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THE ROLE OF GENDER EXPECTATIONS AND ORGANIZATIONAL CITIZENSHIP BEHAVIORS ON TEACHING EVALUATIONS

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF PSYCHOLOGY

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Abstract

Organizational citizenship behaviors (OCBs) are a much-discussed and debated construct in the literature. When examining behaviors not explicitly detailed in job descriptions, ambiguity and subjective expectations about who and how these actions should be carried out naturally occur. Gender role expectations may also create a more complex situation in which workers are evaluated differentially due to gender stereotypes and expectations. This research examined the interplay of gender role expectations for the engagement in organizational citizenship behaviors in a university teaching setting. Two studies examined how gender stereotypes impact student evaluations. Study 1 was an experimental design, which used a university student sample to examine the affects of three factors (i.e., gender of evaluated professor, high vs. low levels of male-typed OCBs, and high vs. low levels of female-typed OCBs) on student evaluations of teaching. Study 2 employed a university faculty survey to examine levels of OCBs reported by male and female faculty, how much faculty believed these behaviors were related to student evaluations of their teaching, and the relationships between behaviors, beliefs and work-related attitudes. Overall results indicated that professor gender in either study had little affect, and the gender type of OCBs and workplace attitudes were important when examining the relationships between OCB performance and evaluations.

The role of gender expectations and organizational citizenship behaviors on teaching evaluations

Organizational citizenship behaviors (OCBs) have been generally described as behaviors that are not formalized into a job description but are, nonetheless, behaviors that contribute to the efficient and effective functioning of an organization (Organ, Podsakoff, & MacKenzie, 2006). This concept has been discussed numerous times in the literature (e.g., Coleman & Borman, 2000; LePine, Erez, & Johnson, 2002; Podsakoff, MacKenzie, Paine, & Bachrach, 2000), but the extent to which these behaviors should and do influence performance evaluations, and the subsequent rewards based on evaluations, has received less attention. Although citizenship behaviors may not be explicitly stated as part of the job, research has shown that they are often implicitly expected and have concrete outcomes (e.g., higher or lower evaluations ratings) (Bergeron, 2007). These expectations have the potential to be influenced by other factors such as gender role stereotypes, bringing into question biases in performance evaluations. For example, past research has shown that women perform a greater amount of OCBs when compared to men, but are recognized less for their actions and may even be penalized if they do not fulfill behavioral expectations (Heilman & Chen, 2005). Thus, men may receive benefits from engaging in citizenship behaviors that are not awarded to women, and women may be penalized under circumstances that men are not. While previous research has detected such findings in occupations such as middle managers and salespeople, problems with gendered expectations and stereotypes may impact teaching evaluations to an equal or greater

extent, given that the nature of a professor's job involves an ill-defined expectation of helping behaviors.

To investigate these relationships, two studies have been designed. The first study uses a sample of university undergraduates to experimentally examine the interplay of gender role expectations and stereotypes of male and female professors' organizational citizenship behaviors on student evaluations and reward recommendations. Liking of the professor will be investigated as a mediator to determine the mechanism through which OCB affects outcomes. The second study will employ a faculty survey to examine the extent of self-reported engagement in gendered OCBs and related variables. There are also two overall questions to be addressed across the studies. First, what are the student expectations of the level of OCBs male and female professors engage in, and does this reflect the professors' self-reported levels of engagement? Secondly, to what extent do student perceptions of OCBs impact teacher evaluations, and how does this correspond with how much the professors believe they do?

Organizational citizenship behaviors (OCBs)

Organizational citizenship behaviors (OCBs), also known as discretionary work behaviors (DWBs), extra-role behaviors, prosocial organizational behaviors, and/or contextual performance (CP), have had a much debated evolution over the past few decades. Van Dyne and colleagues remarked that the proliferation of taxonomies defining the overlapping and related characteristics has "muddied the waters concerning definitions of extra-role behaviors" (Van Dyne, Cummings, & McLean Parks, 1995, p. 216). OCBs are behaviors that attempt to improve the welfare of the recipient and may

even be a part of a job description. Extra-role behavior may also include actions of whistle-blowing (Van Dyne et al., 1995). The related construct of CP, which has received increasing attention over the years, has been described as supporting the social and psychological aspects of the work context (Borman & Motowidlo, 1993; Van Scotter, Motowidlo, & Cross, 2000). Some authors have argued that these behaviors are not required to have specific or direct organizational relevance, but may still be included in the formal reward system (Borman, 2002; Brief & Motowidlo, 1986). One of the pioneers of organizational citizenship behavior more recently defined it as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the efficient and effective functioning of the organization" (Organ, Podsakoff, & MacKenzie, 2006, p.3).

Organ and colleagues (2006) also clarified this "muddiness" by describing OCBs in terms of two common themes across the frameworks: explicit and implicit. Explicit themes include a focus on aspects other than traditional job tasks and measures of individual productivity (e.g., sales volume), and acknowledge the indirect or direct contribution to effective organizational functioning. Implicit themes consist of some element of discretion and a variance of the level to which OCBs are found across individuals, groups, and organizations. Important to note in this second set of themes is the choice or volition of the performers of OCBs.

Perhaps stemming from the lack of definitional clarity of what constitutes an organizational citizenship behavior at work, researchers have addressed the question of whether these behaviors are truly distinct from task performance. Task performance has succinctly been described as behaviors that are role prescribed (Katz & Kahn, 1978),

and includes activities that are involved in the direct transformation of raw materials into goods and services, and activities that maintain the technical core of the organization (e.g., replenishing supplies, distributing products, planning, supervising), or activities that support the transformation of inputs to outputs (Borman & Motowidlo, 1997; Motowidlo & Van Scotter, 1994). The inherent question when considering task performance and OCBs is what exactly qualifies as a behavior that contributes to the functioning of an organization. Empirical investigations of this distinction have found that citizenship behaviors are often perceived by employees to be part of the job and exemplars of task performance (Stone-Romero, Richardson, & Cook, 2009), but task and citizenship behaviors do contribute independently to the overall performance and are separate constructs (e.g., MacKenzie, Podsakoff, & Fetter, 1991; Motowidlo & Van Scotter, 1994; Organ, 1997). In addition, OCBs are related more strongly to attitudes and personality variables such as work orientation and dependability (Hoffman, Blair, Meriac, & Woehr, 2007; Motowidlo & Van Scotter, 1994), providing further construct distinction. Overall, OCBs are beneficial to organizations and have been shown to positively affect firm performance (Podsakoff et al., 2000), suggesting that further research into this area is needed.

Multiple taxonomies have been developed to explicitly describe behaviors that can be categorized as OCBs. The most widely known and researched is Organ's five dimensions of organizational citizenship behavior (Organ, 1988). These consist of altruism (i.e., voluntary actions that help another person with work problems); conscientiousness (i.e., a pattern of going beyond the minimal requirements of attendance and organization), now renamed compliance (Organ et al., 2006);

sportsmanship (i.e., characterized as tolerating the inevitable inconveniences and impositions of work without whining); courtesy (i.e., actions showing foresight that help someone else prevent a problem); and civic virtue (i.e., responsible involvement in the political processes of an organization). Williams and Anderson (1991) created a two-factor taxonomy of OCBs directed at individuals and OCBs directed at the organization, which is similar to Coleman and Borman's (2000) meta-analytically derived taxonomy of interpersonal citizenship performance and organizational citizenship performance. The latter authors added a job-task citizenship performance dimension to include behaviors that reflect extra effort, persistence, and dedication to the job. This job-task dimension has also been compared to functional participation (Van Dyne et al., 1994) and job dedication dimensions (Van Scotter & Motowidlo, 1996). These examples briefly illustrate the profusion of overlapping dimensions, but there are still others (e.g., loyalty, social participation, keeping up with changes, interpersonal facilitation; Podsakoff et al., 2000).

In an attempt to condense the over 30 dimensions of citizenship behaviors in the literature, Podsakoff and colleagues' (2000) review generated a seven-dimension solution. The first dimension is *helping behavior*, which is voluntarily helping others with or preventing the occurrence of work-related problems and includes constructs of altruism and courtesy. Next is *sportsmanship*, defined above by Organ (1988). *Organizational loyalty* refers to protecting and committing to the organization, even under adverse conditions. *Organizational compliance* involves adherence to the rules and procedures of an organization. *Individual initiative* is described as behavior above and beyond the call of duty by voluntarily taking on extra responsibilities and acting

with extra effort at work; this includes the construct conscientiousness. *Self development* is the voluntary engagement in activities meant to increase knowledge, skills and abilities. Finally, *civic virtue* represents a commitment to the organization as a whole through the involvement in activities such as political processes and monitoring the environment for threats and opportunities. This seven-dimension taxonomy provides a comprehensive description of the multitude of research involving specific OCBs and their outcomes as well as categorizing related behaviors from across the literature. However, when these behaviors are viewed through the lens of gender stereotypes and expectations, new issues arise.

Gender Roles and Expectations

Social role theory (Eagly, 1987) is a useful framework from which to examine gender roles and expectations. The theory posits that behavioral expectations for men and women follow gender roles, which are consensual beliefs about the desired attributes, qualities, and behaviors of men and women (Eagly & Karau, 2002). These norms may either be expectations or stereotypes about how members of a certain group *actually* behave (i.e., descriptive norms) or about how group members *should* behave (i.e., injunctive norms; Cialdini & Trost, 1998). Research by Eagly and colleagues (Eagly & Steffen, 1984; Eagly, 1987; Eagly & Karau, 2002; Eagly, Wood, & Diekman, 2000) has described the process by which women have come to be expected to behave communally, while men are expected to behave agentically. Communal behaviors entail acting selflessly and with concern for others, and have also been described as a "desire to be at one with others" (Eagly & Steffen, 1984, p. 736). Agentic behaviors show self-assertiveness and a motivation to master, as well as a desire for self-expansion. The

seminal work by Eagly and Steffen (1984) argues that the process by which communal behaviors became associated with women and agentic behaviors with men was through the distribution of the sexes into social roles that highlight these traits. For example, men have historically been more likely to hold positions of power, higher status and leadership (and as employed workers) and the assertive and commanding behaviors displayed by individuals in these roles naturally became associated with the belief that men possess these traits more so than women, who have historically taken on more communal and lower status roles such as homemaker. Eagly and Steffen state that this distribution of groups into different aspects of the social structure is what underlies stereotypes. Speaking to this is research suggesting men have a more masculine construal of leadership than women, and therefore tend to view women leaders as less qualified than women do (Eagly & Karau, 2002). Data also suggests that stereotypes follow two major patterns: perceiving a group as nice or warm but not competent or smart, or perceiving a group as competent but not warm (Fiske, Xu, Cuddy, & Glick, 1999). Thus, women are categorized as communal but not competent, while men continue to be viewed as competent but not particularly warm.

Another noteworthy aspect of stereotypes and expectations is the ease with which they are automatically activated when a member of a stereotyped group is present; this holds true for gender stereotypes (Banaji & Hardin, 1996; Devine, 1989; Dijksterhuis & van Knippenberg, 1996). Gender will likely be noticed before other personal traits by an observer because demographic cues are the basis of how people place others in to social categories, which makes them particularly salient (Turner, 1987). Thus, simply having a woman present automatically activates beliefs about

stereotypical communal traits, and likewise, having a man present activates beliefs about stereotypical agentic traits. This has implications for how a woman is viewed by others in the workplace and whether she is seen as possessing legitimate power. Indeed, though the number of women in supervisory and middle management positions has increased, women are still a rarity among the top and executive ranks where much of the power in an organization is concentrated (Eagly & Karau, 2002). This "glass ceiling" reinforces stereotypes because it perpetuates the role distribution trend of women in positions of lower status and power. Notably, this effect has also been documented among university professors when considering tenure ranks. Research has found that women are disproportionately represented in lower-ranked and less prestigious tenure-track positions than men, especially when considering male-typed fields such as the hard sciences (cf. Nolan, Buckner, Marzabadi, & Kuck, 2008).

Further understanding of gender prejudice can be drawn from the role congruity theory of prejudice toward female leaders, described by Eagly and Karau (2002). Based on this theory, there is an incongruity between traditional female gender roles and expectations of leader behaviors. This theory posits that perceived incongruity leads to two forms of prejudice, perceiving women less favorably than men as potential occupants of leadership roles, and evaluating behavior that fulfills the prescriptions of a leader role less favorably when it is performed by a woman. The theory also outlines two consequences: first, that attitudes towards female leaders are less positive than male leaders, and second, that it is more difficult for women to become leaders and to achieve success in leadership roles. Past meta-analyses of the literature demonstrate how these consequences have been manifested. Eagly, Makhijani, and Klonsky (1992)

found that the devaluation of female leaders was greater for male-dominated roles (i.e., more agentic roles). This devaluation of female leaders was even greater when men served as the evaluators and women acted especially agentic in their leadership style. Furthermore, Eagly, Karau, and Makhijani (1995) found that the relative effectiveness ratings of female leaders, compared to male leaders, decreased substantially for the roles rated as more congruent with the male gender role and increased for the roles rated as more congruent with the female gender role.

Another set of studies explicitly testing the tenants of role congruity theory found that sensitivity was associated with female leadership, while masculinity, strength, and tyranny were associated with male leadership (Johnson, Murphy, Zewdie, & Reichard, 2008). One study found evidence that participants expected male leaders to demonstrate more agentic qualities and female leaders to demonstrate more communal qualities. A further study had participants read short vignettes about various leaders and rate them on effectiveness. Results showed that female leaders had to demonstrate both strength and sensitivity to be considered effective, while men only had to demonstrate strength. This last finding somewhat contradicts role congruity theory, and the authors suggest that it is important that a female leader incorporate some masculine qualities into her behaviors while still remaining communal to be perceived in the best light. Taken together, the research suggests that women must walk a fine line to be perceived and rated as effective leaders – feminine to seem communal, but not overly so to avoid seeming incompetent; and masculine to seem competent, but not to the extent that they are perceived to be too harsh or acting far outside the norms of role congruity theory.

Social role theory and gender congruity theory can also be applied to the examination of expectations for the performance and subsequent outcomes associated with OCBs. Research has shown that there are higher expectations for women than men to be better overall organizational citizens, especially with regard to helping behaviors and other female-typed OCBs (e.g., Allen & Rush, 2001; Farrell & Finkelstein, 2007). This is likely because OCBs are often thought to be communal in nature and it follows from role congruity theory that women are to behave in patterns consistent with communal prescriptives. However, research has also found evidence suggesting that there is a gendered dichotomy among types of OCBs, and this is reflected in studies that show that women perform and are expected to perform more female-typed citizenship behaviors, while the same pattern holds true for men and male-typed citizenship behaviors (Heilman & Chen, 2005; Kidder, 2002).

Kark and Waismel-Manor (2005) put forward an interesting examination and critique of OCBs using a feminist approach. They argue that this construct and its dimensions have been presented as being gender-neutral, but that gender is actually inherent in the structure of OCB processes and these behaviors are grounded in male-centered assumptions and bureaucracy. Notably, the authors explicitly categorize different dimensions of OCBs into female gender role behaviors (i.e., altruism, courtesy, & cheerleading; a.k.a., helping behaviors) and male gender role behaviors (i.e., civic virtue, certain aspects of conscientiousness, & sportsmanship). The aspects of conscientiousness that are included in the male-typed behaviors are actions such as working long hours, coming in early, and limiting days off because they are not responsible for working the "second shift" of household and family-related

responsibilities that typically fall to women. Also related to this are civic virtue behaviors that may entail attending functions and meetings outside of normal work hours. Recalling the definitions presented previously, male-typed behaviors reflect agentic qualities of assertiveness, motivation to master, and self-expansion into leadership types of activities. Female-typed behaviors address more communal qualities of helping, caring, and sensitivity. Tying role congruity theory into this gendered OCB dichotomy suggests that men and women are expected to act according to these behavioral prescriptives, and as mentioned previously, research has shown this to be the case for expectations held by observers. This also holds true for the reported levels of engagement in these types of OCBs for each gender (Kidder, 2002), possibly because gender identification and gender orientation theories and research have suggested that individuals act in accordance with salient aspects of their social identity (Ashforth & Mael, 1989; Tajfel & Turner, 1979), which provides behavioral confirmation to perceivers that the existing stereotype is valid and perpetuates the cycle (cf. Operario & Fiske, 2001).

However, past research suggests these gendered expectations and stereotypes may impact the way engagement in OCBs is viewed, which may have a significant impact on rewards and evaluations. Heilman and Chen (2005) conducted two experimental studies examining altruism behaviors and performance evaluations. Results showed that raters gave lower evaluations to female employees (but not male) when they failed to participate in altruistic helping, yet rewarded male employees (but not females) in their performance evaluations when they did participate in altruistic helping behaviors. The pattern of results found for the evaluations was also true for

reward recommendations, with men receiving a benefit but no penalty, and women receiving a penalty but no benefit. In a university sample, men who engaged in OCBs were more likely than women who engaged in OCBs to receive promotions in non-tenured jobs (Allen, 2006). A study of resident advisors found that women engaged in more OCBs than men but were not evaluated more highly than men (Lovell et al., 1999). The author argued that the OCBs may be seen as more in-role for women and were therefore less noticed when performed by women. In addition, most reward systems favor task performance, and because the time individuals allocate to participation in OCBs may take time away from task performance, they may unintentionally hurt their careers by helping the organization (Bergeron, 2007).

Student Evaluations of University Professors

Research on performance evaluations has outlined a number of problems that may decrease the reliability and validity of employee ratings (see Cascio & Aguinis, 2005, for a detailed examination of these issues). Many of these address issues related to rater expectations and biases (e.g., halo error). In light of the preceding discussions of OCBs and gender role expectations and stereotypes, gender biases and also leader behavioral patterns conforming to gender expectations may impact the way OCBs are noticed. This may subsequently affect evaluations. For university faculty teaching in institutions of higher education, evaluations of teaching performance are completed by students (SET = student evaluation of teaching), and are often the major and sometimes only method of evaluating college teaching (Seldin, 1993). Seldin (1993) noted that the use of student evaluations of teaching effectiveness is widespread because they are easy to administer and score. However, SETs are also easy to abuse. The untrained student

raters are vulnerable to gender and other biases, creating a situation which has major implications for professors' careers because SETs are often used in tenure and promotion decisions (Centra & Gaubatz, 2000). This may be aggravated further when factoring in the gray area of OCB influence, a variable that has been neglected in student evaluation research. Most research in this area has focused on evaluation questions that use a numerical scale (e.g., rating the amount the student felt the professor contributed to their overall learning using a 5-point Likert scale) with less focus on open-ended questions (e.g., describing what aspects of the course the student liked; Basow, 1998). However, research has shown that overall performance ratings based on explicitly objective factors such as sales volume are even influenced by the employees' engagement in OCBs (MacKenzie et al., 1991). Thus, student evaluations of teaching are likely to be affected by extra-role behaviors demonstrated by the professor.

Studies providing evidence of differences among ratings show a student preference towards male professors, with ratings being more negative when evaluating female professors, especially when male students evaluate female professors (e.g., Basow & Silberg, 1987). While Basow (1998) states that the effect sizes across research on professor gender and SETs are small, she also warns that this is a "deceptive" finding because studies considering the effects of other variables have found that women fare worse than men. Basow specifically cites gender-typed characteristics and methodology differences as variables that have revealed that female professors do receive significantly lower ratings than male professors, especially from male student raters. Also, gender bias is often subtle in today's work environment and may only be

seen under certain conditions. Other researchers have argued that standardized teaching evaluation instruments should be "carefully scrutinized" because gender stereotypes affect students' preferences for masculine traits over feminine traits of professors to a significant degree (cf. Miller & Chamberlin, 2000, p. 287). Additionally, students tend to be more variable in their ratings of female professors than male professors (Basow, 1998) and raters make more accurate behavioral observations when observing men engaging in OCBs than women (Allen & Rush, 1998; 2001). These findings suggest that there are other variables such as stereotypes and gendered expectations that affect ratings.

Research on gender and leadership is applicable in the context of SETs, because professors are essentially acting as the leader of their classes (e.g., creating schedules and deadlines, issuing directives, offering guidance and knowledge). This area of research would suggest that female professors would be deemed less effective than male professors because they do not fit the leadership stereotyped role of being agentic (and the position of professor is one that has a certain connotation of status and competence) due to existing social biases that women should act more communal and less competent (Eagly & Karau, 2002; Sidanius & Crane, 1989). Deviations from these injunctive norms can elicit disapproval from evaluators (Cialdini & Trost, 1998; Eagly & Karau, 2002). Thus, women who are effective leaders or professors and violate stereotyped gender roles by displaying more agentic behavior and/or less communal behavior may be unfavorably evaluated. This has been shown to be true in past research of SETs (e.g., Sprague & Massoni, 2005). However, a female professor may still receive some degree of positive evaluations because she more closely fits into the injunctive norms of a

leader, and as suggested by Basow (1998), other variables may be at work here. Several studies have found evidence that professor gender and student gender may interact such that male faculty tend to be rated similarly by male and female students while female faculty receive higher ratings from female students and lower ratings from male students (Basow & Montgomery, 2005). There have been other studies showing a same-gender preference for male students rating male professors as well (e.g., Feldman, 1993).

One relatively consistent finding throughout the SET and professor teaching effectiveness literature is that female faculty are rated higher if they demonstrate more communal behaviors when interacting with students such as warmth, rapport, sensitivity, friendliness, and acting more nurturing and positive when providing feedback (e.g., Bachen et al., 1999; Basow & Montgomery, 2005; Feldman, 1993; Statham et al., 1991), behaviors that map easily onto female-typed OCBs. Regarding this alignment with OCB and gender research, it is argued that women are expected to and are perceived to engage in OCBs more frequently than men in gender-neutral and male-typed jobs (Allen & Rush, 2001). Higher levels of engagement in OCBs generally leads to better performance evaluations, career advancement, and rewards over time (Van Scotter et al., 2000), so it may be assumed that female professors receive a boost on SETs for performing more OCBs. However, research has also shown that women must show an even greater amount of citizenship behavior to be noticed and to fulfill the higher expectations (Allen & Rush, 2001; Basow & Montgomery, 2005). For example, Allen and Rush (1998) found that raters made the most accurate behavioral observations when males engaged in OCBs and when females did not. In addition,

OCBs are sometimes considered to be in-role and at other times to be considered extra-role, depending on the type of OCB and whether a man or woman is performing it (Heilman & Chen, 2005). This has implications for the likely impact of these behaviors on evaluations, especially considering that women are penalized for not acting communally, whereas men are not penalized and are instead rewarded for engaging in similar communal behaviors as women. Related SET research has found that both female and male students preferred instructors who possessed both feminine/communal and masculine/agentic characteristics, regardless of the gender of the instructor (Freeman, 1994). Indeed, feminine behaviors performed by men may be the best of both worlds and elicit the most favorable ratings (McDowell, 1997), because the female-typed OCBs are gender role incongruent and therefore more noticeable, and men carry with them the social stereotypes of competence and professorial behavior.

STUDY 1

The review of the OCB, gender role expectations and stereotypes, and finally student evaluations has outlined the rationale behind a series of hypotheses that will be tested in a laboratory setting using undergraduate student participants. OCB research examining gender expectations and stereotypes has shown that women are expected to engage in more OCBs than men overall, especially female-typed OCBs (Allen & Rush, 2001), because women are expected to fulfill norms of being more communal and less agentic. Role congruity theory (Eagly & Karau, 2002) argues that women in positions of power and leadership (e.g., a university professor in an undergraduate classroom) are perceived less favorably than men in those positions because corresponding stereotypes dictate that men have the required (agentic) characteristics to be effective and women

do not. In addition, behavior that is seen as norm-inconsistent is more likely to be noted (Heilman & Chen, 2005). Placed into the higher education context, men are naturally perceived to epitomize the role of "professor" with increased assumptions of agentic qualities, while women are perceived as "teachers" with corresponding communal qualities (Miller & Chamberlin, 2000). Thus, performing OCBs is seen as an extra-ordinary positive behavior for men, while it is the expected norm for women. Exceeding expectations enhances ratings, while failing to meet expectations negatively affects ratings (Heilman & Chen, 2005). Student raters using SETs to conduct evaluations of professors are likely to have gendered role expectations, and will allow these stereotypes to influence their ratings (Basow, 1998). Thus, the first two hypotheses state:

Hypothesis 1.1: Engaging in OCBs enhances male professors' performance evaluations and reward recommendations but does not affect those of women.

Hypothesis 1.2: Withholding OCBs is detrimental to women professors' performance evaluations and reward recommendations but does not affect those of men.

In addition to the level of general engagement in OCBs, research regarding the gendered nature of this construct has supported a male/female dichotomy of OCBs (Kark & Waismel-Manor, 2005). For example, men are more likely to report performing civic virtue OCBs, and such behavior is viewed as less optional for men (Kidder, 2002; Heilman & Chen, 2005). Likewise, women report engaging in more helping and altruistic behaviors, which are also viewed as less optional for them. Observers may also project their stereotypes about OCB engagement by assuming that individuals engage in gender role-congruent behaviors even when specific behaviors

have not been observed (i.e., men in male-typed OCBs and women in female-typed OCBs). This adds a level of complexity in that performing male-typed or female-typed OCBs may be seen as even more or less discretionary based on gender expectations. Crossing the two types to categorize a professor as engaging in a combination of high or low levels of each type of OCB may create a broader spectrum of potential influences on ratings. For example, men may receive more of a ratings boost for performing OCBs overall, but would be expected to receive an even greater boost if they perform high levels of both male-typed OCBs (which are more expected but still extra-role) and female-typed OCBs (which are extra-ordinary), than if they perform high levels of one type of gendered OCBs.

Hypothesis 1.3: Students report professor engagement in expected behaviors consistent with gender role expectations, even if the behaviors are not performed by the professor.

Hypothesis 1.4: Professor gender and female-typed OCBs will interact such that female-typed OCBs have a greater effect on ratings for women than men.

Hypothesis 1.5: Professor gender and male-typed OCBs will interact such that male-typed OCBs have a greater effect on ratings for men than women.

Hypothesis 1.6: Professor gender, level of male OCB, and level of female OCB interact to impact evaluations and reward recommendations, such that men performing high levels of both male-typed and female-typed OCBs will be evaluated most positively and women performing low levels of both gender-typed OCBs will be evaluated least positively.

The final hypothesis examines the role of liking. Organ and colleagues (2006) state that there are many reasons why OCBs may influence performance evaluations. For this study, liking will be examined as a mediator. Past research has shown that engaging in OCBs causes the observers and especially the recipients to like the actor more, which leads to better performance evaluations and increased reward recommendations (Allen & Rush, 1998; Lefkowitz, 2000). Allen and Rush (1998) argue, based on past research, that individuals who exhibit OCBs activate a prototype of a "good employee", which activates positive affective characteristics such as liking. Positive regard or liking towards an individual has also been shown to influence evaluation of the individual such that greater liking is related to higher performance appraisal ratings, greater halo error, and less accuracy (Lefkowitz, 2000). Based on this past research, the final hypothesis is:

Hypothesis 1.7: The relationship between OCBs and student evaluations and reward recommendations is mediated through the mechanism of liking of the professor

Method

Participants & Procedure

A two-part online study was administered to 248 undergraduate psychology students at the University of Oklahoma. The sample was 65% female with an average age of 19 years. The study sign-ups were posted on the online experiment management system, which was also used to assign experimental participation credits to the participants as compensation. Participants were told they had the opportunity to participate in a study examining the student preferences of instructor teaching methods. The first part of Study 1 was hosted on the university's online experiment management

system. Participants read the online consent form assuring their anonymity and confidentiality, and were informed that clicking the button to move forward indicated that they agreed to and understood everything outlined in the consent form. This set of measures included measures of independent variables and control variables (see below for Measures for Study 1).

In the second part of Study 1, participants were randomly assigned to one of eight conditions according to the 2x2x2 design (see Table 1). After determining if the responses to Part 1 were legitimate, an email was sent to each participant with a link to Part 2. Legitimacy of the answers was determined by examining patterns in the data. For example, multiple participants answered at the same point on the Likert scale for all 216 Likert scale items (e.g., all "1" or all "3"), regardless if the items were reversed scored. Participants with completion times of more than one standard deviation below the mean also had their data examined more closely to ensure they were carefully considering each item and not just clicking through the survey. Part 2 was hosted on a separate survey hosting website, which allowed multiple surveys (i.e., one survey for each condition) to be active at the same time. Participants received a link to one of the surveys created for the eight conditions, using random assignment to determine which of the eight links each participant receives. Upon accessing the Part 2 survey, participants read an introduction to the research stating that they would review information about one of several professors that agreed to provide past examples of their teaching methods (via letters from former students) and that the participant would then rate the professor using various methods. They were also told that other measures were included to examine individual differences related to teaching method preference.

Participants then read background material about either a male or female psychology professor. Psychology was chosen as the professor's department because past research has shown that job gender stereotypes may affect whether observers expect employees to exhibit male-typed or female-typed OCBs (Kidder & McLean Parks, 2001), and psychology professor has been identified as a gender-neutral job (Wilkinson, 2003). Gender of the professor was manipulated with the use of pronouns throughout the background materials.

Next, participants read two letters about the professor from two students (see Appendix A). These letters were used to manipulate the level of OCB exhibited by the hypothetical professors in the eight conditions. Each letter described a high or low level of male-typed OCBs and a high or low level of female-typed OCBs, according to the respective condition. The determination of gender-typed OCBs was based on a critical paper by Kark and Waismel-Manor (2005). Explicit behaviors for male-typed OCBs (i.e., civic virtue, conscientiousness) and female-typed OCBs (i.e., altruism, courtesy) were drawn from Podakoff and colleagues' (2000) review of the OCB literature. This gendered dichotomy and review of specific OCB behaviors and definitions acted as the guide for creating professorial behaviors described in the student letters about the professors, and also drove the development of the corresponding measures of OCBs described below. Finally, participants completed several evaluation measures and controls, followed by a presentation of a debriefing screen outlining the true nature of the study.

Measures for Study 1

Demographics. Demographic variables included gender, age, year in school, major, race/ethnicity, the number of male and female professors each participant has had for their college career, and whether the mother of the participant worked.

Liking of professor. Four items asked participants to what extent they personally like the professor (5-point Likert; Wayne & Ferris, 1990). Cronbach's alpha was .95, showing good reliability.

Teacher evaluation. This questionnaire, which was developed by researcher and based on Heilman and Chen (2005) has three items using a 7-point Likert scale. The first question asked for an overall rating of the professor's performance (1 = poor, 7 = excellent). The next two questions asked how likely it is that the professor will advance at the university and the likelihood of success (1 = very unlikely, 7 = very likely). The three questions had a Cronbach's alpha of .91.

Reward recommendations. Based on a measure developed by Allen and Rush (2001), participants indicated on a Likert scale how likely it is that they would recommend that four rewards be given to the professor (1 = "would definitely not recommend", 7 = "would definitely recommend"; $\alpha = .95$). Rewards included salary increase, promotion, high-profile project, and bonus pay.

Recommend others to take the course. Three questions using a 7-point Likert scale (1 = very unlikely, 7 = very likely) asked participants the likelihood that they would recommend a friend, another student, and another student majoring in the professor's area of expertise to take a course from the professor ($\alpha = .97$).

Departmental bonus distribution. The measure was developed for the study, loosely based on a measure created by Allen and Rush (2001). Participants were asked

to imagine themselves in the role of the department chair and were told that the Dean of the college has asked them to decide how much of a possible maximum $5000 bonus they will award to the professor they evaluated. In a series of four free-response items, participants must describe what steps they would take to allocate the bonus, what factors they would consider, what the most important factors are, and how they would determine they specific amount awarded to the professor. Finally, they were asked to give a dollar amount up to $5000 to indicate the size of the bonus awarded to the professor evaluated during the study.

Detection accuracy of organizational citizenship behaviors. This measure captured the accuracy of participants' perception of the various OCBs that were presented in the student letters, which was based on the gendered OCB dichotomy described by Kark and Waismel-Manor (2005) and used behaviors derived from Podsakoff and colleagues' (2000) review of the OCB literature. This measure asked participants to indicate the extent to which the professor in the hypothetical letters engaged in each behavior using a 5-point Likert scale (1 = no extent, 5 = great extent) across 17 items. Cronbach's alpha for the entire 17-item scale was .94. The measure was presented the same for every participant, but was employed in multiple ways. First, a scale was created that included only items describing behaviors addressed in the student letters. This scale of *possibly-present behaviors* allowed comparison across conditions to examine if participants did in fact detect higher levels of OCBs when these behaviors were described as taking place than when the professor was described as not doing those behaviors. Second, two scales (i.e., one for male-typed OCBs & one for female-typed OCBs) were built from the items that described behaviors *never*

present in any conditions. These scales were used to examine whether participants projected gender role congruent behavior in male- and female-typed OCBs that were never addressed in the student letters (see Hypothesis 1.3). The third use of the scale was to calculate the *percentage of present OCBs that were correctly detected*, considering the differences in total OCBs between conditions. The scores for this used a dichotomous scoring scheme. Items marked 1 to 2 on the 5-point Likert scale were coded as "missed" OCBs, while items marked 3 to 5 (i.e., behaviors present some to great extent) were marked as "hits" or detected OCBs. The number of hits was then divided by the total number of present OCBs to create a percentage of correctly detected male-typed and female-typed OCBs. Finally, the *total mean* scale score of all 17 items was calculated for use in testing H1.7. See Appendix B for complete measure.

Results

Manipulation Checks

OCB-related. The first OCB-related manipulation check involved a pilot study of 20 undergraduate student raters. Raters were asked to rate on a 5-point Likert scale the extent to which they believed that each item on the OCB scale (see Appendix B) was above the minimal level of expectations for professor teaching behaviors (1 = meets minimal level, 5 = far above minimal level). All behaviors chosen for use in the student letters to manipulate the levels of OCB were rated with a mean of approximately three or above, indicating that they were seen to be at least somewhat above the minimal level. Secondly, to ensure that levels of each type of OCB were distinctly high or low between conditions, two sets of pilot ratings were collected (one of 20 undergraduate students, and another of 3 graduate students versed in the OCB

domain). After being presented with definitions of the 4 types of OCBs used in this study, pilot participants were asked to rate the student letters (i.e., the method of manipulating the independent variables) on levels of male-oriented OCBs (i.e., civic virtue & aspects of conscientiousness) and female-oriented OCBs (i.e., altruism & courtesy). Manipulations were successful: a series of t-tests indicated that high female-typed or male-typed OCB levels were rated as being significantly higher than low female-typed or male-typed OCB levels for each of the four OCB types. One exception was the level of the conscientiousness sub-dimension, which was subsequently revised to strengthen the manipulation.

Deception and attention. A manipulation check asked participants to briefly describe the professor they were assigned to rate as a free-response item. In addition, they responded to several multiple choice items asking them to indicate tenure at the university, gender, professor's name, professor's department, and types of courses taught. The final two questions asked the participant whether he or she was suspicious as to the real purpose of the study and to describe what they believed was truly being examined in the study. Any respondents that were found to have a generally accurate idea of what the study was manipulating or wrongly reported the professor's gender were removed from the data analyses, resulting in the final N size of 248 participants with equal cell sizes of 31 per cell.

Dependent Variables

For Study 1, hypothesis 1.1 and 1.2 considered the three levels of OCB engagement: high, medium (high/low combinations of gendered OCB types) and low. For hypothesis 1.1, a comparison of high to medium levels for male and female

professors examined the enhancing effect of engaging in OCBs on outcomes. For hypothesis 1.2, a comparison of medium to low levels for male and female professors examined the detrimental effect of withholding OCBs on outcomes. A MANOVA with DVs of teacher evaluation, overall reward recommendations, recommending others to take the course, and departmental bonus distribution was significant when comparing all eight conditions using Wilks' Lambda, F (28,856) = 13.62, $p < .01$, $\eta^2 = .74$. Post hoc analyses using Tukey's Honestly Significant Differences test (HSD) to control for increased error in all pairwise comparisons found differences between conditions for each DV (see Table 2 & Figure 1). Result patterns reveal that while levels of male- and female-typed OCBs made a significant difference, gender of the professor did not. Those engaging in high levels of OCBs received the most favorable ratings and recommendation, medium levels of engagement received the next highest ratings, and lowest levels of engagement conditions received the lowest ratings on the DVs. One difference of note due to professor gender was on comparison of the high OCB levels related to bonus distribution. Male professors with high OCB engagement were rated as significantly higher than all other conditions but female professors with high OCB engagement. However, female high engagers were not rated significantly higher than medium level engagers, indicating that there was a slight gender enhancing effect for male professors when it came to the monetary bonus distribution. Another interesting pattern was that of recommendations to others to take a course from the professor. While there were no gender differences, there was a difference between the two medium levels of OCB engagement such that a high level of female-typed and low level

of male-typed OCBs (i.e., conditions 2 & 6) led to higher ratings as compared to low level of female-typed and high level of male-typed OCBs (i.e., conditions 3 & 7).

Hypothesis 1.3, which was partially supported, examined the detection accuracy of OCBs comparing male and female professors on the scale item behaviors that were never included in any condition manipulations. Four independent samples t-test were performed matching conditions on levels of male- and female-typed, never-present OCBs. The resulting pairs were conditions 1 and 5, 2 and 6, 3 and 7, and 4 and 8. A significant difference was found between male and female professors for the condition pair of 2 and 6 on male-typed OCBs (see Table 3). A greater amount of male-typed OCBs were falsely detected for female professors (M = 3.51, SD = .75) than for male professors (M = 3.11, SD = .82) in the low male-typed OCB, high female-typed OCB condition. This result suggests that when female, but not male, professors participate in greater amounts of female-typed OCBs, students seem to give them the benefit of overestimating their participation in OCBs. Perhaps because women are expected to participate in more OCBs than men in general, students overestimate to fulfill stereotyped expectations, although this was found for male-typed OCBs. It also agrees with past research, which found that men's OCB engagement is rated more accurately than women's engagement (Allen & Rush, 1998; 2001). The next set of analyses used within-condition, paired-samples t-tests, which showed that engagement in never-present, male-typed OCBs were projected at higher levels than female-typed OCBs, except in the high-high conditions where the pattern was reversed (see Figure 2 & Table 4). Comparing all conditions in aggregate also found that never-present, male-typed OCBs were falsely detected at higher levels than never-present, female-typed OCBs.

After graphing the levels of present and never-present OCBs by condition, the pattern suggested that while the detection of OCBs described in the student letter descriptions was adequate and in accordance with condition specifications, participants differed considerably on the levels projected for participation in OCBs never present in the descriptions (see Figure 3). Generally, it was expected that never-present male- and female-typed OCBs would be detected at levels significantly below that of the OCBs present in the descriptions, but for many of the conditions, false detection of never-present OCBs was much higher than anticipated and reached levels higher than possibly-present OCBs that were described as not participated in by the professor. This indicates that if behaviors were not explicitly addressed as performed or not performed, evaluators gave the professor the benefit of the doubt that he/she would engage in these OCBs to some extent. A notable exception is that of never-present, female-typed OCBs in the low OCB conditions (i.e., conditions 4 & 8). For low OCB conditions, participants projected that professors would not engage in helping behaviors to some extent if they were described as not engaging in other citizenship behaviors. Perhaps this pattern of falsely detecting male-typed OCBs at higher levels than female-typed OCBs stems from the nature of conscientious and civic virtue OCBs being more related to a gendered norm of being a working male and a professor.

The last set of Hypothesis 1.3 analyses used ANOVAs with Tukey's HSD post-hocs to examine the proportion that participants correctly identified or "missed" described OCBs. Only conditions in which behaviors were present were compared for each type of OCB (i.e., male-typed OCBs compared conditions 1, 3, 5, 7, while female-typed OCBs compared conditions 1, 2, 5, 6). For female-typed OCBs, conditions in

which there were high levels of male- and female-typed OCBs had higher percentages of detected OCBs than in conditions in which there were only high levels of female-typed OCBs, F (3,123) = 5.29, $p < .01$ (see Table 5). The same was true for male-typed OCBs, but only when rating male professors, F (3,123) = 3.58, $p < .05$. This may be a result of the sum of both OCB types being greater than each of its parts because the professor is seen to be a better citizen overall and not just in a single gendered-OCB aspect. Conversely, it may be that having low levels of one OCB type casts the professor in a more negative light, even if he or she still engages in the other OCB type. This is similar to the halo (and horn) effect (Thorndike, 1920), in which a person is rated high (or low) based on a global impression. Engaging in high levels of both prompts the rater to view the professor as better overall and rate him or her accordingly, while engaging in low levels of one OCB type prompts the evaluator to see him or her as a less helpful person overall and lower the ratings of engagement in citizenship behaviors.

To investigate the relationships in Hypothesis 1.6 (as well as the two-way interactions described in 1.4 and 1.5), a three-way MANOVA was used to compare the eight conditions from the 2x2x2 design on the dependent variables related to student evaluations. Several covariates were collected based on past research (e.g., personality variables of agreeableness and conscientiousness, gender identification, gender stereotypes, affectivity, student gender, expected grades, academic testing scores and grade point averages), but were not found to be significantly related to the outcomes, and were therefore omitted from further MANOVA analyses. The overall F, when considering Wilks' lambda, was not significant, F (4,237) = .31, $p > .05$. No two-way

interactions of gender-typed OCBs with professor gender were significant, thus Hypotheses 1.4 and 1.5 were not supported. The main effects of both male- and female-typed OCB levels were significant for the multivariate analyses (F (4,237) = 44.82, p < .01, η^2 = .43; F (4,237) = 82.80, p < .01, η^2 = .58). For male-typed OCBs, estimated marginal means pairwise comparisons using a Bonferroni adjustment found significantly higher ratings on the outcomes for professors displaying high levels of OCB engagement (see Table 6). This was also found for female-typed OCBs. Thus, higher levels of engagement in OCBs led to more positive outcome ratings and reward recommendations, but there was not a significant difference based on gender of the professor, failing to support hypothesis 1.6.

Mediation analyses for Hypothesis 1.7 were conducted using hierarchical regression analyses. As described in the methods section, the total mean score from all 17 OCB scale items was computed for this hypothesis because participants' liking of the professor would be influenced by the perception of total OCB engagement, whether it was accurately detected or falsely detected and projected. First, significant correlations were established between the variables in each component of the mediation analyses (see Table 7). Terms were then centered using the grand means to address issues of multicollinearity. Partial mediation was found for all dependent variables (see Table 8). Using the method outlined by Preacher and Hayes (2004), Sobel's tests for each mediation analysis was conducted to determine the variance in the DVs accounted for by the indirect effect. A significant amount of the variance was found to be accounted for by liking of the professor for each DV. Nearly half of the variance was

accounted for all variables but bonus distribution, which had approximately one-third of the variance accounted for.

STUDY 2

While there have been a few studies examining SETs from the faculty perspective, none have explicitly addressed OCBs. Past research has focused on more formalized aspects of the job description related to conveying information and has not addressed professor behaviors that take place outside of the classroom such as acting as the sponsor or advisor of a student organization. Professors and students may both extend gender role expectations to behaviors categorized as being more discretionary, allowing OCBs to contribute to evaluations in addition to task-related behaviors (i.e., teaching behaviors) (Lovell et al., 1999) and prompting professors to act in accordance with those expectations. Related studies have suggested that female professors work extended hours because of teaching workload (Todd, Madill, Shaw, & Bown, 2008), and are more concerned with improving students' self-esteem and encouraging interaction in small groups and discussion (Goodwin & Steven, 1993). Other studies suggest that female professors often fulfill gender role expectations by performing helping behaviors to a greater degree than men (Statham et al., 1991). In a large university study of gender and university teaching (Statham et al., 1991), the researchers name three types of extra-class personalizing: chatting, counseling, and negotiating grades. Findings from the study show that women were more willing to chat about personal issues with students, to listen and counsel students about problems, and to allow grade negotiation, while male professors limited their interactions with students to school-related issues and were less likely to provide informal counseling and

negotiating. Women also used strategies to address issues with students that were less harsh, less direct and less punitive, suggesting that women were more likely to behave in accordance with communal gender norms.

Hypothesis 2.1: Female professors report engaging in OCBs more than male professors, especially female-typed OCBs, in accordance with gender role expectations.

Given that OCBs are more expected from women, this may make gender role expectations and stereotypes more salient to female professors who may recognize the connection that OCBs have on their student evaluations to a greater extent than male professors. Research into discrimination has found that targets of discrimination are more sensitive to negative attitudes and behaviors directed at them or their group because the discrimination becomes more self-relevant (Fiske & Taylor, 1991). Thus, female professors are likely to be aware of existing gender stereotypes that dictate more communal types of behavior when they interact with students. One study found that women more often reported that students also evaluated their personalities on SETs, suggesting female faculty are aware that students consider variables beyond teaching behaviors (Statham et al., 1991).

Hypothesis 2.2: Female professors believe that OCBs are more highly related to their evaluations than male professors.

In general, professors support the use of SETs (Beran & Rokosh, 2009), but this varies depending on which aspects of a professor's job are being considered. Professors often agree that students are competent raters of things such as organization and preparation of professors, talking speed and volume, and how boring the reading material is (Statham et al., 1991). However, they do not support allowing students to

view the ratings or allowing administrators to use them in summative decisions (e.g., rewards and promotions) because they believe that students may use them as a means for revenge or allow personality and liking to influence the ratings (Nasser & Fresko, 2002; Simpson & Siguaw, 2000). Research has shown that there is a gap between what students and faculty believe is important. Faculty support SETs as a source of feedback, but they often challenge their use in personnel decisions because they feel that many variables may be affecting the validity and applicability (Wachtel, 1998). However, evaluations are frequently used in personnel decisions such as awarding tenure status (Centra & Gaubatz, 2000). Using ratings thought to be unsound and subject to biases may lead faculty to perceive these ratings and any actions based on the ratings as unfair. This perceived unfairness in the evaluation process may be related to increased negative work attitudes and a lower level of engagement in OCBs. Indeed, perceived unfairness in procedural processes has been related to a decrease in cooperation, lower levels of morale, disobedience, and higher levels of work stress and turnover (cf. Van Den Bos, 2005), while increased fairness has been linked to greater organizational commitment, job satisfaction, job performance, decreased turnover, and increased OCBs (Gilliland & Langdon, 1998). Thus, these issues have implications not only for well-being factors like stress but also for concrete organizational rewards tied to increased performance like promotions.

Hypothesis 2.3: Individuals who feel they are being evaluated more on behaviors outside their job descriptions experience more negative work attitudes and greater levels of stress.

Method

Participants & Procedure

An online survey was administered to the faculty and staff of six colleges at the University of Oklahoma as wave two in a longitudinal survey. This survey is part of a larger National Science Foundation ADVANCE grant initiative to assess and improve aspects of the work climate, policies, and procedures at the university, especially with regard to the women in academic science and engineering careers. Following consent to participate by the deans of University colleges, the respective administrative assistants sent a notification of the upcoming survey to faculty and staff via email. After the initial email asking for input in a "Faculty Climate Survey", a second email providing a link to the online survey (which will be hosted on SurveyMonkey.com) was sent. This was followed by a third participation reminder email sent shortly before the time window to complete the survey was closed. The time window to complete the survey was approximately one month. Upon accessing the online survey, participants viewed an information sheet informing them of the nature and purpose of the survey, and assuring their anonymity and confidentiality. After deleting cases in which less than 50% of the survey was completed and did not complete the measure of interest (i.e., organizational citizenship behaviors), the final N was 158, a response rate of approximately 20%.

The sample was approximately 60% male, which is roughly equivalent to the gender distribution at the university. Approximately 86% of respondents identified themselves as Caucasian/White, with an average age of 47.5 (*SD* = 10.4) years. Ninety-one percent of the sample identified themselves as a full, associate or assistant professor, while the other 9% identified as adjunct, renewable-term, or research staff.

Average number of years at the University was 12.35 (*SD* = 9.05), and years in rank was 6.47 (*SD* = 5.42).

Measures

Several measures were adapted from items developed at other universities that received similar grants from the National Science Foundation ADVANCE program (NSF, 2009; University of Michigan ADVANCE Survey of Academic Climate and Activities, 2005; University of Rhode Island ADVANCE Academic Work Environment Survey, 2004).

Demographics. Demographic variables include age, gender, ethnicity, college and department, STEM status, job classification, years at OU, years since terminal degree, and years in current rank.

Organizational citizenship behaviors. This measure uses the same response scale and items from the Detection Accuracy of OCBs measure described in Study 1. However, the instructions for the measure in Study 2 were altered so that respondents were asked to indicate, first, how often they personally engage in each of the behaviors in their job as a teacher/lecturer at the university; and second, to what extent they believed the behaviors were related to student evaluations of their job as a teacher/lecturer at the university. The same 5-point Likert scale was used each time (1 = "no extent", 5 = "great extent"). Cronbach's alpha was .79 for the personal engagement scale, and .91 for the relatedness to student evaluations scale.

Job satisfaction. A shortened form (7 items) of the measure developed by Schriesheim and Tsui (1980) assessed job satisfaction ($\alpha = .82$). Respondents were asked to use a 5-point Likert scale to identify the extent to which they were satisfied

with their work, supervisor, interpersonal relationships, and other job opportunities (1 = "very dissatisfied", 5 = "very satisfied").

Affective organizational commitment. An established subscale of a larger organizational commitment scale was used to measure affective organizational commitment (Meyer, Allen, & Smith, 1993). Six items assessed the extent to which respondents agreed (5-point Likert scale; 1 = "strongly disagree", 5 = "strongly agree") to statements describing a sense of belonging and emotional attachment felt towards the university. Cronbach's alpha was .93.

Turnover intentions. Turnover intentions was measured with a 5-item, 5-point Likert scale adapted from Hom and Griffeth (1991). Items assessed the extent to which respondents agreed with statements of "I am thinking about leaving the university" and "I intend to ask people about new job opportunities" (1 = "strongly disagree", 5 = "strongly agree"), as well as an item assessing the frequency they think about leaving the university (1 = "never", 5 = "everyday"). Alpha was .94, indicating good reliability.

Perceived Stress. A 14-item scale asked participants to indicate how frequently they experienced feelings of stress at work (Cohen, Karmarck, & Mermelstein, 1983). The measure used a 5-point Likert scale (1 = "never", 5 = "very often"; $\alpha = .87$).

Results

To test hypothesis 2.1, female professors report engaging in OCBs to a greater extent than male professors, an independent samples t-test was conducted to explore the difference between gender groups. No support was found for this hypothesis for overall engagement in OCBs, engagement in male-typed OCBs, or engagement in female-typed OCBs (see Table 9). Adjustment based on Levene's test for equality of variance was

followed where appropriate. After aggregating male and female faculty, a follow-up analysis found a difference in the amount of engagement between OCB types, with more self-reported engagement in female-typed OCBs (M = 3.75, SD = .54) than male-typed OCBs (M = 3.60, SD = .58), t (157) = 3.69, $p < .01$. Thus, there is more overall engagement in female-typed OCBs or helping behaviors, but men and women are equally likely to follow this pattern of OCB engagement.

An independent samples t-test was also employed to test hypothesis 2.2, which hypothesized that faculty women believed that OCBs were more related to their student evaluations than did faculty men. Overall, there was no significant difference between male and female faculty members, but male faculty reported a greater belief in the relatedness of engagement in female-typed OCBs to student evaluations approaching significance (see Table 10). A paired samples t-test found that all respondents believed that female-typed OCBs (M = 2.77, SD = .84) were significantly more related to student evaluations than male-typed OCBs (M = 2.26, SD = .49); t (149) = 10.23, $p < .01$. Thus, male and female faculty have similar perceptions of how OCBs affect ratings on teaching evaluations.

The last hypothesis (i.e., 2.3, that individuals who feel they are being evaluated more on OCBs experience more negative work attitudes and greater stress) was tested with correlational analyses. Interestingly, several correlations showed trends in the opposite direction hypothesized (see Table 11). It was found that belief in a greater relatedness of OCBs to student evaluations was related to greater job satisfaction, greater affective organizational commitment, and less perceived stress. Belief that OCB engagement was related to student evaluations was positively related to reported OCB

engagement. More engagement in OCBs was related to more job satisfaction, greater commitment, and lower intention to turnover. The trends in the data may suggest that there is a cluster of positive affect and behavior associated with experiences at the university.

OVERALL RESULTS OF STUDY 1 & STUDY 2

To examine the overall research questions spanning the two studies, the OCB measure included in both studies was used. When examining the patterns comparing the students' scores of expected OCB engagement with the faculty's scores of self-reported OCB engagement, only items related to never-present behaviors were considered. These items allowed student participants to project their expected level of OCB engagement onto the hypothetical professors for behaviors that were never mentioned as engaged in or not. Note that for the never-present OCB items in Study 1, there were no significant differences between hypothetical male and female professors on the projected engagement levels of gender-typed OCBs, matching the results from Study 2, which considered all OCB measure items together. Results indicate that male and female faculty respondents reported engagement in OCBs at levels similar to students' projections in conditions describing high engagement overall or high engagement within OCB gender-types by the hypothetical professors (see Figure 4). For male-typed OCBs, faculty respondents' engagement levels were similar to projected levels of OCBs in the high engagement conditions. For female-typed OCBs, faculty respondents' engagement levels were similar to high engagement conditions as well as medium conditions with high levels of female-typed OCBs. Student participants' ratings showed no differences on projected OCB engagement levels between male and female

professors, and faculty respondents' self-reports showed no differences on actual OCB engagement levels between male and female professors. That is, both studies found no difference between professor gender groups on the level of OCBs either projected or actually engaged in, which suggests that gendered expectations of students match the reality at the university regarding gender differences and OCB engagement.

The second overall research question examined the extent that OCB engagement impacted student evaluations in Study 1, compared to the extent faculty respondents in Study 2 believed that it did. Direct comparison between the two studies was prevented because the student participants were not given an explicit measure of their beliefs regarding the impact of OCBs on SETs. Instead, the pattern of student-rated differences between professor gender groups in Study 1 (e.g., if hypothetical women were affected more) was compared to the pattern of beliefs held by the faculty respondents in Study 2 (e.g., if faculty women in turn believed that they are affected more). Results from the studies showed no notable difference between professor gender groups on the impact of OCB engagement on SETs, or on the belief that OCB engagement impacted SETs. It was also found in Study 1 that engagement in both male- and female-typed OCBs by professors of either gender influenced SETs, with a greater effect size for female-typed OCBs; and faculty respondents in Study 2 believed that female-typed OCBs significantly impacted SETs more than male-typed OCBs. Comparison of the studies again indicated that the reality of the faculty respondents' beliefs matched the student participants' ratings pattern.

GENERAL DISCUSSION

Threats to Validity

For Study 1, one threat to validity is the high correlations reported between the dependent variables. Tabachnick and Fidell (2007) suggest two strategies when considering highly positively correlated DVs. The first strategy is to create a composite score from the DVs for use in an ANOVA, but the scale of the bonus distribution measure conflicted with that of the other three DV's, leading to consideration of the second strategy. This second strategy is to pick a single DV, which is preferably the most reliable, and employ an ANOVA. To address this second strategy, two ANOVAs were conducted. The first used the most reliable DV: recommend others to take a course from the professor. The same pattern of results as the MANOVA was found, that is, main effects of male-typed OCBs and female-typed OCBs were the only significant results (F (7,240) = 104.29, $p < .01$; F (7,240) = 339.59, $p < .01$). The second ANOVA used the DV of greatest interest, the teacher evaluations, which also had a high reliability of .91. This ANOVA also found results similar to the MANOVA (F (7,240) = 146.32, $p < .01$; F (7,240) = 179.82, $p < .01$). Thus, the result pattern previously described in the Study 1 results section is an accurate picture of the data. A second threat to validity specific to Study 1 was the use of "paper professors". The manipulation of high and low levels of citizenship behaviors is likely to be much stronger when participants actively observe professors in the classroom engaging in these actions. It is also much different to generate teaching evaluation ratings when students are exposed to a semester-long course with a professor than reading descriptions of a few behaviors from a second-hand source. Research using more extensive OCB descriptions or professors in actual classrooms settings to allow for OCB observation over longer periods of time is warranted. Many other factors in have

been found to impact SETs including students' grades, students' gender, perceived professor traits, and field of study of class (Basow, 1998; Wachtel, 1998). However, the use of "paper people" in an experimental setting does allow researchers to control many other variables that may be free to vary in field research. Many of these potential confounding factors were addressed by introducing the professors with the same description for each condition detailing the professor's area of study, which was previously established to be a gender-neutral job. Covariate measures were also collected to ensure that there were no differences based on students' projected grade, students' gender, and perceived professor traits, or that if differences were found, they would be addressed in the analyses.

Although the nature of the survey data in Study 2 was cross-sectional and prevented statements regarding causation between the variables, the focus of the study (and comparison of the studies) was centered on the patterns of co-occurrence among the variables and group mean differences. Causation was also not the focus when comparing the OCB engagement and SET relatedness beliefs of the faculty respondents with the experimental results of Study 1. However, both samples were obtained from a single university, possibly limiting the generalizability of findings to other universities with differing demographics, climates, and policies. Future research should examine samples of students and faculty members from multiple universities with different demographics and climates.

Conclusions & Implications

While the overall findings of these studies reveal very few differential effects between gender groups on teaching evaluations and OCB engagement and detection, the

gendered dichotomy of the OCBs was found to have a notable impact on the outcomes. Examining differential ratings based on gender biases in Study 1 was motivated by the work of Heilman and Chen (2005), which examined this in a business setting with the ratings of managers. Their findings showed the enhancing effects of performing altruistic behaviors in the workplace that resulted for male managers and the punishing effects of not performing these behaviors that resulted for female managers. The results of the current research did not find a similar pattern regarding gender biases and OCBs on performance evaluations. However, while Heilman and Chen only examined altruism, this research expanded consideration to both male- and female-typed OCBs in the forms of civic virtue, aspects of conscientiousness, altruism, and courtesy.

In study 1, no gender effects were found for any OCB types on the teaching evaluation DV, but when considering the outcome variable of bonus distribution, there was a slight enhancing effect for high OCB-performing male professors. Past studies (e.g., Allen & Rush, 2001) have found that assignment of monetary rewards can be influenced by OCBs, and this finding also supports the enhancing effect found for men in Heilman and Chen (2005). There was also a difference between the two types of medium OCB engagement conditions such that professors described as low in male-typed and high in female-typed OCBs received higher recommendations for others to take a course than did professors that were high in male-typed, low in female-typed OCBs. This suggests that students favored the professors described as warm, courteous and helpful to an above average extent (i.e., overall mean of approximately 5), even if they were described as not conscientious or engaging in civic virtue behaviors. Students may assume that professors perceived as more helpful in extra-role behaviors may also

be more helpful with regard to classroom behaviors (e.g., grading, study guides), and may try to help their friends and fellow students by recommending these types of professors. It may also be that male-typed OCBs, and the motivations of the professors who perform them, are viewed somewhat suspiciously. Bolino (1999) found that conscientiousness and civic virtue OCBs were more often than not attributed to self-serving rather than genuine motives. Thus, a professor described as high in these OCBs but low in communal helping behaviors may be classified as self-serving, leading to lower recommendations of that professor to others. These findings show that male-typed and female-typed OCBs are weighted differently and have a differential impact on outcomes.

Further examination of the differing consideration of male- and female-typed OCBs was explored through the detection accuracy analyses. For the never-present OCBs overall, male-typed OCBs were falsely projected to occur at higher levels than female-typed OCBs (see Figure 2 and Table 4). This was true for all conditions, except in the high male-/high female-typed conditions where the pattern was reversed. Male-typed OCBs may have dominated the medium and low conditions because these behaviors have a more agentic quality typical of a university professor and a lower level of helpfulness; that is, competent but not warm. Considering that the sample came from a large university with a total enrollment of approximately 30,000 students where the introductory class sizes can reach 400 students, results may be different at smaller schools or in smaller class sizes where students are able to receive more individualized interaction and help from their professors. Higher levels of OCBs generally lead to better evaluations (Van Scotter et al., 2000), and previous research has argued that a

combination of warmth and strength or masculinity and femininity or agentic and communal behaviors may elicit the most favorable job ratings and SET ratings (Freeman, 1994; Johnson et al., 2008; McDowell, 1997). This combination of male- and female-typed OCBs leading to the best ratings held true in the current findings as well. However, for the reverse gender-typed pattern found in the high/high conditions (i.e., the levels of female-typed OCBs were now slightly higher than that of male-typed OCBs) it may be that the high combination of both OCB types caused students to view the hypothetical professors as a more helpful person overall. Perhaps the high OCB level boosts the projected levels of overall OCB engagement such that the motives then attributed to the behaviors are seen as less self-serving and more genuine (i.e., they are seen as an overall helpful person and good organizational citizen, not just doing a few OCBs to look good). The perceived genuine motivations driving the behaviors may shift the weight to the communal OCBs because the professor is viewed as wanting to be a part of the organizational community and putting the organization's needs first.

When comparing the never-present OCBs with the possibly-present OCBs (see Figure 3), the reported OCB levels followed the expected levels based on the manipulations. However, the never-present engagement levels were far above expected, falling in the range of "some extent" to "great extent" on the Likert scale. This indicates that when no specific information about behaviors was provided, students tended to give the professors they evaluate the benefit of the doubt that they would perform citizenship behaviors, suggesting a leniency bias when no explicit information is presented. An exception to this pattern of higher than expected levels of falsely-projected OCBs was the low/low conditions, in which students correctly reported low

levels of female-typed OCBs. Combining this finding with the previously described finding of significantly higher overestimation for never-present, female-typed OCBs in the high/high conditions, it seems that helping behaviors are weighting on the ratings the most. Helping behaviors are likely to evoke a global positive assessment of the person being evaluated in accordance with the halo effect. If the professors are described as engaging in these helping behaviors, the ratings get an extra boost overall, and if they are described as not engaging in those behaviors, the overall impression of the person being evaluated becomes more negative. Detection accuracy was also considered for the possibly-present behaviors. Female-typed OCBs in high/high conditions had higher correctly-detected percentage than conditions in which it was a combination of low/high OCB engagement (see Table 5). The same pattern was found for male-typed OCBs, but only when male professors were evaluated. These findings also provide support that the halo effect works to create a global impression and if a professor was described as being low on one OCB type that negatively colored the overall picture.

One significant difference in detection accuracy based on professor gender groups was found when considering male-typed OCBs, such that detection was more accurate for male professors in low male-/high female-typed OCB conditions. This finding supports past research stating that men are rated more accurately when engaging in OCBs, because these citizenship behaviors are more extra-ordinary for men and are therefore noticed more (Allen & Rush, 1998; 2001). However, the three other analyses comparing professor gender groups did not have significance.

The three-way MANOVA also showed significant effects of male- and female-typed OCBs. Both types of gendered OCBs showed main effects causing higher ratings on each of the four DVs (see Table 6). Corresponding to the other results examining the affects of male- and female-typed OCB engagement, more engagement led to better ratings and greater reward recommendations. Mediation analyses were conducted to examine the mechanism through which the described OCB engagement impacted the evaluation outcomes and found that liking of the professor partially mediated the relationship between total perceived OCB engagement and each of the four DVs. For the teacher evaluations, recommend to others, and reward recommendation outcomes, approximately 50% of the variance was accounted for by the indirect effects (see Table 8), while 30% of the variance was accounted for when examining bonus distributions. This supports research that activating a positive affective characteristic (i.e., liking) can cause an evaluator to inflate their ratings (Lefkowitz, 2000). SETs are known to have problems with affective and instructor personality characteristics, such as liking, creating a halo effect (Nasser & Fresko, 2002; Wachtel, 1998). Students are untrained raters and may easily be influenced by OCBs and liking and rate professors higher on all dimensions of student evaluations because of global impressions. This becomes important when SETs are used in personnel decisions. It may be necessary to provide students with a brief rater training or benchmarks before completing SETs to avoid the influence of bias and rater errors attributable to OCBs. Students may also benefit from SET ratings explicitly separating items into those describing tasks and those describing OCBs so that the influence of OCBs on the in-role task ratings may be examined.

In Study 2, faculty members from the same university as the student sample were surveyed to gain a different perspective on citizenship behaviors and teaching evaluations. Experimental and field study result patterns matched such that students in Study 1 were not rating gender groups differentially, and no gender group differences on OCB engagement levels were reported by faculty respondents in Study 2. Perhaps there was no gender group bias regarding OCBs and SETs because the students were accurately influenced by the actual faculty members at the university. The overall OCB engagement among faculty respondents was higher for female-typed OCBs, but both gender-typed OCBs were still reported at mean levels above "some extent". In fact, female faculty and male faculty both report OCB engagement levels that correspond with conditions of high engagement overall or high engagement within when comparing specific OCB gender-types (see Figure 4). These self-reported, high levels of engagement must be viewed with some caution however because low-rated instructors tend to overestimate their ratings (Nasser & Fresko, 2002).

Faculty respondents' OCB engagement levels were found to positively correlate with job satisfaction and organizational commitment and to negatively correlate with turnover intentions. Faculty respondents' beliefs in the relatedness of OCBs to SET ratings was also positively related to job satisfaction and organizational commitment, and negatively correlated with stress. Finally, OCB engagement and believed relatedness between OCBs and SETS was positively correlated. While there were no gender differences reported for OCB-SET relatedness levels, respondents overall believed female-typed OCBs were more related to SETs than male-typed OCBs, which again reflects the pattern of results from Study 1 showing the greater weighting of

female-typed OCBs on evaluations. Perhaps the faculty members are recognizing the focus that student raters have on female-typed OCBs.

Unfortunately, the cross-sectional nature of the dataset prevents causation from being extracted, but it is important to note that these positive attitudes and actions increase and decrease together. Perhaps positive work attitudes spur positive involvement in all aspects of the workplace, including those things not explicitly a part of a formal job descriptions such as OCBs. These positive work attitudes may especially manifest as helping behaviors with genuine motives driving the citizenship behavior. It may also be that the belief that OCBs are related to student evaluations will initially prompt a faculty member to increase engagement in OCBs to positively impact their evaluations, but as they perform these behaviors, they correspondingly experience positive attitudes that spillover into other aspects of the workplace, thereby increasing satisfaction and decreasing stress. Increased control in the workplace has also been shown to decrease stress and more positive work attitudes (Cox, Griffiths, & Randall, 2003). Perhaps those faculty members that recognize the link between OCBs and SETs are able to actively decide to engage in these behaviors and, in effect, exercise some measure of perceived control over their SETs.

Approaching the results from the opposite angle, decreased belief in the relatedness of OCBs to SETs being related to decreased engagement in OCBs and increased negative work attitudes may suggest that respondents are somewhat cynical. They may feel that citizenship behaviors in essence do not matter and have an overall negative view of the workplace and how their actions support the organization. The lack of perceived control due to their beliefs about a weak OCB to SET link may now

correspond to negative work attitudes and increased stress. The low mean scores on relatedness to evaluations, which were below 3 for both male and female faculty respondents on both male- and female-typed OCBs, reveal that many of the respondents believe that these behaviors have little effect on SETs. The somewhat low reported belief in the relatedness between OCBs and SETs suggests that these individuals may be rationalizing to themselves why they do not engage in OCBs. This may free them from the worry that not participating in OCBs will negatively impact their evaluations. Applying equality theory, these individuals' negative view of their workplace as causing stress and lowering job satisfaction may lower the perceived outputs they receive from the organization and prompt them to lower their inputs to maintain equality (i.e., OCBs). They are able to use this equality argument to protect their view of themselves as a 'good' person who behaves in 'good' ways.

However, the overall levels of OCB engagement reported by the faculty respondents showed a relatively high level. Perhaps faculty members feel that these OCBs they commonly engage in are being recognized on SETs with good reason; OCBs are an everyday aspect of the workplace at the university. Therefore, faculty members may feel that their OCB engagement should be recognized on evaluations because they are going beyond the job description to help their students and the university.

In conclusion, the findings of this research indicate that gender groups did not play a large role, but gendered types of behaviors had a permeating effect in both studies. OCBs impacted student evaluations of professors, with greater weight given to female-typed helping behaviors. Faculty respondents' actions corresponded with this in

that they reported greater engagement levels in female-typed OCBs. OCB engagement was also related to more positive work attitudes, thus leading to the conclusion that OCBs are beneficial in a university faculty setting. Student raters did not display gender bias outright, but instead simply favored professors who were helpful and supported the university they attended, while the high OCB performing faculty participated in more of these helping behaviors and recognized the impact of such actions. A work climate emphasizing OCB engagement was related to a more collegial atmosphere and more positive outcomes. The findings of this study also highlight the leniency and halo biases of student raters when projecting professors' involvement in OCBs. While OCBs may be influencing teaching evaluations, more research is needed to examine the extent of this influence and how faculty members view and are impacted by performing OCBs. These studies also highlight the need for more research examining the gendered dichotomy of OCBs and how the gendered nature of the OCBs themselves may create outcome differences, even when gender of the evaluated employee is not a factor.

References

Allen, T. D. (2006). Rewarding good citizens: The relationship between citizenship behavior, gender, and organizational rewards. *Journal of Applied Social Psychology*, *36*, 120-143.

Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology, 83(2),* 247-260.

Allen, T. D., & Rush, M. C. (2001). The influence of ratee gender on ratings of organizational citizenship behavior. *Journal of Applied Social Psychology*, *31(12),* 2561-2587.

Ashforth, B. E., & Mael, F. A. (1989). Social identity theory and the organization. *Academy of Management Review*, *14*, 20-39.

Bachen, C. M., McLoughlin, M. M., & Garcia, S. S. (1999). Assessing the role of gender in college students' evaluations of faculty. *Communication Education,* 48, 193-210.

Banaji, M. R., & Hardin, C. D. (1996). Automatic stereotyping. *Psychological Science*, *7*, 136-141.

Basow, S. A. (1995). Student evaluations of college professors: When gender matters. *Journal of Educational Psychology*, *87*, 656-665.

Basow, S. A. (1998). Student evaluations: The role of gender bias and teaching styles. In L. H. Collins, J. C. Chrisler, K. Quina, (Eds.), *Career strategies for women in academe: Arming Athena* (pp. 135-156). Thousand Oaks, CA: Sage Publications.

Basow, S. A., & Montgomery, S. (2005). Student ratings and professor self-ratings of college teaching: Effects of gender and divisional affiliation. *Journal of Personnel Evaluation in Education, 18*, 91-106.

Basow, S. A., & Silberg, N. (1987). Student evaluations of college professors: Are female and male professors rated differently? *Journal of Educational Psychology, 79*, 308-314.

Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, *42(2)*, 155-162.

Bennett, S. K. (1982). Student perceptions of and expectations of r male and female instructors: Evidence relating to the question of gender bias in teaching evaluation. *Journal of Educational Psychology, 74*, 170-179.

Benokraitis, N. V., & Feagin, J. R. (1986). *Modern Sexism: Blatant, Subtle, and Covert Discrimination*. New Jersey: Prentice-Hall.

Beran, T. N., & Rokosh, J. L. (2009). Instructors' perspectives on the utility of student ratings of instruction. *Instructional Science, 37*, 171-184.

Bergeron, D. M. (2007). The potential paradox of organizational citizenship behavior: Good citizens at what cost? *Academy of Management Review, 32(4)*, 1079-1095.

Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or good actors? *Academy of Management Review*, *24(1)*, 82-98.

Bollen, K., & Lennox, R., (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychology Bulletin*, *110*, 305–314.

Borman, W. C. (2002, April). *Citizenship performance: Its nature, antecedents, and measurement*. Presentation delivered at the semiannual meeting of the North Carolina Industrial and Organizational Psychologists, Greensboro, NC.

Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include element of extra-role performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.

Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, *10*, 99-109.

Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviors. Academy of *Management Review, 11*, 710-725.

Cascio, W. F., & Aguinis, H. (2005). *Applied Psychology in Human Resource Management* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Centra, J. A., & Gaubatz, N. B. (2000). Is there gender bias in student evaluations of teaching? *The Journal of Higher Education, 70(1),* 17-33.

Chen, G., Gully, S. M., & Eden, D. (2001). *Validation of a New General Self-Efficacy Scale*. *Organizational Research Methods*, *4*, 62-83.

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity, and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), The *handbook of social psychology* (4th ed., Vol. 2, pp. 151-192). Boston: McGraw-Hill.

Cohen, S., Kamarck, T., Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*, 385-396.

Coleman, V. I., & Borman, W. C. (2000). Investigating the underlying structure of the citizenship performance domain. *Human Resource Management Review, 10,* 25–44.

Cox, T., Griffiths, A. & Randall, R. (2003). A risk management approach to the prevention of work stress. In M.J. Schabracq, J.A.M. Winnubst, & C.L. Cooper (Eds.), *The Handbook of Work and Health Psychology*. West Sussex, England: John Wiley.

Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56(1),* 5-18.

Dijksterhuis, A., & van Knippenberg, A. (1996). The knife that cuts both ways: Facilitated an inhibited access to traits as a result of stereotype activation. *Journal of Experimental Social Psychology, 32*, 271-288.

Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Erlbaum.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109(3),* 573-598.

Eagly, A. H., Makhijani, M. G. & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin, 11(1),* 3-22.

Eagly, A. H., Karau, S. J., Makhijani, M. G. (1995).Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin, 117(1),* 125-145.

Eagly, A. H., Wood, W., & Diekman, A. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.), *The*

developmental social psychology of gender (pp. 123-174). Mahwah, NJ: Erlbaum.

Eagly, A. H., & Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of Personality and Social Psychology, 46(4),* 735-754.

Ellemers, N., Kortekaas, P., & Ouwerkerk, J. W. (1999). Self-categorization, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology, 29,* 371–389.

Elliot, A. J., & McGregor, H. A. (2001). A 2x2 achievement goal framework. *Journal of Personality and Social Psychology, 80(3),* 501-519.

Farrell, S. K., & Finkelstein, L. M. (2007). Organizational citizenship behavior and gender: Expectations and attributions for performance. *North American Journal of Psychology, 9(1),* 81-96.

Feldman, F. A. (1993). College students views of male and female college teachers: Part II – evidence from students' evaluations of their classroom teachers. *Research in Higher Education, 34,* 151-211.

Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.

Fiske, S. T., Xu, J., Cuddy, A. J. C., & Glick, P. (1999). Respect versus liking: Status and interdependence underlie ambivalent stereotypes. *Journal of Social Issues, 55,* 473-489.

Freeman, H. R. (1994). Student evaluations of college instructors: Effects of type of course taught, instructor gender and gender role, and student gender. *Journal of Educational Psychology*, *86(4)*, 627-30,

Frone, M. R. (1998). Predictors of work injuries among employed adolescents. *Journal of Applied Psychology*, *83*, 565–576.

Gilliland, S.W. & Langdon, J.C. (1998). Creating performance management systems that promote perceptions of fairness. In J. Smither (Ed.) *Performance appraisal: State of the art in practice*(pp. 209-243). San Francisco: Jossey-Bass.

Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491-513.

Goldberg, L. R. (1999). A broad-bandwidth, public-domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe, Vol. 7* (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.

Goodwin, L. D., & Steven, E. A. (1993). The influence of gender on university faculty members' perceptions of "good" teaching. *Journal of Higher Education*, *64(2)*, 166-185.

Heilman, M. E., & Chen, J. J. (2005). Same behavior, different consequences: Reactions to men's and women's altruistic citizenship behavior. *Journal of Applied Psychology*, *90(3)*, 431-441.

Hoffman, B. J., Blair, C. A., Meriac, J. P., & Woehr, D. J. (2007). Expanding the criterion domain? A quantitative review of the OCB literature. *Journal of Applied Psychology*, *92(2)*, 555-566.

Hom, P. W., & Griffeth, R. W. (1991). Structural equations modeling test of a turnover theory: Cross-sectional and longitudinal analyses. *Journal of Applied Psychology, 76(3),* 350-366.

Johnson, S. K., Murphy, S. E., Zewdie, S., & Reichard, R. J. (2008). The strong, sensitive type: Effects of gender stereotypes and leadership prototypes on the evaluation of male and female leaders. *Organizational Behavior and Human Decision Processes, 106,* 39-60.

Judd, C. M., James-Hawkins, L., Yzerbyt, V., & Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology*, *89(6)*, 899-913.

Kark, R., & Waismel-Manor, R. (2005). Organizational citizenship behavior: What's gender got to do with it? *Organization*, *12*, 889-917.

Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York: Wiley & Sons.

Kidder, D. (2002). The influence of gender on the performance of organizational citizenship behaviors. *Journal of Management, 28,* 629-648.

Kidder, D., & McLean Parks, J. (2001). The good soldier: Who is (s)he? *Journal of Organizational Behavior, 22,* 939-959.

Lefkowitz, J. 2000. The role of interpersonal affective regard in supervisory performance ratings: A literature review and proposed causal model. *Journal of Occupational & Organizational Psychology*, 73(1): 67–85.

LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behaviors: A critical review and meta-analysis. *Journal of Applied Psychology, 87(1),* 52-65.

Lovell, S., Kahn, A., Anton, J., Davidson, A., Dowling, E., Post, D., & Mason, C. (1999). Does gender affect the link between organizational citizenship behavior and performance evaluation? *Sex Roles*, *41*, 469-478.

MacKenzie, S. B., Podsakoff, P. M., & Fetter, R. (1991). Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salesperson performance. *Organizational Behavior and Human Decision Processes, 50,* 123-150.

Mael, F. A., & Tetrick, L. E. (1992). Identifying organizational identification. *Educational & Psychological Measurement, 52***,** 813–824.

McDowell, L. (1997). *Capital Culture: Gender at Work in the City*. Oxford: Blackwell Publishers.

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, *78*, 538-551.

Miller, J., & Chamberlin, M. (2000). Women are teachers, men are professors: A study of student perceptions. *Teaching Sociology*, *28*, 283-298.

Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that performance task should be distinguished from contextual performance. *Journal of Applied Psychology, 79(4)*, 475-480.

Nasser, F., & Fresko, B. (2002). Faculty views of student evaluation of college teaching. *Assessment & Evaluation in Higher Education, 27(2)*, 187-198.

Nolan, S., Buckner, J., Marzabadi, C., & Kuck, V. (2008). Training and mentoring of chemists: A study of gender disparity. *Sex Roles, 58*, 235-250.

NSF (National Science Foundation). (2009). ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers. Retrieved March 2, 2009 from http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383

Operario, D. T., & Fiske, S. T. (2001). Causes and consequences of stereotypes in organizations. In M. London, *How People Evaluate Others in Organizations* (pp. 45-62). Mahwah, NJ: Lawrence Erlbaum Associates.

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.

Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance, 10,* 85–97.

Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature antecedents and consequences*. Thousand Oaks, CA: Sage Publications.

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and

empirical literature and suggestions for future research. *Journal of Management*, *26*, 513-563.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers*, *36*, 717-731.

Schriesheim, C., & Tsui, A. S. (1980, March). *Development and validation of a short satisfaction instrument for use in survey feedback interventions*. Paper presented at the Western Academy of Management meeting, Phoenix, AZ.

Seldin, P. (1993, July). The use and abuse of student ratings of professors. *Chronicle of Higher Education*, *59*, p. A40.

Sidanius, J., & Crane, M. (1989). Job evaluation and gender: The case of university faculty. *Journal of Applied Social Psychology*, *19(2)*, 174-197.

Silver, M. D. (1999). Analyses of measures of group identification. Unpublished raw data.

Simpson, P. M., & Siguaw, J. A. (2000). Student evaluations of teaching: An exploratory study of the faculty response. *Journal of Marketing Education*, *22*, 199-213.

Sprague, J., & Massoni, K. (2005). Student evaluations and gendered expectations: What we can't count can hurt us. *Sex Roles*, *53*, 779-793.

Statham, A., Richardson, L., & Cook, J. A. (1991). *Gender and university teaching*. New York: State University of New York Press.

Stone-Romero, E. F., Alvarez, K., & Thompson, L. F. (2009). The construct validity of conceptual and operational definitions of contextual performance and related constructs. *Human Resource Management Review, 19*, 104-116.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th Ed.). Boston, MA: Pearson.

Tajfel, H., & Turner, J. C. (1979). The social identity theory of intergroup behavior. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 7-24). Chicago, IL: Nelson-Hall.

Thompson, C. A., Beauvais, L. L., & Lyness, K. S. (1999). When work-family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict. *Journal of Vocational Behavior*, *54*, 392-415.

Thorndike, E. L. (1920). A constant error on psychological rating. *Journal of Applied Psychology, IV*, 25-29.

Todd, Z., Madill, A., Shaw, N., & Bown, N. (2008). Faculty members' perceptions of how academic work is evaluated: Similarities and differences by gender. *Sex Roles, 59*, 765-775.

Turner, J. C. (1987). *Rediscovering the social group: A self-categorization theory*. Mahwah, NJ: Lawrence Erlbaum Associates.

University of Michigan ADVANCE Survey of Academic Climate and Activities. (2005). *University of Michigan National Science Foundation ADVANCE Project*. Ann Arbor, MI.

University of Rhode Island ADVANCE Academic Work Environment Survey. (2004). *ADVANCE Institutional Transformation Project*. Kingston, RI: ADVANCE Resource Center.

Valecha, G. K., & Ostrom, T. M. (1974). An abbreviated measure of internal-external locus of control. *Journal of Personality Assessment, 38*, 369-376.

Van Den Bos, K. (2005). What is responsible for the fair process effect? In J. Greenberg & Colquitt, *Handbook of Organizational Justice* (pp. 273-327). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Van Dyne, L., Cumming, L. L., & McLean Parks, J. M. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (a bridge over muddied waters). In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (pp. 215-285). Greenwich, CT: JAI Press.

Van Dyne, L., Graham, J. G., & Dienesch, R. M. (1994). Organizational citizenship behavior: Construct redefinition, operationalization, and validation. *Academy of Management Journal, 37*, 765–802.

Van Scotter J. R., & Motowidlo, S. J. (1996). Interpersonal facilitation and job dedication as separate facets of contextual performance. *Journal of Applied Psychology, 81*, 525-531.

Van Scotter, J. R., Motowidlo, S. J., & Cross, T. C. (2000). Effects of task performance and contextual performance on systemic rewards. *Journal of Applied Psychology, 85(4),* 526-535.

Wachtel, H. K. (1998). Student evaluation of college teaching effectiveness: A brief review. *Assessment & Evaluation in Higher Education, 23(2),* 191-211.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affectivity: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.

Wayne, S. J., & Ferris, G. R. (1990). Influence tactics, affect, and exchange quality in supervisor-subordinate interactions: A laboratory experiment and field study. *Journal of Applied Psychology, 75(5),* 487-499.

Wilkinson, L. (2003). Gender stereotypes of citizenship performance. Unpublished doctoral dissertation.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behavior. *Journal of Management, 17,* 601-617.

Table 1

Eight Conditions for Study 1

		High Female OCB	Low Female OCB
Male Professor	High Male OCB	1	3
	Low Male OCB	2	4
Female Professor	High Male OCB	5	7
	Low Male OCB	6	8

Table 2

Post-Hoc Comparisons of Condition Means on Dependent Variable Using Tukey's Honestly Significant Differences Tests

	Professor Evaluation		Reward Recommendation		Recommend to Others		Bonus Distribution	
Univariate *F*	42.76**		36.76**		60.09**		16.71**	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Condition 1	6.26_{a}	0.86	5.73_{a}	1.13	6.37_{a}	0.98	3.96_{a}	1.03
Condition 2	4.84_{b}	1.05	4.01_{b}	1.39	5.10_{b}	1.25	3.03_{b}	1.06
Condition 3	4.81_{b}	1.11	4.30_{b}	1.48	3.54_{c}	1.96	2.86_{b}	1.42
Condition 4	3.08_{c}	1.09	2.11_{c}	0.97	1.62_{d}	0.97	1.51_{c}	1.03
Condition 5	6.22_{a}	0.74	5.70_{a}	0.85	6.44_{a}	0.69	3.66_{ab}	1.18
Condition 6	4.87_{b}	0.99	4.20_{b}	1.41	4.96_{b}	1.48	2.97_{b}	1.17
Condition 7	4.57_{b}	0.88	4.38_{b}	1.16	3.84_{c}	1.46	3.18_{b}	1.24
Condition 8	3.04_{c}	1.37	2.40_{c}	1.18	1.97_{d}	1.29	1.64_{c}	1.30

Note. Degrees of freedom for each univariate = (7,240). Bonus Distribution measured in thousands of dollars. *M* = mean; *SD* = standard deviation. Differing subscripts indicate a significant difference between groups. $^{**}p < .01$.

Table 3

Independent Samples T-Tests Values When Comparing Gender Groups on Organizational Citizenship Behavior Detection Accuracy of Never-Present Behaviors

	Conditions 1 & 5	Conditions 2 & 6	Conditions 3 & 7	Conditions 4 & 8
Male-typed OCBs	0.69	2.00*	0.26	0.97
Female-typed OCBs	0.14	0.10	0.50	0.28

Note. Degrees of freedom = 60 for each *t*-test. *$p < .05$.

Table 4

Paired Samples T-Tests within Condition on Male- vs. Female-Typed Organizational Citizenship Behavior Detection Accuracy of Never-Present Behaviors

	t value	M-OCBs	F-OCBs
Condition 1	4.03**	3.92(.73)	4.30(.54)
Condition 2	2.24*	3.11(.82)	2.72(.71)
Condition 3	2.34*	3.87(.69)	3.46(.80)
Condition 4	6.23**	3.15(.77)	1.97(.74)
Condition 5	5.45**	3.80(.74)	4.32(.59)
Condition 6	4.51**	3.51(.75)	2.70(.85)
Condition 7	2.02*	3.83(.60)	3.55(.62)
Condition 8	5.89**	2.94(.96)	2.03(.90)
All Conditions	5.99**	3.51(.84)	3.13(1.13)

Note. Degrees of freedom = 30 for each within condition *t*-test & 247 for all conditions combined. **$p < .01$, *$p < .05$, $^{\dagger}p < .10$. *M* = mean; *SD* = standard deviation. M-OCBs = male-typed OCBs, F-OCBs = female-typed OCBs.

Table 5

Amount of Correctly Detected Organizational Citizenship Behaviors

	Male-Typed OCBs*	Female-Typed OCBs**
Condition 1	$99\%_{a}$	$97\%_{a}$
Condition 2	–	$86\%_{b}$
Condition 3	$87\%_{b}$	–
Condition 4	–	–
Condition 5	$97\%_{a}$	$96\%_{a}$
Condition 6	–	$83\%_{b}$
Condition 7	$93\%_{ab}$	–
Condition 8	–	–

Note. Differing subscripts indicate a significant difference between groups, $*p < .05$, $**p < .01$. En dashes indicate that no OCBs of the corresponding gender type were present to detect for that condition.

Table 6

Pairwise Comparisons of Estimated Marginal Means (and Standard Errors)

	Male-Typed OCB	Female-Typed OCB
	High vs. Low Level	High vs. Low Level
Professor Evaluation	5.46(.09) vs. 3.96(.09) **	5.55(.09) vs. 3.87(.09) **
Reward Recommendations	5.03(.11) vs. 3.18(.11) **	4.91(.11) vs. 3.30(.11) **
Recommend to Others	5.05(.12) vs. 3.41(.12) **	5.72(.12) vs. 2.74(.12) **
Bonus Distribution ($)	3.42(.11) vs. 2.29(.11) **	3.41(.11) vs. 2.30(.11) **

Note. Bonus Distribution measured in thousands of dollars. **$p < .01$.

Table 7

Correlations among Variables Involved in Mediation Analyses

	1	2	3	4	5
1. Liking of Professor					
2. Total OCB	.74**				
3. Professor Evaluation	.81**	.74**			
4. Reward Recommendations	.74**	.78**	.79**		
5. Recommend to Others	.87**	.75**	.80**	.79**	
6. Bonus Distribution ($)	.60**	.61**	.63**	.63**	.63**

Note. **$p < .01$.

Table 8

Mediating Effects of Liking of Professor on the Relationship between Total Perceived Organizational Citizenship Behaviors and Outcomes

	Professor Evaluation	Reward Recommendation	Recommend to Others	Bonus Distribution
Model 1 βs				
OCB	.74**	.78**	.75**	.61**
Model 2 βs				
OCB	.31**	.51**	.24**	.37**
Liking	.58**	.37**	.69**	.33**
ΔR^2	.15**	.06**	.21**	.05**
Variance accounted for	50%**	49%**	54%**	31%**

Note. **$p < .01$, *$p < .05$. β = standardized beta. ΔR^2 = change in R-squared.

Table 9

Independent Samples T-Test Comparing Gender Groups on Engagement in Organizational Citizenship Behaviors

	Overall OCB Engagement *M* (*SD*)	Male-Typed OCB Engagement *M* (*SD*)	Female-Typed OCB Engagement *M* (*SD*)
Male Faculty	3.64 (.54)	3.56 (.59)	3.71 (.58)
Female Faculty	3.73 (.43)	3.64 (.57)	3.82 (.50)
t value (*df*)	1.12 (148) *ns*	0.78 (151) *ns*	1.20 (151) *ns*

Note. *M* = mean; *SD* = standard deviation. *ns* = non-significant.

Table 10

Independent Samples T-Test Comparing Gender Groups on Strength of Belief that Engagement in Organizational Citizenship Behaviors is Related to Student Evaluations

	Overall OCB Relatedness *M* (*SD*)	Male-Typed OCB Relatedness *M* (*SD*)	Female-Typed OCB Relatedness *M* (*SD*)
Male Faculty	2.58 (.63)	2.28 (.52)	2.87 (.79)
Female Faculty	2.42 (.65)	2.19 (.47)	2.62 (.91)
t value (*df*)	1.53 (144) *ns*	1.05 (144) *ns*	1.76 (143)†

Note. *M* = mean; *SD* = standard deviation. $^{\dagger}p < .10$; *ns* = non-significant.

Table 11

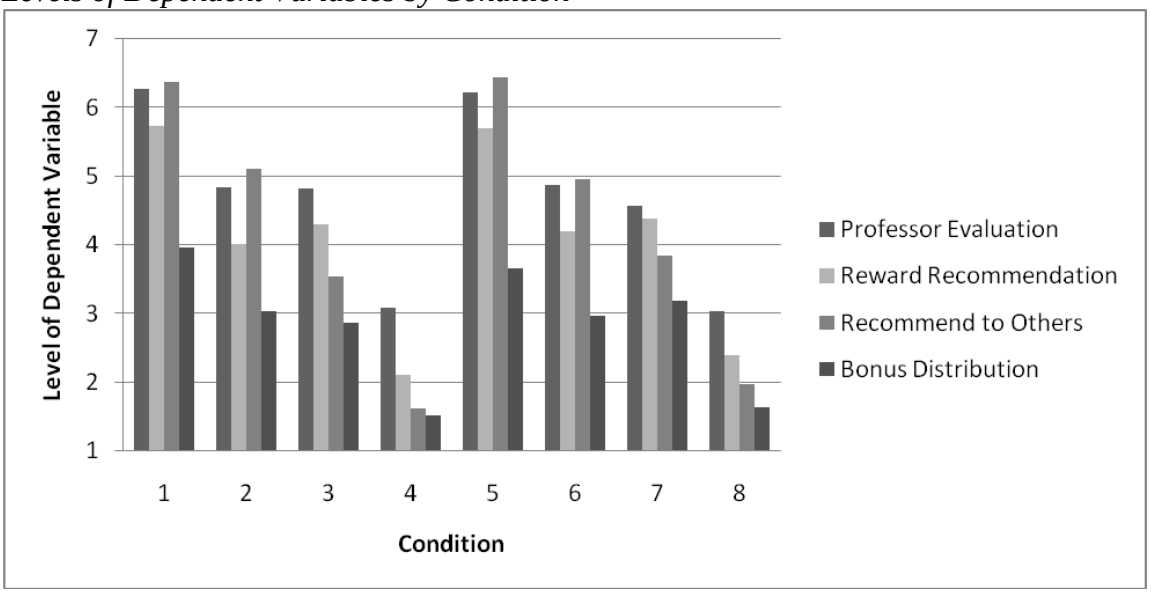
Correlations among Study 2 Variables

	M (*SD*)	1	2	3	4	5	6	7	8	9	10
1. Gender	.59 (.49)										
2. Job satisfaction	3.67 (.78)	.00									
3. Affective org. commitment	3.27 (1.14)	.02	.64**								
4. Turnover intentions	2.62 (1.26)	.03	-.68**	-.68**							
5. Perceived stress	2.68 (.61)	-.09	-.50**	-.50**	.49**						
6. OCB personal engagement	3.67 (.49)	-.09	.22**	.29**	-.16*	-.07					
7. OCB personal engagement (male)	3.60 (.58)	-.06	.18*	.26**	-.12	-.07	.87**				
8. OCB personal engagement (female)	3.75 (.54)	-.10	.21**	.25**	-.16*	-.05	.90**	.57**			
9. OCB relatedness to evaluations	2.52 (.64)	.13	.21**	.21**	-.08	-.19*	.24**	.16†	.26**		
10. OCB relatedness to evaluations (male)	2.25 (.50)	.09	.15†	.23**	-.08	-.11	.31**	.30**	.25**	.86**	
11. OCB relatedness to evaluations (female)	2.77 (.84)	.15†	.24**	.20*	-.07	-.23**	.19*	.09	.24**	.96**	.69**

Note. *M* = mean; *SD* = standard deviation. **$p < .01$, *$p < .05$, $^{\dagger}p < .10$. Gender: 0 = female, 1 = male. OCB = organizational citizenship behaviors. For #7-11, (male) = male-typed OCBs, (female) = female-typed OCBs.

Figure 1

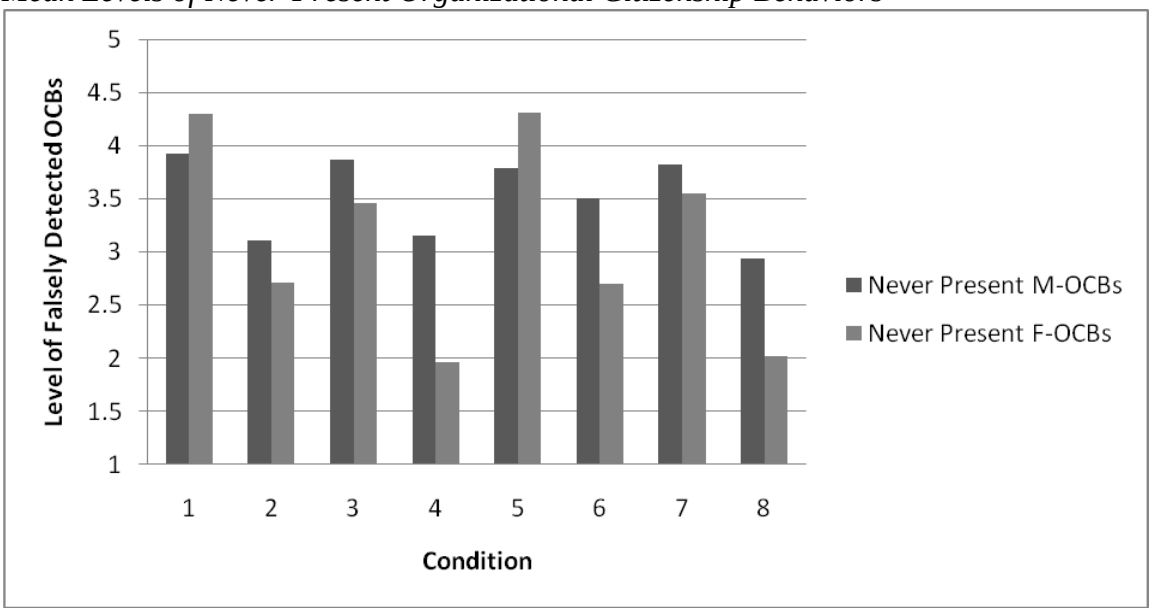
Levels of Dependent Variables by Condition



Note. Bonus Distribution level reported in thousands of dollars.

Figure 2

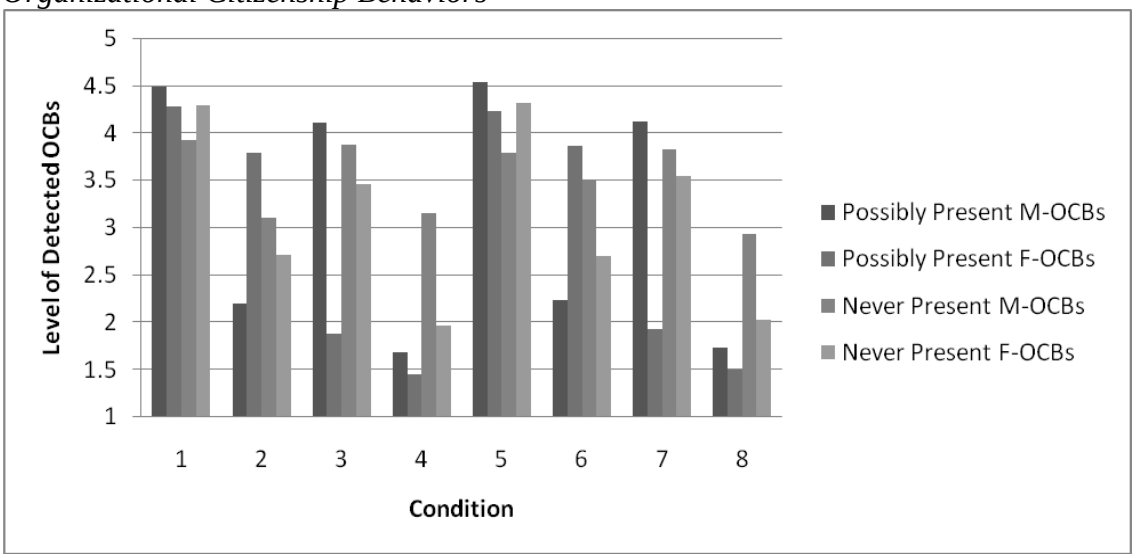
Mean Levels of Never-Present Organizational Citizenship Behaviors



Note. M-OCBs = male-typed OCBs, F-OCBs = female-typed OCBs.

Figure 3

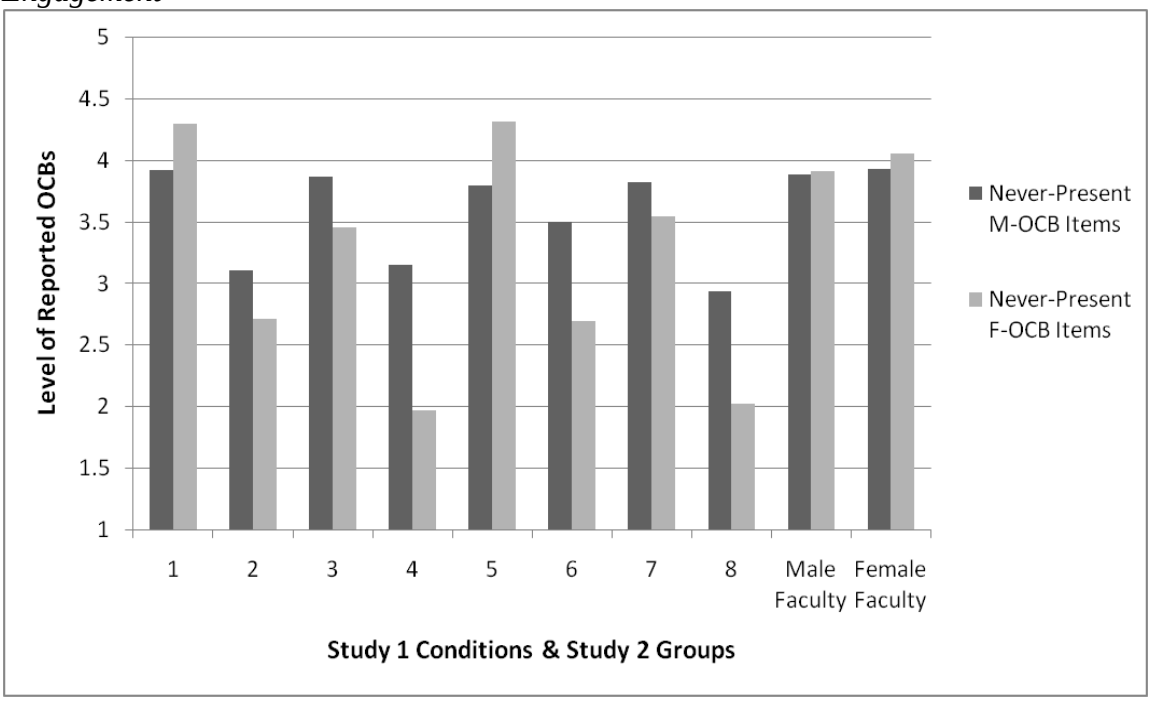
Mean Levels of Detected Possibly-Present and Falsely-Detected Never-Present Organizational Citizenship Behaviors



Note. M-OCBs = male-typed OCBs, F-OCBs = female-typed OCBs.

Figure 4

Comparison of Study 1 Participants' Projected Level of Professor OCB Engagement versus Study 2 Faculty Respondents' Self-Reported Level of Actual OCB Engagement



Note. M-OCB = male-typed OCB, F-OCB = female-typed OCB.

Appendix A: Student Letters in Study 1

8 conditions (professor gender, level of male OCB – level of female OCB)

- 1 = male, high - high
- 2 = male, low - high
- 3 = male, high - low
- 4 = male, low - low
- 5 = female, high - high
- 6 = female, low - high
- 7 = female, high - low
- 8 = female, low - low

NOTE: The following are the sets of letters for the 4 <u>male</u> professor conditions (the 4 female professor letters are the exact same except for the gender of the pronouns and the name of the professor is Dr. Kelley).

Condition 1 (& 5): High Male-Typed OCB & High Female-Typed OCB

Letter A

Dear Student,

I am a junior psychology major and an officer in the Psychology Club and have had the chance to observe Dr. Russell in both the classroom and club atmosphere.

Dr. Russell is a big supporter of University involvement. Everyday before lecture he likes to announce campus activities, always encouraging us to go a new concert, ballet, or rally. He always reminds us how important it is to stay involved and take advantage of what our university has to offer.

Dr. Russell even volunteered to be the Faculty Advisor to the Psychology Club. This is at least a two hour commitment each week, but Dr. Russell is always enthusiastic about participating. He is helpful to the club and to his students because of the way he considers student work loads and schedules when determining club activities and course due dates. He tries to get informal input from the class as to the level of work they have before he sets assignment due dates. Overall, he constantly provides encouragement and praise to his students.

--Student 1

Letter B

Dear Student,

I am a junior psychology major and have had Dr. Russell as my professor for two semesters. I think I've witnessed enough of his behavior to tell you a little about his character.

I think Dr. Russell really goes above and beyond what his job requires. When it comes to the class material, he enjoys taking time to discuss differing opinions or students' questions. Dr. Russell also shares informed opinions and new ideas with students regarding the University.

A few months ago, I had to have knee surgery and missed class for close to two weeks. Within a few days of my expected return to class, our biggest project of the semester was due. Needless to say, I was terrified of this due date because I hadn't had time to work on it while I was bed-ridden. When I gave Dr. Russell my excused absence slip, he not only emailed me all of the written lecture notes I missed, but when I explained to him about the project, he also gave me an extra week to complete it. Dr. Russell's ability to understand my circumstances and his willingness to help made my recovery a lot less stressful.

-- Student 2

Condition 2 (& 4): Low Male-Typed OCB & High Female-Typed OCB

Letter A

Dear Student,

I am a junior psychology major and an officer in the Psychology Club and have had the chance to observe Dr. Russell in the classroom atmosphere.

Dr. Russell never seemed to be very involved with what was going on at the University. He does not like to take a lot of class time to make extracurricular announcements and seems uninterested when students bring it up in class. We asked him to speak at Psychology Club one time and he turned us down.

Dr. Russell is helpful to his students because of the way he considers student work loads and schedules when determining activities and course due dates. He tries to get informal input from the class as to the level of work they have before he sets assignment due dates. Overall, he constantly provides encouragement and praise to his students.

-- Student 1

Letter B

Dear Student,

I am a junior psychology major and have had Dr. Russell as my professor for two semesters. I think I've witnessed enough of his behavior to tell you a little about his character.

I've never had any problems with Dr. Russell. He focuses more on presenting the course material than answering students' questions. I also remember one time when a student asked him about a policy at OU that would impact our preparation time for finals. I was also interested in what he thought about the policy, but he told the student that we just had to go with what the University said and it unfortunately was not up to us.

A few months ago, I had to have knee surgery and missed class for close to two weeks. Within a few days of my expected return to class, our biggest project of the semester was due. Needless to say, I was terrified of this due date because I hadn't had time to work on it while I was bed-ridden. When I gave Dr. Russell my excused absence slip, he not only emailed me all of the written lecture notes I missed, but when I explained to him about the project, he also gave me an extra week to complete it. Dr. Russell's ability to understand my circumstances and his willingness to help made my recovery a lot less stressful.

-- Student 2

Condition 3 (& 7): High Male-Typed OCB & Low Female-Typed OCB

Letter A

Dear Student,

I am a junior psychology major and an officer in the Psychology Club and have had the chance to observe Dr. Russell in both the classroom and club atmosphere.

Dr. Russell is a big supporter of University involvement. Everyday before lecture he likes to announce campus activities, always encouraging us to go a new concert, ballet, or rally. He always reminds us how important it is to stay involved and take advantage of what our university has to offer. Dr. Russell even volunteered to be the Faculty Advisor to the Psychology Club. This is at least a two hour commitment each week, but he's always enthusiastic about participating.

Regarding class, Dr. Russell seems to give us heavy workloads at times. He also schedules multiple assignments due within a week of each other so our class last semester was swamped, even though he knew we also had a lot of work in other classes due around midterms and a couple of students asked him for small extension. It was a little unreasonable, and he did not offer any praise or encouragement when he recognized our workload was so big.

-- Student 1

Letter B

Dear Student,

I am a junior psychology major and have had Dr. Russell as my professor for two semesters. I think I've witnessed enough of his behavior to tell you a little about his character.

I think Dr. Russell really goes above and beyond what his job requires. When it comes to the class material, he enjoys taking time to answer students' questions. Dr. Russell also shares informed opinions and new ideas with students regarding the University.

A few months ago, I had to have knee surgery and missed class for close to two weeks. Within a few days of my expected return to class, our biggest project of the semester was due. I was hoping Dr. Russell would give me more time but he explained that he was determined to stick to the "no make-up work" policy of his syllabus. He said I could have avoided the predicament by working on the project earlier and turned down my request for an extension. I settled with taking a late grade.

-- Student 2

Condition 4 (& 8): Low Male-Typed OCB & Low Female-Typed OCB

Letter A

Dear Student,

I am a junior psychology major and an officer in the Psychology Club and have had the chance to observe Dr. Russell in both the classroom and club atmosphere.

Dr. Russell never seemed to be very involved with what was going on at the University. He does not like to take a lot of class time to make extracurricular announcements and seems uninterested when students bring it up in class. We asked him to speak at Psychology Club one time and he turned us down.

Regarding class, Dr. Russell seems to give us heavy workloads at times. He also schedules multiple assignments due within a week of each other so our class last semester was swamped, even though he knew we also had a lot of work in other classes due around midterms and a couple of students asked him for small extension. It was a little unreasonable, and he did not offer any praise or encouragement when he recognized our workload was so big.

-- Student 1

Letter B

Dear Student,

I am a junior psychology major and have had Dr. Russell as my professor for two semesters. I think I've witnessed enough of his behavior to tell you a little about his character.

I've never had any problems with Dr. Russell. He focuses more on presenting the course material than answering students' questions. I also remember one time when a student asked him about a policy at OU that would impact our preparation time for finals. I was also interested in what he thought about the policy, but he told the student that we just had to go with what the University said and it unfortunately was not up to us.

A few months ago, I had to have knee surgery and missed class for close to two weeks. Within a few days of my expected return to class, our biggest project of the semester was due. I was hoping Dr. Russell would give me more time but he explained that he was determined to stick to the "no make-up work" policy of his syllabus. He said I could have avoided the predicament by working on the project earlier and turned down my request for an extension. I settled with taking a late grade.

-- Student 2

Appendix B: Organizational Citizenship Behaviors Measure

(Study 1) Instructions: Using the scale, indicate to what extent the professor you evaluated engages in each of the following behaviors in their job as a teacher/lecturer at the university.

1	2	3	4	5
No extent		Some extent		Great extent

1.	M	*	Announce campus activities to the students
2.	M		Report potentially harmful situations (e.g., fire hazards)
3.	F		Inquire about and incorporate students' interests
4.	F		Take initiative to solve problems to help others/the University (e.g., notify appropriate person if classroom equipment is damaged)
5.	F	*	Make exceptions when student personal circumstances interfere with class
6.	M	*	Support university involvement
7.	F		Give advice about topics beyond the scope of the course, such as graduate school and life preparation
8.	M	*	Discuss students' questions and opinions
9.	M		Do not cancel class or take class time for personal reasons that are not related to work
10.	F	*	Extend deadlines and allow make-up work
11.	M	*	Participate in student organizations (e.g., act as a club sponsor)
12.	F		Have an informal open-door policy
13.	F	*	Provide encouragement and praise to the class
14.	M	*	Share informed opinions and new ideas with students regarding OU
15.	F		Encourage cooperation among students
16.	F	*	Consider student work loads & schedules when determining course due dates
17.	M		Display a pattern of going well beyond the minimal levels of attendance and punctuality

Note: M, F = male- or female-typed OCB. * = behavior present in the student letters.