Figure 1), followed by a Sobel test. According to Kenny, Kashy, and Bolger (1998), step 1 involved showing that the initial variable (X) was correlated with the outcome (Y) (path c) and established that there was an effect that could be mediated. Step 2 correlated the initial variable with the mediator (M) to result in path a. The third step estimated path b by showing that the mediator affected the outcome variable, while controlling for the initial variable. In the last step, complete or partial mediation was determined by establishing whether the mediator completely mediated the X-Y relationship (path c’). For example, with complete mediation, the effect of X on Y controlling for M would be zero. If the relationship did not equal zero, but was reduced, partial mediation would be indicated. Finally, a Sobel test was used to test the significance of the mediation.
Descriptive Statistics

Table 1 lists the descriptive statistics for age of instructors and average class size of instructors who participated in the study, whereas Table 2 lists the frequency distribution for the demographic information of participants in the study. Table 3 lists the information given by instructors in regards to the exploratory questions about a specific situation with a student, given before the attribution measure in the questionnaire. The second step in the analysis was to determine if there was a significant difference between the two methods of survey administration. As a result of independent t-tests of the main variables, there were no significant differences between the results of the paper or online surveys.

Table 1
Descriptive Statistics for Age of Instructors, Average Class Size, and How Many Times Instructors Experience a Student Asking for Help Per Semester

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>R</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>131</td>
<td>22-68</td>
<td>45.17</td>
<td>12.33</td>
</tr>
<tr>
<td>Average UG Class Size</td>
<td>127</td>
<td>10-99</td>
<td>33.70</td>
<td>15.89</td>
</tr>
<tr>
<td>Average GR Class Size</td>
<td>55</td>
<td>4-40</td>
<td>15.53</td>
<td>7.74</td>
</tr>
<tr>
<td>Times Per Semester</td>
<td>103</td>
<td>1-20</td>
<td>3.82</td>
<td>3.57</td>
</tr>
</tbody>
</table>

Fig. 1. A mediational model of the relationship between self-efficacy and prosocial tendencies: empathic concern.

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<th>M</th>
<th>SD</th>
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</tr>
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<td>1-20</td>
<td>3.82</td>
<td>3.57</td>
</tr>
</tbody>
</table>

28
<table>
<thead>
<tr>
<th>Variable</th>
<th>Subcategory</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Males</td>
<td>45</td>
<td>32.6</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>93</td>
<td>67.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td>100.0</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>European American/Caucasian</td>
<td>127</td>
<td>92.0</td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Asian/Pacific Islander</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>American Indian</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Hispanic/Latino</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>2</td>
<td>1.4</td>
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<tr>
<td></td>
<td>Total</td>
<td>137</td>
<td>99.3</td>
</tr>
<tr>
<td>Years Spent Teaching</td>
<td>0-5 years</td>
<td>39</td>
<td>28.3</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>27</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>10-15 years</td>
<td>24</td>
<td>17.4</td>
</tr>
<tr>
<td></td>
<td>15-20 years</td>
<td>16</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>20 or more years</td>
<td>32</td>
<td>23.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 3
*Frequency Distribution from Attribution Exploratory Questions*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Subcategory</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>How recent the situation took place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This Semester</td>
<td>89</td>
<td>64.5</td>
</tr>
<tr>
<td></td>
<td>This Past Semester</td>
<td>25</td>
<td>18.1</td>
</tr>
<tr>
<td></td>
<td>2 Semesters Ago</td>
<td>13</td>
<td>9.4</td>
</tr>
<tr>
<td></td>
<td>Over a Year Ago</td>
<td>10</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td>100.0</td>
</tr>
<tr>
<td>Student’s Gender</td>
<td>Male</td>
<td>45</td>
<td>32.6</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>87</td>
<td>63.0</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>6</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td>100.0</td>
</tr>
<tr>
<td>Student’s Ethnicity</td>
<td>European American/Caucasian</td>
<td>108</td>
<td>78.3</td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>10</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>Hispanic/Latino</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>13</td>
<td>9.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td>100.0</td>
</tr>
<tr>
<td>Enrollment Status</td>
<td>Undergrad (F or S)</td>
<td>44</td>
<td>31.9</td>
</tr>
<tr>
<td></td>
<td>Undergrad (J or S)</td>
<td>68</td>
<td>49.3</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>23</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td>100.0</td>
</tr>
<tr>
<td>Type of Problem (Checked All that Applied)</td>
<td>Financial</td>
<td>26</td>
<td>12.3</td>
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<tr>
<td></td>
<td>Relationship</td>
<td>45</td>
<td>21.2</td>
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<tr>
<td></td>
<td>Health</td>
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<td>20.3</td>
</tr>
<tr>
<td></td>
<td>Drug/Alcohol</td>
<td>12</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td>Death</td>
<td>13</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Mental Health</td>
<td>36</td>
<td>17.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Sexual Assault</td>
<td>5</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Disabilities</td>
<td>8</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>212</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

| How Instructor Avoided   | 2      | 0.5  |
| Responded to Referred    | 51     | 12.7 |
| Listened                 | 114    | 28.4 |
| Student Solutions        | 27     | 6.7  |
| Sympathy                 | 98     | 24.4 |
| Advice                   | 55     | 13.7 |
| Intervened               | 14     | 3.5  |
| Other Resources          | 22     | 5.5  |
| Other                    | 18     | 4.5  |
| Total                    | 401    | 100.0|

Table 4 lists the means, standard deviations, ranges and correlations between each of the main variables. Participants reported internal causal attribution for the student’s problem below the scale midpoint \( M = 2.46, SD = 1.29 \) and external attribution for the problem cause around the scale midpoint \( M = 3.70, SD =1.41 \). However, neither internal nor external attribution was significantly related to any of the other predictors, nor prosocial tendencies. Participants’ similarity felt towards their students was about average \( M = 4.01, SD = 0.83 \), whereas they felt higher levels of self-efficacy in situations when students disclose personal problems to them in out-of-class situations \( M = 2.95, SD = 0.43 \). In addition, empathic concern towards students was reported above the scale midpoint \( M = 3.84, SD = 0.60 \). Lastly, participants reported prosocial tendencies closer to the scale midpoint \( M = 3.26, SD = 0.69 \).

Furthermore, perceived similarity and empathic concern were found to be significantly, albeit weakly positively related, \( r = .19, p < .05 \). Self-efficacy was also strongly positively
related to prosocial tendencies \((r = .56, p < .01)\). In addition, empathic concern toward students was found to be significantly positively correlated with perceived similarity \((r = .18, p < .05)\), self-efficacy \((r = .26, p < .01)\), and prosocial tendencies \((r = .51, p < .01)\).

Table 4
**Descriptive Statistics for Main Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>R</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internal Attribution</td>
<td>138</td>
<td>1.00-7.00</td>
<td>2.46</td>
<td>1.29</td>
<td>1</td>
<td>-0.67**</td>
<td>-0.06</td>
<td>-0.03</td>
<td>-0.16</td>
<td>-0.08</td>
</tr>
<tr>
<td>2. External Attribution</td>
<td>138</td>
<td>1.09-7.00</td>
<td>3.70</td>
<td>1.41</td>
<td>-</td>
<td>1</td>
<td>-0.02</td>
<td>-0.06</td>
<td>-0.10</td>
<td>-0.08</td>
</tr>
<tr>
<td>3. Perceived Similarity</td>
<td>138</td>
<td>1.00-5.75</td>
<td>4.01</td>
<td>0.83</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>0.18*</td>
<td>0.19*</td>
<td>0.07</td>
</tr>
<tr>
<td>4. Self Efficacy</td>
<td>138</td>
<td>1.90-3.90</td>
<td>2.95</td>
<td>0.43</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>0.26**</td>
<td>0.56**</td>
</tr>
<tr>
<td>5. Empathic Concern</td>
<td>138</td>
<td>2.14-5.00</td>
<td>3.84</td>
<td>0.60</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>0.51**</td>
</tr>
<tr>
<td>6. Prosocial Tendencies</td>
<td>137</td>
<td>1.00-5.00</td>
<td>3.26</td>
<td>0.69</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Included in the study’s hypotheses were gender differences in regard to female instructors having higher levels of empathic concern and prosocial tendencies, than their male counterparts. Independent samples \(t\)-tests revealed that in fact, there were no gender differences present in regards to instructors’ empathic concern towards students \(t(136) = -0.53, p = .60\), nor were there differences in the level of prosocial tendencies among male and female instructors in the context of the out-of-class situation \(t(135) = 0.26, p = .80\).
Empathy as a Mediator

Due to causal attribution’s non-significant relationships with the other predictors, it was eliminated from the path analysis, leaving the predictors of perceived similarity and self-efficacy to be tested in the model, with empathic concern mediating the relationship between the predictors and instructor prosocial tendencies. Table 5 provides the effects from the initial path analysis with all three predictors entered as well as analyses that followed. Self-efficacy, perceived similarity, and empathic concern accounted for 46.3% of the variability in prosocial tendencies, $F(3, 133) = 38.25, p = .00$. However, in a subsequent path analysis, with self-efficacy and perceived similarity entered as the predictors and empathic concern entered as the outcome variable, only self-efficacy predicted empathic concern ($\beta = 0.23, t = 2.77, p = .01$). At this point, the model with the predictors of self-efficacy ($\beta = 0.46, t = 6.95, p = .00$) and empathic concern ($\beta = 0.39, t = 5.97, p = .00$) with prosocial tendencies as the outcome variable was tested. In this model, self-efficacy and empathic concern predicted 45.6% of the variability in prosocial tendencies. With a significant path model (see Figure 2), analyses proceeded to testing the exploratory hypotheses involving mediation.
Table 5
Path Analysis Results

<table>
<thead>
<tr>
<th>1. Regressing Prosocial Tendencies</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Efficacy</td>
<td>0.75</td>
<td>0.11</td>
<td>0.47</td>
<td>7.09</td>
<td>.00</td>
<td>(0.54, 0.96)</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>0.47</td>
<td>0.08</td>
<td>0.41</td>
<td>6.12</td>
<td>.00</td>
<td>(0.32, 0.62)</td>
</tr>
<tr>
<td>Perceived Similarity</td>
<td>-0.07</td>
<td>0.05</td>
<td>-0.09</td>
<td>-1.35</td>
<td>.18</td>
<td>(-0.18, 0.03)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Regressing Empathic Concern</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Efficacy</td>
<td>0.32</td>
<td>0.15</td>
<td>0.23</td>
<td>2.77</td>
<td>.01</td>
<td>(0.09, 0.55)</td>
</tr>
<tr>
<td>Perceived Similarity</td>
<td>0.11</td>
<td>0.60</td>
<td>0.15</td>
<td>1.79</td>
<td>.08</td>
<td>(-0.01, 0.23)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Regressing Prosocial Tendencies</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Efficacy</td>
<td>0.73</td>
<td>0.11</td>
<td>0.46</td>
<td>6.95</td>
<td>.00</td>
<td>(0.52, 0.94)</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>0.45</td>
<td>0.08</td>
<td>0.39</td>
<td>5.97</td>
<td>.00</td>
<td>(0.30, 0.60)</td>
</tr>
</tbody>
</table>

Fig. 2. Path analysis model for the relationship between predictors perceived similarity, self-efficacy and empathic concern and outcome variable prosocial tendencies.

Following removal of perceived similarity from the path analysis, the model of empathic concern as a mediator of the relationship between self-efficacy and prosocial tendencies was tested, following Kenny, Kashy, and Bolger’s (1998) four requirements for mediation. Please refer to Figure 1 for a diagram of the model. As illustrated in Table 6, paths a-c were significant,
ps < .01. Whereas path c´ was also found to be significant, the effect of self-efficacy on prosocial tendencies when controlling for empathic concern did not equal to zero, but was reduced, implying partial mediation. The Sobel test confirmed the significance of empathic concern’s role in the mediation of self-efficacy and prosocial tendencies (Z = 2.73, p < .00). Further, empathic concern accounted for an 18.2% reduction in the direct effect.

Table 6

<table>
<thead>
<tr>
<th>Step</th>
<th>Path</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>0.36</td>
<td>0.12</td>
<td>0.26</td>
<td>.00</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>0.45</td>
<td>0.08</td>
<td>0.39</td>
<td>.00</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>0.89</td>
<td>0.11</td>
<td>0.56</td>
<td>.00</td>
</tr>
<tr>
<td>4</td>
<td>c´</td>
<td>0.73</td>
<td>0.11</td>
<td>0.45</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note. Path c is self-efficacy’s correlation with prosocial tendencies, path a is self-efficacy’s correlation with empathic concern, path b is empathy’s effect on prosocial tendencies when controlling for self-efficacy, and path c´ is the correlation between self-efficacy and prosocial tendencies when controlling for empathic concern.
CHAPTER 4 - DISCUSSION

The present study investigated potential predictors of instructor helping behavior in out-of-class situations in which students self-disclosed non-academic problems. These predictors included perceived similarity, self-efficacy, causal attribution, and empathic concern. In relation to the current study’s first hypothesis, previous research indicated that people were more likely to help others who they perceived as similar to themselves (Emswiller, Deaux, & Willits, 1971). This trend was not supported in the current study, but somewhat weak associations with other predictors revealed that if instructors perceived themselves as more similar to their students, they tended to feel more self-efficacious in helping their students and more empathic concern towards students in helping situations. Thus, although similarity was not a predictor of prosocial tendencies, it shared some characteristics with instructor empathic concern and self-efficacy.

The second result was previously hypothesized with support from Sturmer and Snyder (2010), who reported levels of empathy increased when people perceived another person as similar to themselves. Whereas the first correlation between the predictors similarity and self-efficacy was not expected, research on relationships in the workplace have indicated that workers who perceived others as psychologically similar to themselves supported the development of self-efficacy beliefs (Jaina & Tyson, 2004). This finding may be generalizable to the instructor-student context since the interaction often takes place within the instructor’s workplace. Also, similar to the findings from Jaina & Tyson (2004), the current study’s similarity measure had more items that measured psychological perceived similarity such as “My students and I have similar personalities,” than items measuring physical similarity, such as appearance.
Furthermore, the current study supported previous research findings regarding individuals who were more self-efficacious and tended to be more prosocial (Caprara et al., 2010). In the context of helping students with personal problems, those instructors who felt more self-efficacious had higher levels of prosocial tendencies. Finally, the hypothesis of a strong positive association between empathy and prosocial behavior had been repeatedly substantiated throughout the prosocial literature (Batson et al., 1981; 1991). Once again, this relationship was supported by the current study within the context of the student-instructor interaction, where instructors who reported empathic concern for their students were more inclined to report higher degrees of prosocial tendencies.

Based on previous research regarding causal attribution (Weiner, 1980), the study’s second hypothesis predicted instructors who attributed the cause of a student’s personal problem as external, viewing the student as not responsible for causing the problem, would be more likely to help that student; thus a positive relationship between external attribution and prosocial tendencies. In contrast, it was hypothesized that those instructors who viewed a student as responsible for the cause of the problem, or internal attribution, would be less likely to help that student, thus a negative relationship between internal attribution and prosocial tendencies. However, these hypotheses were not supported. Attribution, whether internal or external, was not significantly related to any of the other predictors, nor prosocial tendencies. A few possibilities for these null results included the nature of attribution as a construct in comparison to the other predictors, as well as the type of measure used to assess causal attribution. Whereas self-efficacy, similarity and empathy were more global assessments of instructor characteristics, the causal attribution measure was domain-specific in that it assessed instructors’ views of a specific
instance with a particular student. The fact that instructors were asked to describe the student, their problem, and their own actions in the situation, along with answering multiple questions in regards to the attribution of responsibility to that particular student, may have tapped into another dimension of helping which was ultimately unrelated to the more global assessments of instructor helping behavior towards their students in general. Although the attribution measure had good reliability and its inclusion as a predictor of prosocial tendencies was theoretically sound, its lack of a relationship with the dependent variable lends that the measure itself may be more relevant in experimental conditions versus the questionnaire format utilized for this particular study and thus, potentially lacking validity in the current study.

Furthermore, previous research on helping behavior has indicated gender differences in the types of situations in which males and females typically provide help, as well as the type of help given by respective helpers. For instance, research has shown that males generally provide help in situations where they will be deemed heroic and often involves some physical form of helping, whereas females tend to help in caretaking situations in which they can utilize interpersonal skills and are viewed as nurturing (Eagly & Crowley, 1986). Thus, in the context of the out-of-class situation in which students confide in instructors, we hypothesized female instructors would be more empathetic and have greater prosocial tendencies than male instructors. However, there were no significant gender differences in empathic concern or prosocial tendencies for instructors in this study. This might have been due to the nature of the profession; helping is a common part of the teaching profession. For example, in the current study, instructors reported that they experienced out-of-class situations with self-disclosing students on average of four times a semester. In addition, only about 1% of instructors reported
“avoiding” the situation altogether when it occurred, meaning that the majority of instructors dealing with students in this situation felt compelled to offer some form of help. Although a potential reason for the lack of gender differences might have been that males and females who returned the survey were more interested in the topic, this might have not been the case in the current study given the range of responses on the measures. Whatever may be the cause, the results indicated that there is not a more helpful gender amongst instructors when comparing gender categories at face value. However, regarding the research on social roles that demonstrates different individual characteristics in relation to helping, future studies should investigate whether personality traits differ according to gender and are ultimately better predictors of instructor prosociality, than gender itself.

In the current study, the last three hypotheses surrounded the mediational nature of empathy as related to prosocial behavior. In addition to Batson et al.’s (1981) empathy-altruism model, other research has shown empathy’s role as a mediator between prosocial behavior and similarity (Sturmer & Snyder, 2010), causal attribution (Weiner, 1980), and self-efficacy (Alessandri et al., 2009). The exploratory hypotheses sought to replicate these findings in the student-instructor context. However, following correlational and path analyses, only self-efficacy remained significant to test as a predictor in the mediation model. Empathic concern was a partial mediator of the relationship between self-efficacy and prosocial tendencies for instructors. This result indicated not only the importance of instructors perceiving their ability to help students as capable, but also the significant influence that empathy had on determining the likelihood instructors would actually help students. Hence, it was not enough for instructors to
feel efficacious in interactions with students, but necessary to feel empathetic towards the student in order to be likely to help them.

**Strengths & Limitations.**

The current study sought to bridge the gap in the literature between prosocial behavior and out-of-class communication, bringing two bodies of literature and methods of research together that prior had been unacquainted. Previously, few studies had examined helping in the context of the student-instructor interaction that takes place all too often outside of the classroom, during office hours or less informal circumstances (Easton & Van Laar, 1995). Although the predictors selected for this study have previously been associated with prosocial research, it was important to determine if their relationships were applicable in the context of the student-instructor interaction. Thus, the finding that empathy and self-efficacy were distinct predictors of instructor prosocial tendencies contributed to the lack of research in this area.

Aside from theoretical contributions, other strengths of the current study included the distribution of the sample. Although the sample was somewhat small, respondents were fairly varied across age groups, teaching status, and responses. Another strength of the study was that the identified population was one in which all members, or instructors at various employment levels, had equal opportunity to participate. In addition, throughout the duration of data collection and analysis, participants remained anonymous which most likely strengthened honesty in responses and increased the return of a questionnaire that held revealing self-reported information about the campus community.

Although the study generated many significant and interesting results, it was not without its limitations. Though the sample was evenly distributed it was not random; participants were
encouraged to participate based solely on their status as instructors, as it was the most relevant and defining characteristic of respondents. However, to combat this weakness, the questionnaire was made available to all instructors with campus mailboxes. Secondly, whereas completion of the questionnaire was greatly encouraged through multiple routes of communication with instructors including hard copy notifications before and after distribution of the questionnaire, campus-wide emails, and making the survey available online in the latter half of the semester, a sample size closer or exceeding the projected power of 150 participants would have been ideal. Although the final count of questionnaires exceeded the estimated count originally needed for the study (close to 200 were attempted and returned), due to high numbers of uncompleted questionnaires from the online survey and also missing data on whole measures participants chose not to answer, a considerable number of participants (about 50) could not be included in the final analysis.

The final limitations of this study pertain to the design of the questionnaire and the measures used in its compilation. Although all of the measures had relatively good reliability estimates, each had their weaknesses. Because no other study to our knowledge has examined the predictors of prosocial behavior in this particular context, every measure had to be modified in order to assess the student-instructor dynamic which meant adding “students” to part of the items and in some cases using items from a measure that tapped the construct in this context the most, another shortcoming related to the attribution measure. Using this measure alongside questions regarding an instance instructors had previously experienced with a student might have contributed to the non-significant relationship between causal attribution of the situation and the more global measure of prosocial tendencies. Again, the questionnaire method might not have
accurately assessed causal attribution; however, no other existing measures of attribution adequately assessed attribution for the purposes of this study. Similarly, a better measure of perceived similarity was also needed for the context of this study.

Conclusions & Future Directions.

Aside from the strengths and limitations of this study, there are various ways to expand upon the current research findings and to further the investigation of out-of-class interactions between instructors and students. This was the first empirically-based research study focused on helping in academia, thus there are many possibilities for expansion of future research. This subfield of the literature has a need for the development of new measures, not only to be used in questionnaires, but also in experimental settings. New surveys that specifically measure instructors’ characteristics, ideas, and feelings about dealing with and helping students with personal problems should be constructed and validated to accurately measure any future predictors of instructor helping behavior in subsequent studies.

Furthermore, numerous studies could be pursued by taking into consideration the results from the present study’s research findings. Other survey-based methodologies might assess other predictors of helping behavior, in order to establish other important determinants of helping, in addition to empathy and self-efficacy. Another direction would involve using a student population to assess the characteristics and qualities students look for when choosing to seek out instructors for help and acquiring information about past experiences with instructors, including topics discussed and the results of such conversations. Employment of vignettes in which student characteristics, dynamics of the described situation, and types of student problems manipulated might offer a fruitful avenue of research. Information from the current study and those suggested
could form a foundation for experimental studies which could actually assess instructors’ prosocial behaviors when interacting with students, instead of the likelihood or “tendencies” to help. Such experiments could adequately assess the theory-supported predictors such as similarity and causal attribution by using student confederates to present a problem to instructors and thus accurately assess the determinants of their prosocial behavior, through experimenter observation.

The need for subsequent research in this area of psychology would be highly applicable in many domains of higher education such as contributing to the credibility of handbooks dedicated to dealing with students. Whereas some institutions might already have policies in place for ethically risky situations or offer training on the potential matters faculty are confronted with by their students, many of the faculty from Easton & Van Laar’s (1995) study reported being unaware of their employer’s policies and in need of supplemental training. This sentiment has produced numerous educational handbooks and articles offering college faculty advice on dealing with student issues, such as the importance of listening (Waldeck, 1999), knowing appropriate resources in order to make referrals to (Rossi, 2008), and, ultimately, avoiding situations which could cross ethical boundaries and have negative implications for both parties involved (Keith-Spiegel, 1999). Yet, most are based on personal experience and future handbooks or guidelines institutions make available to instructors should be based on the empirical determinants of prosocial behavior and not rely so heavily on individual experience. Similarly, additional research could add to other tools already being utilized by college instructors who need assistance in dealing with self-disclosing students and their personal problems. Online programs such as Maxient, an online student conduct database where
instructors can detail experiences with students that is made available to other instructors, could benefit from empirically-based suggestions and examples on how to react to such situations. Finally, training made available to university instructors could also benefit from research like the current study, by emphasizing the importance of characteristics such as empathy and self-efficacy in helping situations in order to arrive at positive outcomes for both parties involved.

Overall, the phenomena of students self-disclosing personal information to teaching instructors in out-of-class setting is not uncommon on a college campus. Yet, to date, few studies have examined the underlying determinants which influence instructors to help in these situations. Thus, the current study contributes by not only examining the roles of instructors as potential bystanders in a university setting, but explores the possible predictors that ultimately influence their decision to help the students who turn to them in a time of need.
REFERENCES


## APPENDIX F
### DEMOGRAPHIC INFORMATION

1. **What is your Gender?**  
   _____ Male  _____ Female

2. **What is your age?**  
   _______ yrs old

3. **Approximately how long have you been teaching?**  
   ___ 0-5 yrs  ___ 5-10 yrs  ___ 10-15 yrs  ___ 15-20 yrs  ___ 20 or more yrs

5. **What is your current teaching status?**  
   ___ Tenure  
   ___ Tenure-track  
   ___ Assistant Professor  
   ___ Associate Professor  
   ___ Full-time Teaching Faculty  
   ___ Part-time/adjunct  
   ___ Graduate Teaching Assistant/Faculty  
   ___ Other

6. **What is your ethnicity?**  
   ___European American/Caucasian  
   ___African American  
   ___Asian/ Pacific Islander American  
   ___American Indian  
   ___Hispanic/ Latino American  
   ___Caribbean American (non-Hispanic)  
   ___Other (Please specify)

7. **What is your average undergraduate class size?**  
   ___ students
<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. On average, how often do students come to you about non-academic personal problems?</td>
<td>___ Very Often       ___ Often       ___ Not very Often       ___ Not at all</td>
</tr>
<tr>
<td>9. To what extent do you think students are coming to teaching faculty for help with their problems?</td>
<td>___ Very often       ___ Often       ___ Not very often       ___ Not at all</td>
</tr>
<tr>
<td>10. How important/rewarding do you consider helping distressed students tackle their problems as a part of your work?</td>
<td>___ Very important       ___ Important       ___ Not very important       ___ Not important</td>
</tr>
<tr>
<td>11. To what extent do you wish you knew more about how to help distressed students who come to you in distress than you know now?</td>
<td>___ A lot more       ___ More       ___ Not a lot more       ___ Not any more</td>
</tr>
<tr>
<td>12. How much satisfaction do you feel with the help you are able to offer students who come to you in distress?</td>
<td>___ Very satisfied       ___ Satisfied       ___ Not very satisfied       ___ Not satisfied at all</td>
</tr>
<tr>
<td>13. How knowledgeable do you feel about other sources of help to offer to students in distress? (e.g. helplines, counseling services, etc.)</td>
<td>___ Very knowledgeable       ___ Knowledgeable       ___ Not very knowledgeable       ___ Not knowledgeable at all</td>
</tr>
<tr>
<td>14. How often do you encounter distressed undergraduate students with personal problems?</td>
<td>___ times per semester</td>
</tr>
<tr>
<td>15. What types of personal problems have you encountered with students?</td>
<td>___ financial issues       ___ relationship issues       ___ health-related issues       ___ drug/alcohol related issues       ___ death-related issues       ___ mental health issues       ___ sexual assault       ___ disabilities       ___ eating disorders       ___ other, ____________________________________________________________________________</td>
</tr>
</tbody>
</table>