**Does Friendship Make Employees Better Citizens?** 

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#### ABSTRACT

#### **Does Friendship Make Employees Better Citizens?**

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This study explores the influence that different dimensions of workplace friendship cast on organizational citizenship behavior (OCB). I draw on social exchange theory, impression management theory, and affect theory to argue that workplace friendship opportunity (WFO) will lead to OCBO (OCB directed at the organization) through perceived organizational support (POS), and OCBI (OCB directed at individuals) through employees' impression management tactics (IM). I also propose that workplace friendship prevalence (WFP) can lead to both OCBI and OCBO through positive affect (PA), with workplace friendship quality (WFQ) moderating these relations. The sample for this study includes 400 Concordia undergraduate business students, who are employed in various industries in Canada. Regression analyses were applied to analyze proposed mediation and moderated mediation relationships. Consistent with our hypotheses, we found that WFO is positively related to OCBO and OCBI, with POS and IM partially mediating these relationships, respectively. We also found that WFP is positively related to OCBI, but not OCBO. In contrast to the hypotheses, WFQ does not moderate the relationship between WFP and positive affect, and positive affect does not mediate the relation between WFP and OCBO/I. Post-hoc analyses indicate that WFQ is positively related to both OCBO and OCBI, and that the relationship between WFQ and OCBO is fully mediated by PA and the relationship between WFQ and OCBI is partially mediated by PA. Based on these results, companies can benefit from creating more friendship opportunity at work and promoting high friendship quality among employees. Considering that our sample is mostly young and they are university students, these results may be most applicable to organizations who have hired, or who intend to hire, young professionals from the millennial generation.

*Keywords:* OCB, workplace friendship, positive affect, social exchange theory, impression management, perceived organizational support

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### Introduction

Organizational citizenship behavior (OCB) has received considerable research attention in the fields of organizational behavior and management studies over the past three decades (see review by Podsakoff, MacKenzie, Paine & Bachrach, 2000). Organ (1988) defined OCB as an "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (p. 4). Numerous studies have found that organizational citizenship behavior can increase overall organizational effectiveness (see meta-analysis by Podsakoff, Whiting, Podsakoff & Blume, 2009). In their analysis, Podsakoff et al. (2009) found that OCB positively relates to a number of positive organizational-level outcomes, such as productivity, efficiency, and high-quality customer service. At the individual level, they found that OCB is positively related to reward allocation decisions and employee performance and is negatively related to turnover intention.

Due to the fact that organizational citizenship behavior has many significant consequences, the antecedents of OCB have been widely studied. Bolino (1999) suggested that predictors of individual-level OCBs can mainly be categorized into two groups: attitudinal factors and dispositional factors. Attitudinal factors refer to any kind of attitudes that employees hold towards the organization. Some examples are job satisfaction, perceived organizational justice and organizational commitment (Farh, Podsakoff & Organ, 1990; Niehoff & Moorman, 1993; Scott & Colquitt, 2007; Williams & Anderson, 1991). For the dispositional predictors, it is suggested that some personal characteristics predispose people to certain orientations with regard to coworkers (e.g. Podsakoff et al., 2000). For example, some dispositional variables, such as agreeableness, conscientiousness and positive affectivity, have been found to be positively related to OCBs (Organ & Ryan, 1995). A review of the literature also suggests that affective factors help predict OCBs (Clark & Watson, 1989; Williams & Shiaw, 1999). Studies that fall into this category hold that the affective states people experience will exert influence on their intention to engage in citizenship behaviors. In addition to these individual factors, there is some evidence that situational factors can also exert influence on one's citizenship behaviors. One example of this is OCB norms. For example, Ehrhart and Naumann (2004) proposed that when OCB levels are high among group members overall, individual group members will engage in higher levels of OCB too. Similarly, Zagenczyk, Gibney, Murrell, and Boss (2008) argued that OCB is contagious and socially

influenced; the results of their study supported the idea that a focal employee's OCBs are affected by the OCBs of those with whom they maintain social network ties.

Past research concerning antecedents of OCB has focused on traditional employeremployee dyads. As noted above, however, researchers have suggested that social context will also have influence on citizenship behaviors (e.g., Ehrhart & Naumann, 2004; Zagenczyk et al., 2008) and that studies should explore other relationships besides the traditional dyads. Lateral relationships between coworkers is one such dyadic relationship. Chiaburu and Harrison (2008) contend that coworkers are not only a vital part of an organization's social environment, but they can also define it. In their meta-analysis, they examined how lateral relationships, conceptualized in terms of coworker support and coworker antagonism, can exert influence on various employee outcomes, including OCBs. They found that when an employee receives support from coworkers, such as useful information, the focal employee is more likely to act kind and engage in interpersonally directed OCBs (i.e., OCBI).

In this thesis, I take one step beyond coworker relationships to look at workplace friendships. Workplace friendship is a concept that is more specific and special than the general workplace relationships that are mentioned above. Friendship is unique in that it is informal, voluntary and is for personal, socio-emotional benefits (Mao, 2006). In contemporary society, people spend a large amount of their time at work, which constitutes an indispensable part of life, and friendship can develop from formal workplace relationships due to constant interactions between employees (Morrison, 2004). Workplace friendship is positively associated with employee outcomes, including job satisfaction and work engagement, as well as organizational effectiveness (see Morrison, 2004; Nielsen, Jex & Adams, 2000; Riordan& Griffeth, 1995). It can also increase support and resources that are helpful for individuals to get their jobs done (Berman, West & Richter Jr, 2002). Despite this promising evidence on the value of workplace friendship, few studies have examined this concept in relation to organizational citizenship behaviors, either empirically or theoretically. Given that OCB is inherently a relational phenomenon, it would be interesting to explore how informal relationships (i.e., friendships), rather than formal relationships (e.g., mentor-to-protégé, subordinate-to-supervisor, co-worker to co-worker) at work may play a role in employees' engagement in this behavior.

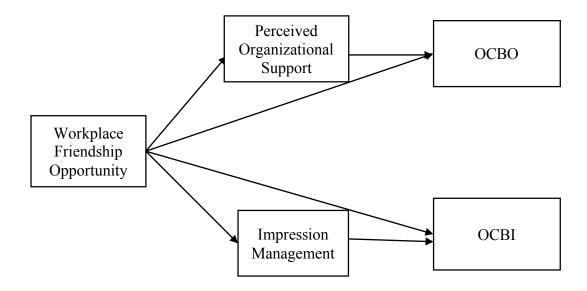
This study has two objectives. The first objective is to see whether friendship at work is associated with employees' engagement in citizenship behavior. The second objective is to explore

the underlying mechanisms that may explain why friendships at work can possibly lead employees to engage in citizenship behaviors. To pursue these objectives, I developed two theoretical models that hypothesize the relations among friendship variables and dimensions of OCB (see Figure 1 and 2). As the figures show, I consider workplace friendship from a multi-dimensional perspective, including workplace friendship opportunity, workplace friendship prevalence and workplace friendship quality. Different aspects of OCB are also examined, including OCBI and OCBO.

Understanding the effects of workplace friendship on citizenship behaviors has important theoretical and practical implications. First, this study adds insights into social influences on OCB that go beyond the traditional employer-employee dyads and formal coworker relationships by examining informal relationships at work. Second, this study contributes to literature on workplace friendship by examining three different dimensions of friendship and examining their respective relations with citizenship behaviors. I expect that having friends at work will be positively related to employees' citizenship behaviors, both towards individuals and the organization. If these expectations are supported by my data, then from a practical perspective, organizations may benefit by promoting an open working environment where employees have many opportunities to make friends.

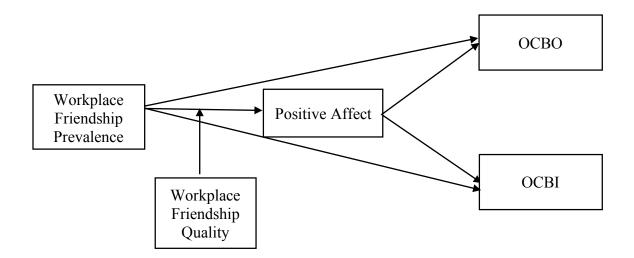
# Figure 1

Hypothesized Relations for Workplace Friendship Opportunity and OCB



# Figure 2

Hypothesized Relations for Workplace Friendship Prevalence and OCB



#### **Theory and Hypotheses**

### The concept of OCB

Organizational Citizenship Behavior (OCB) is a term first coined by Dennis Organ and his colleagues (Smith, Organ & Near, 1983). As described above, it refers to workplace activities that exceed formal job requirements and contribute to the effective functioning of the organization (Organ, 1988). OCB is also referred to as "contextual performance" (Borman & Motowidlo, 1993), to emphasize the voluntary nature of the activity and to distinguish it from "task performance" or "in-role performance" (Rinkelstein & Penner, 2004). Some common dimensions of citizenship behavior include sportsmanship, altruism, organizational compliance, civic virtue and courtesy. For example, *sportsmanship* is defined as a willingness to tolerate the inevitable inconveniences and impositions of work without complaint or fuss (Organ, 1988). It can also be understood as a positive attitude towards work and employees even when people are facing difficulties. *Altruism*, also known as helping behavior has been wildly recognized by researchers. Smith et al. (1983) developed this concept because they hold that most of the citizenship behaviors are of altruistic character. In organizations, altruism refers to the behavior of voluntarily helping others and/or preventing the occurrence of work-related problems (Podsakoff et al., 2000). Some similar concepts include interpersonal helping (Graham, 1989) and OCB-I (Williams & Anderson, 1991). Organizational compliance is considered as a form of citizenship behavior because not every employee can religiously comply with organizational rules, especially when no one is observing their behaviors. Smith et al. (1983) first developed this dimension, and it is also known as organizational obedience (Graham, 1991) and OCB-O (Williams & Anderson, 1991). Civic virtue is comparatively less studied than the previous dimensions. It refers to responsible, constructive involvement in the political process of the organization, with examples including expressing opinions, reading one's mail, attending meetings, and keeping up with larger issues that go on in the organization (Organ, 1990). This dimension represents employees' general interest in, or commitment to, the organization as a whole (Podsakoff et al., 2000). Lastly, *courtesy* can be deemed as a specific form of helping behavior (altruism), along with peacemaking, which refers to actions that help to prevent, resolve or mitigate destructive interpersonal conflict and cheer leading (Organ, 1990).

OCBs can also be categorized by their targets, referred to as OCBI and OCBO. OCBI are behaviors directed at specific individuals or/and groups within the organization (Rinkelstein & Penner, 2004); they are also referred to as interpersonal citizenship behavior (ICB) and correspond to altruism (Bower & Brass, 2006) and courtesy. For example, an employee who helps a coworker with his/her project or helps him/her solve problems at work would be performing OCBI. On the other hand, when an employee is doing something beneficial for the organization in general, such as demonstrating and sustaining high standards for attendance, punctuality, conservation of organizational resources (Organ, 1997), then s/he is performing OCBO. Podsakoff et al. (2000) claimed that this dimension of OCB captures a person's "internalization and acceptance of the organization's rules, regulations and procedures, which result in in a scrupulous adherence to them" (p. 517).

In this study, I follow this latter categorization and I examine OCB as two separate dimensions. The reason for this choice is because OCBO and OCBI may be caused by different antecedents. For example, employees who hold neutral attitudes to their organizations may still engage in OCBI if they want to help their friends at work. Past research supports the idea that different dimensions of OCB have different correlates (e.g., Bowler & Brass, 2006). Therefore, it is valuable to look at OCBO and OCBI separately, and to look for predictors that can lead to each of them. This approach also responds to Settoon and Mossholder's (2002) suggestion that future research and theory development efforts regarding relationships at work and OCB should be directed towards identifying unique antecedents of different forms of citizenship behaviors. Consistent with this, my study will explore factors that lead to both aspects of OCB with a focus on workplace friendship.

#### The concept of workplace friendship

Friendship is a relationship with extremely broad and ambiguous boundaries because it lacks normative definitions or social trappings that are external to the relationship itself (Wright, 1987). Sapadin (1988) defined friendships as "voluntary relationships that exist primarily for enjoyment and satisfaction, rather than for the fulfillment of a particular function or role" (p. 387). Building on this more general definition, Berman et al. (2002) defined workplace friendships as "nonexclusive voluntary workplace relations that involve mutual trust, commitment, reciprocal liking and shared interest and values" (p. 218). From this definition it can be seen that friendship at work is not just an "acquaintanceship," but carries more value and quality. Morrison (2004) stated that friendship at work is voluntary, reciprocal and equal, which distinguishes it from other workplace relationships, such as supervisor-subordinate relationships, which are involuntary and may not be reciprocal or equal. We define a "**friend at work**" as someone with whom people choose to have a relationship because they find the relationship enjoyable. A friend at work would be someone with whom an individual socializes outside of work and/or with whom they share personal information or other interests beyond their job. A friend at work; it involves more than being friendly and courteous with a colleague when at work; it involves having a pleasing relationship with that person outside of work as well.

There are several perspectives that have been proposed regarding the dimensionality of workplace friendship in the literature. Early research examined workplace friendship by looking at its quality (e.g., Windstead, Derlega, Montgomery & Pilkington, 1995). Friendship opportunity, which refers to the opportunity of talking to each other and establishing informal relationship with coworkers, is another dimension that has generated many studies too (e.g., Nielson et al., 2000; Riordan et Griffeth, 1995). This study will incorporate these two dimensions, along with friendship prevalence, which is defined as the number (or quantity) of friends at work.

A brief review of the literature indicates that there are few empirical studies of associations between workplace friendship and OCB. Bowler and Brass (2006) proposed that friendship strength (i.e., level of familiarity and past exchange experiences) can influence the performance and receipt of OCBI. They used four categories to capture the strength of friendship between two employees: do not know this person (score 0), an acquaintance (score 1), a friend (score 2), a close friend (score 3). The relationship is indicated by a number ranging from 0 to 3. Applying social exchange theory, they found that strong friendship ties lead to reciprocity and social exchange, and they suggested that individuals who engage in OCBI will expect that equal reciprocation will happen sometime in the future, even if helping another is not immediately reciprocated. They also suggested that sometimes individuals do not expect reciprocation at all, but engage in OCBI simply because they like another person. In contrast, they found that when relationship ties are weak, the probability of both performing and receiving OCBI is lower. Zagenczyk et al. (2008) explored social influences on OCB by examining the effects of advice ties and friendship ties among coworkers. Advice ties are ties through with employees share information and knowledge related to work, whereas friendship ties involve expressions of personal affect, social support, and a sense

of identity and personal belongingness. They classified ties as strong or weak depending on how frequently individuals interacted with one another. Zagenczyk et al. (2008) observed that employees who frequently sought advice from another employee tended to engage in similar levels of OCB to that specific employee, whereas this is not the case for friendship ties (frequent or infrequent) or for low-frequency advice seeking. Their research did not, however, focus on individual levels of OCB; rather, they focused on whether social ties are related to similarity in dyadic levels of OCBs. Looking at both of these studies, only the strength and quality of friendships were examined, but the literature on workplace friendship suggests that friendship is a multi-faceted concept and that each dimension may carry different influence on work-related outcomes. After reviewing relevant research on friendship, I think it is worth exploring further how different dimensions of workplace friendship might relate to employees' organizational and interpersonal citizenship behavior. I present the rationale for my specific hypotheses in the following section.

### Workplace friendship opportunity and OCBO

Social exchange theory predicts that people seek to reciprocate those who benefit them (Blau, 1965). According to Organ (1988), OCB is mainly a product of social exchange between employees and organizations, and most of the research on OCB draws on social exchange theory (e.g., Zagenczyk et al., 2008). When an employee feels that s/he is treated well by the organization, and perceives those organizational actions as discretionary, the employee will reciprocate to the organization by going above and beyond what his/her job requires; that is to say, s/he will perform organizational citizenship behavior. Consistent with this theory, there is evidence that many job-related factors (e.g., job satisfaction) and organizational justice, and perceived leader fairness) can predict OCB (Farh et al., 1990; Scott & Colquitt, 2007; Williams & Anderson, 1991; Zagenczyk et al., 2008). Hence, I also draw on social exchange theory to explain why workplace friendship opportunity is expected to lead to OCBO.

Workplace friendship opportunity is defined as how much employees perceive that their jobs allow them to talk with, and establish informal relationships with, other employees (Hackman & Lawler, 1971). This idea was first introduced by Hackman & Lawler (1971) as one of the 6 dimensions of job characteristics. This dimension was included to permit exploration of the impact

of the interpersonal characteristics of job design. Hackman and Lawler found that friendship opportunity is positively related to job satisfaction. Riordan and Griffeth (1995) also found similar results; they observed that friendship opportunity can lead to job involvement, job satisfaction and can decrease the intention to turnover. When employees' satisfaction results from the efforts of organizational officials, and such efforts are interpreted as volitional, people will seek to reciprocate those efforts (Bateman & Organ, 1983). It has also been suggested that resources received from the organization are more highly valued if they are believed to be based on discretionary choice, rather than external constraints, such as governmental health and safety regulations (Rhoades &, Eisenberger, 2002). Friendship opportunity is a job characteristic and it tends to be shaped by organizational culture and rules, rather than government regulations; therefore, it is discretionary on the part of the organization. Based on this, I argue that employees are likely to reciprocate to the organization in exchange for friendship opportunity by engaging in OCBO. Hence, I hypothesize that:

H1: Workplace friendship opportunity is positively related to OCBO.

Favorable job conditions have been found to be one of the antecedents of perceived organization support (Rhoades &, Eisenberger, 2002). One possible explanation for friendship opportunity leading to OCBO is that employees perceive this job characteristic as favorable compared to other jobs that allow fewer interactions with coworkers. I believe that employees will perceive the opportunity to make friends at work as one form of organizational support and there are many studies that have found POS is positively related to OCBs (e.g., Shore & Wayne, 1993; Wayne, Shore, & Liden, 1997). Hence I propose that:

**H2:** The relationship between workplace friendship opportunity and OCBO is mediated by perceived organizational support.

### Workplace friendship opportunity and OCBI

Above, I use social exchange theory to explain why workplace friendship opportunity is hypothesized to be positively related to OCBO, but it does not as easily explain a relation with OCBI. In this case, I believe that the theory of impression management could explain why a relation between workplace friendship opportunity and OCBI may occur. Impression management refers to the process by which people attempt to influence the image that other people have of them (Leary, 1995) and it is a common occurrence in organizational settings (Bolino & Turnley, 1999).

People use impression management to advance their career and occupational opportunities (Gould & Penley, 1984) because they think that merit alone will not be enough for them to get hired or promoted (Leary, 1995). Jones and Pittman (1982) developed a taxonomy aimed at capturing the wide variety of impression management behaviors. The five groupings of impression management include: *self-promotion* (i.e., individuals hope to be seen as competent), *ingratiation* (i.e., individuals do favors or use flattery to be viewed as likeable), *intimidation* (i.e., individuals seek to appear dangerous or threatening), *exemplification* (i.e., people self-sacrifice or go above and beyond the call of duty in order to be deemed as dedicated) and *supplication* (i.e., individuals advertise their weaknesses or shortcomings in order to be viewed as needy; Bolino & Turnley, 1999).

Workplace friendship opportunity might lead to IM because employees should have more chances to build up their ideal image when a job is designed to have plenty of opportunities to establish informal relationships; under these circumstances, employees may also perceive more value in engaging in OCBI to create positive impressions among their coworkers. In contrast, when employees work in an environment where there are few opportunities for them to talk and establish informal relationships, they may find it hard to build up the ideal image they want or they may feel there is less value in attempting to managing the impressions that others have of them. Based on this reasoning, I believe that higher levels of friendship opportunity should lead to higher levels of IM.

An increased desire to manage impressions and a greater perceived value in doing so may lead individuals to engage in higher levels of OCBI. Indeed, this corresponds to Wayne & Green's (1993) study, which revealed a positive significant relationship between impression management and OCBI. It is worth noting that impression management and OCB share some similarities, but research has treated them as two different constructs due to their underlying motives (Bolino & Turnley, 1999). When people engage in impression management, the motive is to be viewed in a favorable light and to avoid being viewed negatively (Rosenfeld, Giacalone & Riordan, 1995), whereas when people perform OCB, the motive is typically concern for the organization or their coworkers. On the surface, impression management and OCB have much in common, and it is not easy to tell them apart unless the underlying motives are known. Bolino (1999) proposed that impression management can actually be viewed as a motive for engaging in OCB. Individuals may desire to create a positive impression of themselves among others and this may lead to their

engagement in ingratiation and exemplification behaviors that involve helping those among whom they want to create a favorable impression. Impression management differs from the social exchange argument in that favors are not done to reciprocate something that has been received; rather, they are done with the hope of changing the other's opinion of the person engaging in the helpful behavior (Bowler & Brass, 2006). The end result is still the same; employees might engage in interpersonal citizenship behaviors, such as volunteering to help someone else on a task, in order to achieve the goal of being viewed positively by others. Therefore, I propose the following:

H3: Workplace friendship opportunity is positively related to OCBI.

**H4:** The relationship between workplace friendship opportunity and OCBI is mediated by impression management.

#### Workplace friendship prevalence and OCB

Friendship prevalence represents the actual presence of friendship at work. Friendship involves expressions of personal affect, social support, and a sense of identity and personal belongingness (Gibbons, 2004). Having (good) friends at work is likely to create a positive environment among employees, where they feel cared for, trusted and supported. Morrison (2004) suggested that having friends at work would make work more pleasurable and at the same time help to create a positive working environment. Put another way, having friends at work can make people "feel" good, meaning that they should experience more positive affect. Positive Affect (PA) reflects "one's level of pleasurable engagement with the environment" (Clark & Watson, 1989). High levels of PA are characterized by enthusiasm, joy, high energy level, and determination. Having (good) friends at work should contribute to the experience of joy, happiness and high energy levels at work, which should put employees in a state of high positive affect. Lack of friends at work should lead to lower levels of positive affect at work. It is important to note that there is a distinction between positive affect and negative affect, which are two related, yet distinct, dimensions. Negative affect (NA) subsumes a range of negative emotional states, including fear, anger, disgust and sadness (Clark & Watson, 1989); in this study, I do not propose that friendship is related to NA. I propose that friendship prevalence is positively related to positive affect.

It has been suggested that employees are more likely to engage in prosocial behaviors when they are experiencing positive moods, which are characterized by positive affect (Bateman & Organ, 1983). Research has also shown that when employees are experiencing positive affect, their intensions to engage in OCB are significantly enhanced (Williams & Shiaw, 1999). Given that intentions are an antecedent of actions (Azjen & Fishbein, 1977), it is logical to conclude that positive affect can lead to OCBs. Consistent with these ideas, Wegener and Petty (1994) argued that individuals might engage in helping behaviors because they want to prolong feelings of positive affect. It is also possible that when employees are feeling good, they are more likely to see things in a positive light and, therefore, they may see their co-workers and the organization as more deserving of discretionary assistance (Isen & Barron, 1991; Williams & Shiaw, 1999). Based on the above, I propose that friendship prevalence can lead to citizenship behaviors, targeted at both the individual and the organization, and that these relations are mediated by positive affect.

H5: Workplace friendship prevalence is positively related to OCBO.

H6: Workplace friendship prevalence is positively related to OCBI.

**H7a:** The relation between workplace friendship prevalence and OCBO is mediated by positive affect.

**H7b:** The relation between workplace friendship prevalence and OCBI is mediated by positive affect.

### Workplace friendship quality

Another dimension of workplace friendship that has received attention is friendship quality. Numerous definitions of friendship quality have been proposed. Clark & Milles (1979) developed a model that encompasses two types of friendship: the communal-oriented friendship and the exchange-oriented friendship. The communal-oriented friendship is characterized by concern for one another's welfare, whereas the exchange-oriented friendship is characterized by benefits given with the expectation of receiving similar benefits in return (Clark & Mills, 1979). According to Clark and Mills, the more communal-oriented and less exchange-oriented the relationship, the higher the friendship quality. Wright (1984) developed two criteria that represent the strength of friendship quality: *person-qua-person factor* and *voluntary interdependence factor*. The former refers to the extent to which friendship is characterized by a mutual personalized interest. The latter refers to the degree to which a pair commits free time to each other in the absence of pressure

and constraints. According to Wright, the higher degree of both factors, the stronger the friendship (or the better the friendship quality). Another way to conceptualize relationship quality is consistent with leader-member exchange theory; in this theory, relationships are conceptualized by loyalty, affect, respect and mutual trust between leader and member (Dansereau, Graen & Haga, 1975). Similar to this, Settoon and Mossholder (2002) argued that relationship quality is characterized by support, trust, perspective taking and empathetic concern. Another conceptualization, proposed by Mendelson & Aboud (1999), describes friendship quality in terms of six functions that friendship can provide: stimulating companionship, help, intimacy, reliable alliance, self-validation, and emotional security. Stimulating companionship refers to doing things together that can arouse enjoyment. Help refers to giving guidance, assistance, information and other tangible aids. Intimacy refers to providing an accepting context where personal thoughts and feelings can be openly and honestly expressed. Reliable alliance refers to "being able to count on the continuing availability and loyalty of the friend" (p.131). Self-validation refers to perceiving the other as reassuring, agreeing, encouraging and listening as well as helping maintain one's selfimage. The last dimension emotional security refers to "the comfort and confidence provided by the friend in novel or threatening situations" (p.132). This last approach is adopted in the present study because it incorporates many aspects of friendship quality.

Settoon and Mossholder (2002) found that relationship quality is positively associated with OCBI. I believe, however, that friendship quality serves to moderate the link between workplace friendship prevalence and positive affect. Given same number of friends at work, I expect that people will experience higher levels of positive affect when they experience higher quality friendship, due to higher level of companionship, intimacy, self-evaluation and emotional security. Based on this I propose that:

**H8:** Workplace friendship quality moderates the relationship between friendship prevalence and positive affect, such that the positive relation between workplace friendship prevalence and positive affect is stronger when friendship quality is higher than when friendship quality is lower.

As mentioned earlier, the overall picture of my hypotheses and a summary of my theoretical framework appear in Figures 1 and 2 (see page 4 and page 5).

#### Method

#### **Participants and procedure**

Participants for this study were 427 Concordia undergraduate business students who participated to receive one extra percentage point towards their final score in an introductory organizational behavior (OB) course. 27 participants were excluded from data analyses: 19 responded to a data quality check item by choosing "do not use my data," 7 did not complete the survey, and 4 took less than 380 seconds to complete the survey, which is less than 1/3 of the average response time. Data from 400 students were used for data analysis.

The average age of participants is 21 years old (SD=2.40). 195 participants (49%) are male and 205 participants (51%) are female. The sample is 59% Caucasian, 21% Asian, 2.3% Native Canadian, 2.5% Hispanic, and 1.8% Black. The vast majority of the students are part-time workers (94.7%) and the rest are full-time workers (5.3%). On average, they work 16.9 hours per week (SD=7.81). They have been, on average, working in their current company for 2.1 years (SD=1.96). They work in various industries, including retail trade (23.5%), accommodation & food services (17.3%), and finance & insurance (8.5%). Job titles include customer service representative, tutor, cashier, client advisor, and sales clerk, among others.

Only students with a paid job were eligible to sign up for this study. Information about the study was posted on a course-related website that students could check voluntarily if they were registered in the OB course. Students who signed up for this study were redirected to my online survey, which was labeled as a survey on workplace environments, relationships at work and employee performance. It took them on average 19 minutes to compete the survey. The purpose of discovering the relationship between workplace friendship and OCB was not disclosed to participants to avoid possible biases.

### Measures

*Organizational Citizenship Behavior (OCB).* Scales developed by Lee & Allen (2002) were used to measure OCBO (directed at organization) and OCBI (directed at individuals: helping/altruism). Participants were asked to indicate how often they have engaged in these behaviors in the past four weeks (one month) using a 5-point frequency scale: never (0), one quarter of the time (1), half of the time (2), three quarters of the time (3), almost all of the time (4). The reason to use four weeks is that citizenship behaviors vary over time, but one week may not

be long enough for people to display these behaviors. At the same time, if the time period was too long, it might be hard for employees to recall their behaviors in the past and may assess more of a dispositional tendency, rather than actual behaviors. There are 16 items in total: 8 for OCBI and 8 for OCBO. An example for OCBI is: "I willingly give my time to help others who have work-related problems"; an example for OCBO is: "I defend the organization when other employees criticize it".

*Workplace Friendship Opportunity (WFO)*. Workplace friendship opportunity was measured by the 5-item scale developed by Nielsen et al. (2000). This scale has been widely adopted by researchers (e.g., Mao, 2006; Song, 2006; Herman et al., 2008). One example of the items is "In my organization, I have the chance to talk informally and visit other employees." Participants were asked to rate these items on a 7-point Likert scale with "1" representing "strongly disagree" and "7" representing "strongly agree."

*Workplace Friendship Prevalence (WFP)*. Workplace friendship prevalence was assessed with a single item that asked participants how many friends they have at work. They were provided with a clear definition of what a "friend at work" means before indicating how many friends they have; specifically, they were given this definition: A "**friend at work**" is someone with whom people choose to have a relationship because they find the relationship enjoyable. A friend at work would be someone with whom an individual socializes outside of work and/or with whom they share personal information or other interests beyond their job. A friend at work involves more than being friendly and courteous with a colleague when at work; it involves having a pleasing relationship with that person outside of work as well. If the answer was 0, participants were asked to skip the friendship quality section. 337 (84%) participants indicated that they have friends at work based on the definition we provided.

*Workplace Friendship Quality (WFQ)*. Workplace friendship quality was measured with the McGill Friendship Questionnaire-Friend's Functions (Mendelson & Aboud, 1999). This scale includes 6 dimensions: stimulating companionship, help, intimacy, reliable alliance, self-validation and emotional security. We excluded items in the help dimension because they overlap with the OCBI items. We adopted the short version of the scale considering that we did not have hypotheses about specific dimensions of friendship quality, but rather were interested in an overall score. Further, we deleted some items that seemed redundant with each other in order to reduce the number of items on the questionnaire. For example, we kept "my friends are exciting to be

with" and dropped "my friends are exciting to talk to." After some minor changes to the items, we used 21 items (see **Appendix A**) in total for friendship quality. Participants were asked to rate the quality of friendship at work in general instead of rating the quality of friendship with each friend. Participants rated these items on a 7-point Likert scale with "1" representing "strongly disagree" and "7" representing "strongly agree".

*Impression Management (IM)*. We adopted 5 items (see **Appendix B**) from the impression management measure developed by Bolino and Turley (1999). We excluded the intimidation and supplication dimensions because they do not capture employees' intention to be viewed in positive light. We also excluded items that pertain to helping because they would overlap with OCBI items. One example of the items is "I praised my colleagues for their accomplishments so they would consider me a nice person." Consistent with the time frame for OCBI, participants were asked to indicate how frequently they have used each of the strategies in the last four weeks (one month). A 5-point scale was adopted: never (0), one quarter of the time (1), half of the time (2), three quarters of the time (3), almost all of the time (4).

*Perceived Organizational Support (POS).* Perceived organizational support was assessed by the 11-item scale developed by Armeli, Eisenberger, Fasolo & Lynch (1986). One example item is: "the company where I work strongly considers my goals and values." Participants were asked to rate these items on a 7-point Likert scale, where "1" represents "strongly disagree" and "7" represents "strongly agree".

*Positive Affect and Negative Affect (PA and NA).* Positive affect and negative affect were assessed using a scale developed by Watson, Clark & Tellegen (1988). This scale contains 20 words that describe different feelings and emotions, such as "interested", "scared", "excited", and "guilty." Participants were asked to rate how often they have felt those emotions in the past four weeks (one month) at work on a 5-point frequency scale: never (0), one quarter of the time (1), half of the time (2), three quarters of the time (3), almost all of the time (4). Consistent with the measure of OCB, we used a four-week time period for affect. There are 10 items each for negative affect and positive affect.

### Other measures

In order to distract participants from focusing solely on the relationship between workplace friendship and OCB, other workplace scales were also included in the online survey.

Workplace Deviance Behavior (WDB). Workplace deviance was measured with items from

a scale developed by Robinson & Bennett (1995). The original scale contains 45 items describing both employees and bosses, but we excluded "serious" deviant behaviors and picked items that are for employees only. This left 8 "minor" employee deviance items in total. One example is "I come to work late without permission." Participants were asked to rate each item on a 5-point frequency scale to indicate the extent to which they had engaged in each behavior in the past four weeks: never (0), one quarter of the time (1), half of the time (2), three quarters of the time (3), almost all of the time (4).

*In-role Behavior (IRB)*. The Anderson & Williams (1991) scale was used to measure inrole performance. This scale originally included 7 items, but one item was dropped to increase the internal consistency (Cronbach's Alpha improved from 0.66 to 0.77). The item that was dropped was: "I engaged in activities that will be considered on my performance evaluation." One example of the retained items is: "I fulfilled the responsibilities that are in my job description." Participants were asked to indicate how often they have engaged in in-role behaviors at work in the past four weeks, on a 5-point frequency scale: never (0), one quarter of the time (1), half of the time (2), three quarters of the time (3), almost all of the time (4).

*Work-life Balance Practices*. Participants were asked to indicate whether their company offers four work-life balance practices based on the work of Beauregard & Henry (2009). The practices included: allows employees to have flexible work hours, allows employees to have compressed work weeks, allows employees to telework, and permits two employees to share one full-time job. Response options were yes or no for each policy (yes was coded as "1" and no was coded as "0"). One example is "my company provides compressed work weeks, in which employees work a full week's worth of hours in four days and take the fifth off". We calculated a total score out of 4 for each person for this measure by adding up the number of policies to which they responded yes.

*OCB Norms*. A scale of OCB norms developed by Ehrhart (2004) was included to capture the general level of OCBs in participants' workplaces. Participants were asked to indicate the degree to which they agree with each statement on a 7-point Likert scale, with "1" representing "strongly disagree" and "7" representing "strongly agree". This scale includes 9 items in total. One example is "employees obey rules and regulations even when no one is watching".

#### Results

Means, standard deviations, correlations among variables, and internal consistencies are

#### presented in Table 1.

## Analytical Strategy

For all the analyses in this study, we used the PROCESS macro for SPSS (Hayes, 2016). For mediation tests, PROCESS uses a bootstrapping procedure to test the significance of the indirect effects. Bootstrap re-samples provide an approximation of the sampling distribution of the statistic of interest (Cohen & Abedallah, 2015). When zero falls within the 95 percent confidence interval for the bootstrap samples, this indicates a lack of significance. In this study, 95 percent confidence intervals were used and 5,000 bootstrap samples were run.

Due to the fact that OCB norms may be an important situational cause of OCB and is highly correlated with both OCBO (r = .34, p < .001) and OCBI (r = .32, p < .001) in this study, I ran all analyses with OCB norms as a covariate to determine if workplace friendship will influence OCB beyond the impact of OCB norms. This did not change the pattern of the results, so I present the version without the covariate included.

#### Workplace Friendship Opportunity and OCB

Hypothesis 1 stated that workplace friendship opportunity is positively related to OCBO and Hypothesis 2 stated that this relation is mediated by perceived organizational support (POS). To test these proposed relations, we used PROCESS Model 4. As shown in **Table 2**, workplace friendship opportunity (WFO) is positively related to OCBO. This is consistent with Hypothesis 1. WFO is also positively related to POS and POS is positively related to OCBO. When both perceived organizational support (POS) and WFO are included in the model predicting OCBO, WFO remains a significant predictor of OCBO, and the estimate for the indirect effect of WFO on OCBO via POS is .12 with zero falling outside the 95% bootstrap CI. The mediation effect accounts for 7% of the variance in OCBO, with zero falling outside the relations between workplace friendship opportunity and OCBO, and this provides partial support for Hypothesis 2.

## Means, standard deviations, correlations among variables and internal consistencies.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Workplace Friendship Opportunity	5.81	1.01	(.80)												
2. Impression Management	1.92	1.00	.16**	(.79)											
3. Perceived Organizational Support	5.14	1.12	.44**	.09	(.90)										
4. Workplace Friendship Prevalence	3.79	4.00	.30**	.10*	.09	N/A									
5. Workplace Friendship Quality	5.78	.85	.35**	.17**	.15**	.23**	(.96)								
6. Positive Affect	2.59	.88	.38**	.36**	.49**	.09	.26**	(.92)							
7. Negative Affect	.61	.03	27**	10*	40**	10	09	12	(.85)						
8. OCBO	2.24	.92	.31**	.54**	.38**	.09	.23**	.58**	08	(.83)					
9. OCBI	2.32	.90	.31**	.54**	.10*	.22**	.32**	.33**	.03	.61**	(.84)				
10. In-role Behaviours	3.62	.50	.28**	07	.24**	.06	.20**	.25**	42*	.10*	.08	(.77)			
11. Workplace Deviance Behaviours	.61	.56	20**	.10	28**	.00	11*	24**	.37**	04	.03	61**	(.78)		
12. OCB Norms	5.27	.87	.51**	.13**	.47**	.08	.33**	.40**	25**	.34**	.32**	.25**	32*	(.78)	
13. Work-life Balance Practices	1.65	1.26	.07	.10*	.21**	.01	02	.22*	02	.21**	.33	03	.05	12	N,

*Note.*  $*p \le 0.05 **p \le 0.01 ***p \le 0.01$ . N=337 for friendship quality, N=400 for all the other variables. N/A= not applicable. Cronbach's alpha appears in parenthesis along the diagonal. OCBI, OCBO, impression management, positive affect, negative affect, workplace deviance behaviors, and in-role behaviors are measured on a 5-point scale, where 0 represents never and 4 represents almost all of the time. Perceived organizational support, workplace friendship opportunity, workplace friendship quality and OCB norms are measured on a 7-point Likert scale, where 1 represents strongly disagree and 7 represents strongly agree. Work-life balance practices are measured in terms of the number of practices participants reported (coded 1 for yes and 0 for no), with a minimum of zero and a maximum of 4.

# Mediation test for WFO, POS and OCBO

	Outcome:		Outcome:		Outcome:	
	POS		ОСВО		ОСВО	
	Coefficient	se	Coefficient	se	Coefficient	se
Constant	2.31***	.29	0.59*	0.26	.02	.26
Workplace Friendship	0.49***	.05	.28***	.04	.16***	.05
Opportunity (WFO)						
Perceived					.25***	.04
Organizational Support						
(POS)						
R-squared	.19***		.10***		.17***	
F	95.50		42.58		41.12	
(df)	(1, 398)		(1, 398)		(2,397)	
Direct effect of WFO on					.16***	.05
OCBO						
Indirect effect of WFO					.12	.02
on OCBO via POS					(.0817)	
(95% Bootstrap CI)						
R-squared mediation					.07	
effect size (95%					(.0411)	
Bootstrap CI)						
Normal theory test of					.12***	.02
indirect effect (z)					(5.09)	

*Note.* N=400, \*p<=.05 \*\*p<=.01 \*\*\*p<=.001. WFO=workplace friendship opportunity,

POS=perceived organizational support, OCBO=organizational citizenship behavior-organization.

H3 and H4 postulated a positive relation between workplace friendship opportunity (WFO) and OCBI that is mediated by impression management (IM). We adopted PROCESS Model 4 again to test these relations. As shown in **Table 3**, WFO is positively related to OCBI, which is consistent with Hypothesis 3. WFO is also positively related to IM and IM is positively related to OCBI. When both IM and WFO are put in the model predicting OCBI, WFO remains a significant predictor of OCBI and the estimate for the indirect effect of WFO on OCBI via IM is .07 with zero falling outside the 95% bootstrap CI. The mediation effect accounts for 4% of the variance in OCBI, with zero falling outside the 95% bootstrap CI. These results are consistent with the notion that IM partially mediates the relations between workplace friendship opportunity and OCBI, and this provides partial support for Hypothesis 4.

### Workplace Friendship Prevalence and OCB

H5 proposed a positive relationship between workplace friendship prevalence (WFP) and OCBO; H7a proposed that positive affect (PA) mediates the relation between WFP and OCBO. PROCESS Model 4 was adopted again. **Table 4** demonstrates the relations among WFP, PA and OCBO. As shown, WFP is not related to OCBO. Hence, Hypothesis 5 is not supported and there is no relation to mediate. However, we examined the indirect effect to see if it was significant. As shown in Table 4, WFP is marginally related to PA and PA is positively related to OCBO. When both WFP and PA are put in the model predicting OCBO, the estimate for the indirect effect of WFP on OCBO via PA is .01 with zero falling inside the 95% bootstrap CI. These results do not support the notion that WFP is indirectly related OCBO via PA and hence H7a is not supported.

H6 proposed a positive relationship between workplace friendship prevalence (WFP) and OCBI; H7b proposed that positive affect (PA) mediates the relation between WFP and OCBI. PROCESS Model 4 was adopted again. **Table 5** demonstrates the relations among WFP, PA and OCBI. As shown, WFP is positively related to OCBI. Hence H6 is supported. WFP is not significantly related to PA, but PA is positively related to OCBI. When both WFP and PA are put in the model predicting OCBI, WFP remains a significant predictor of OCBI and the estimate for the indirect effect of WFP on OCBI via PA is .01 with zero falling inside the 95% bootstrap CI. The mediation effect accounts for 1% of the variance in OCBI, with zero falling inside the 95% bootstrap CI. These results do not support the notion that PA mediates the relations between WFP and OCBI; therefore, H7b is not supported.

Table 3		
Mediation test for	WFO, IM and	<b>OCBI</b>

	Outcome:		Outcome:		Outcome:	
	IM		OCBI		OCBI	
	Coefficient	Se	Coefficient	se	Coefficient	se
Constant	1.02***	.29	0.69**	0.26	.23	.22
Workplace Friendship Opportunity (WFO)	0.15**	.05	.28***	.04	.21***	.04
Impression					.45***	.04
Management (IM)						
R-squared	.02**		.10***		.34***	
F	10.05		43.43		102.26	
(df)	(1, 398)		(1, 398)		(2,397)	
Direct effect of WFO on OCBI					.21***	.04
Indirect effect of WFO					.07	.02
on OCBI via IM (95%					(.0212)	
Bootstrap CI)						
R-squared mediation					.04	
effect size (95%					(.0109)	
Bootstrap CI)						
Normal theory test of					.07*	.02
indirect effect (z)					(3.06)	

*Note.* N=400, \*p<=.05 \*\*p<=.01 \*\*\*p<=.001. WFO=workplace friendship opportunity, IM=impression management, OCBI=organizational citizenship behavior-individual.

# Mediation test for WFP, PA and OCBO

	Outcome:		Outcome:		Outcome:	
	PA		ОСВО		ОСВО	
	Coefficient	Se	Coefficient	Se	Coefficient	Se
Constant	2.52***	.06	2.16***	.06	.63***	.12
Workplace Friendship	.02	.01	.02	.01	.01	.01
Prevalence						
(WFP)						
Positive Affect (PA)					.61***	.04
R-squared	.01		.01		.34***	
F	3.17		3.31		103.17***	
(df)	(1, 398)		(1, 398)		(2,397)	
Direct effect of WFP on					.01	.01
OCBO						
Indirect effect of WFP					.01	.01
on OCBO via PA (95%					(0002)	
Bootstrap CI)						
R-squared mediation					.01	
effect size (95%					(0003)	
Bootstrap CI)						
Normal theory test of					.01	.01
indirect effect (z)					(1.76)	

*Note.* N=400, \*p<=.05 \*\*p<=.01 \*\*\*p<=.001. WFP=workplace friendship prevalence,

PA=positive affect, OCBO=organizational citizenship behavior-organization.

## Mediation test for WFP, PA and OCBI

	Outcome:		Outcome:		Outcome:	
	PA		OCBI		OCBI	
	Coefficient	se	Coefficient	Se	Coefficient	Se
Constant	2.52***	.06	2.13***	.06	1.34***	.13
Workplace Friendship	.02	.01	.05***	.01	.04***	.01
Prevalence						
(WFP)						
Positive Affect (PA)					.32***	.05
R-squared	.01		.05***		.14***	
F	3.17		19.55		32.65***	
(df)	(1, 398)		(1, 398)		(2,397)	
Direct effect of WFP					.04***	.01
on OCBI						
Indirect effect of WFP					.01	.00
on OCBI via PA (95%					(0001)	
Bootstrap CI)						
R-squared mediation					.01	
effect size (95%					(0003)	
Bootstrap CI)						
Normal theory test of				1	.01	.00
indirect effect (z)					(1.70)	

*Note.* N=400, \*p<=.05 \*\*p<=.01 \*\*\*p<=.001. WFP=workplace friendship prevalence,

PA=positive affect, OCBI=organizational citizenship behavior-individual.

Hypothesis 8 stated that workplace friendship quality (WFQ) moderates the relationship between workplace friendship prevalence (WFP) and positive affect (PA). We adopted PROCESS Model 7 to test this hypothesis. Because only those who have 1 or more friends at work filled out the quality items, we only included those participants in this analysis (i.e., N = 337 participants). As shown in **Table 6**, the interaction effect (WFP \* WFQ) is not significant. Therefore, H8 is not supported.

### **Post-hoc Analyses**

Although the moderated mediation hypothesis for friendship quality was not supported, it appears from the analysis that workplace friendship quality is positively related to positive affect and there is evidence that positive affect is positively related to both OCBO and OCBI (see **Table 6**). Therefore, we wondered if PA would mediate the relations between WFQ and OCBO/OCBI. To test this post-hoc hypothesis, we used PROCESS Model 4 again and the results are shown in **Table 7**.

## Table 7 and Table 8

As shown in **Table 7**, workplace friendship quality (WFQ) is positively related to OCBO as well as PA, and PA is positively related to OCBO. When both PA and WFQ are included in the model predicting OCBO, WFQ is no longer a significant predictor of OCBO and the estimate for the indirect effect of WFQ on OCBO via PA is .16 with zero falling outside the 95% bootstrap CI. The mediation effect accounts for 5% of the variance in OCBO, with zero falling outside the 95% bootstrap CI. Based on these results, I conclude that positive affect fully mediates the relationship between workplace friendship quality and OCBO.

**Table 8** presents similar results. WFQ is positively related to OCBI as well as PA, and PA is positively related to OCBI. When both positive affect and WFQ are included in the model predicting OCBI, WFQ remains a significant predictor of OCBI and the estimate for the indirect effect of WFQ on OCBI via PA is .08 with zero falling outside the 95% bootstrap CI. The mediation effect accounts for 5% of the variance in OCBI, with zero falling outside the 95% bootstrap CI. Based on these results, I conclude that positive affect partially mediates the relationship between workplace friendship quality and OCBI.

## Moderated mediation test for WFP, PA and OCBO/OCBI

	Outcome:		Outcome:		Outcome:	
	PA		ОСВО		OCBI	
	Coefficient	se	Coefficient	Se	Coefficient	Se
Constant	2.59***	.05	.67***	.13	1.52***	.14
Workplace Friendship	.00	.01	.01	.01	.03**	.01
Prevalence						
(WFP)						
Workplace Friendship	.27***	.06				
Quality (WFQ)						
Positive Affect (PA)			.61***	.05	.34***	.05
WFP * WFQ	.02	.01				
R-squared	.07***		.35***		.15***	
F	7.90		89.59		32.00	
(df)	(3, 333)		(2, 334)		(2,334)	
Direct effect of WFP on			.01	.01	.03*	.01
OCBO/OCBI			(0103)		(.0105)	
Indirect effect of WFP on			Low01	.01	Low00	.01
OCBO/OCBI at different			(0402)		(0201)	
values of moderator WFQ			Average .00	.01	Average .00	.00
(95% Bootstrap CI)			(0102)	.01	(0101)	.00
			High .01	.01	High .01	.00
			(0102)		(0001)	
Index of moderated			.01	.01	.01	.01
mediation (95% Bootstrap			(0103)		(0002)	
CI)						

*Note.* N=337, \*p<=.05 \*\*p<=.01 \*\*\*p<=.001. WFP=workplace friendship prevalence, PA=positive affect, OCBO= organizational citizenship behavior-organization, OCBI= organizational citizenship behavior-individual.

## Mediation test for WFQ, PA and OCBO

	Outcome:		Outcome:		Outcome:	
	PA		ОСВО		OCBO	
	Coefficient	se	Coefficient	Se	Coefficient	Se
Constant	1.04*	.33	.85**	.33	.23	.27
Workplace Friendship	.27***	.06	.24***	.06	.08	.05
Quality (WFQ)						
Positive Affect (PA)					.59***	.05
R-squared	.07***		.05***		.36***	
F	22.75		18.35		92.25	
(df)	(1, 335)		(1, 335)		(2, 334)	
Direct effect of WFQ on					.08	.05
ОСВО						
Indirect effect of WFQ					.16	.04
on OCBO via PA (95%					(.1024)	
Bootstrap CI)						
R-squared mediation					.05	
effect size (95%					(.0209)	
Bootstrap CI)						
Normal theory test of					.16***	.04
indirect effect (z)					(4.42)	

*Note.* N=337, \*p<=.05 \*\*p<=.01 \*\*\*p<=.001. WFQ=workplace friendship quality,

PA=positive affect, OCBO= organizational citizenship behavior-organization.

## Mediation test for WFQ, PA and OCBI

	Outcome:		Outcome:		Outcome:	
	РА		OCBI		OCBI	
	Coefficient	se	Coefficient	Se	Coefficient	Se
Constant	1.04*	.33	.55	.31	.25	.30
Workplace Friendship	.27***	.06	.32***	.05	.24***	.05
Quality (WFQ)						
Positive Affect (PA)					.29***	.05
R-squared	.07***		.10***		.18***	
F	22.75		36.70		36.05	
(df)	(1, 335)		(1, 335)		(2, 334)	
Direct effect of WFQ on					.24***	.05
OCBI						
Indirect effect of WFQ					.08	.02
on OCBI via PA (95%					(.0413)	
Bootstrap CI)						
R-squared mediation					.05	
effect size (95%					(.0209)	
Bootstrap CI)						
Normal theory test of					.08***	.02
indirect effect (z)						

*Note.* N=337, \*p<=.05 \*\*p<=.01 \*\*\*p<=.001. WFQ=workplace friendship quality, PA=positive affect, OCBI= organizational citizenship behavior-individual.

#### Discussion

The purpose of this study was to see whether friendship at work is associated with employees' engagement in citizenship behavior and to test the underlying mechanisms that may explain why friendships at work may lead employees to engage in citizenship behaviors. This study adds insights into social influences on OCB that go beyond the traditional employer-employee dyad as well as formal coworker relationships by examining informal relationships at work. It contributes to the workplace friendship literature by exploring how different dimensions of workplace friendship are related to people's impression management and affective states and eventually OCBs.

Workplace Friendship Opportunity. Overall, the results of this study suggest that workplace friendship opportunity is an important factor that predicts engagement in OCBO and OCBI. I hypothesized that workplace friendship opportunity is positively related to OCBO via perceived organizational support, which is supported by the data. My results are congruent with the notion that workplace friendship opportunity helps employees view their organizations in a positive light in terms of organizational support. This finding is consistent with social exchange theory which claims that people reciprocate to those who benefit them (Blau, 1965). I also hypothesized that workplace friendship opportunity is positively related to OCBI via impression management. This hypothesis is also supported by the data. Based on the findings, it appears that the more opportunity one has to make friends at work, the more likely s/he is to engage in impression management. Having the opportunity to make friends at work means employees can talk informally, visit and socialize with other employees. When employees work in an environment where the opportunity to make friends is ample, it opens a door for them to build up their ideal image and simply look good in front their co-workers, and this may increase the perceived value of impression management activities. In contrast, when there is little opportunity to make friends, employees may either have too little chance to build up their image or may think it is not worth the effort to do so. Consistent with this logic, I found that employees are less likely to engage in impression management when WFO is low. The results of this study further support the idea that impression management serves as an important predictor for OCBI, consistent with Wayne and Green (1993). It is highly possible that when employees want to be viewed as likable and competent by their co-workers, they show concern and courtesy to the people they want to impress and/or they help them with work-related problems.

Workplace *Friendship Prevalence*. I hypothesized that workplace friendship prevalence is positively related to OCBO via positive affect, which is not supported by the data. To start, the number of friends one has at work is not related to OCBO. It is possible that employees do not consider the fact that they have friends at work to be the result of company effort. This explanation is similar to Morrison's (2004) statement that "the formation of friendships is something that people feel that the organization cannot be responsible for" (p. 4). Because of this employee may not engage in organization focused citizenship behaviours simply because they have a lot of friends at work. Secondly, workplace friendship prevalence is not positively related to positive affect. It might seem logical that the more friends one has at work, the happier s/he is. However, the data suggested otherwise. Having 5 friends at work does not make people happier than when they have just 1. This may be explained by workplace friendship quality, which is an issue to which I return later.

I also proposed that workplace friendship prevalence is positively related to OCBI via positive affect. The positive relationship between workplace prevalence and OCBI is supported. This means that having more friends at work is associated with higher engagement in citizenship behaviours directed at individuals. One possible explanation for this is that the more friends an employee has at work, the more people to whom s/he can offer help, and therefore the more OCBIs in which s/he engages. The hypothesis that the relationship between workplace friendship prevalence and OCBI is mediated by positive affect is not supported by the data and this is because the number of friends at work is not positively related to positive affect one experiences. Workplace friendship prevalence is not related to negative affect either (see **Table 1**). Therefore, it seems that the quantity of friends one has at work has little to do with their affective experiences. We do not know the reason for this and it needs further investigation.

Very few past studies have examined the quantity of friends at work and its relationship to employees' affective states at work. This study extends our understanding of friendship at work by revealing that the number of friends at work is related to OCBI, but it is not related to employees' positive affect. Employees are more helpful when they have more friends at work, but they do not feel happier when they have more friends at work.

*Workplace Friendship Quality*. I hypothesized that workplace friendship quality serves as a moderator of the relation between workplace friendship prevalence and positive affect. More specifically, I suggested that the quantity of friends at work and the quality of them will interact

together to influence positive affect and then citizenship behaviours. I expected that an employee who has higher quality friends would be happier than one who has lower quality friends, given the same quantity of friends at work. This hypothesis, however, is not supported by the data. However, there is evidence that WFQ is a more direct predictor of citizenship behaviours and I examined whether workplace friendship quality is positively related to both OCBO and OCBI via positive affect. From the results of post-hoc analyses, these post-hoc hypotheses are supported. I found that WFQ is positively related to employees' level of positive affect and results are consistent with the idea that PA mediates the link between WFQ and OCB (I and O). These results suggest that the existence of high quality friendships at work can benefit organizations in that employees are more likely to be in a positive mood when they have good quality friends, and this in turn is associated with engagement in both OCBO and OCBI. This finding is consistent with past research which found a positive relation between friendship quality and performance of OCBI (e.g. Settoon & Mossholder, 2002).

### Limitations

The limitations of this study should be noted. First of all, this study involved cross-sectional data. I attempted to get a second wave of data by sending an email to 309 students who agreed to participate in a follow-up study, but the number of responses that was received (N = 81 and only 74 in same jobs as Time 1) was not enough to do the PROCESS analyses with those data. As a result, biases might exist in the cross-sectional analyses pertaining to mediation effects. As noted by Maxwell and Cole (2007), when the predictor and the mediator are relatively stable, the cross-sectional indirect effect can be substantially positively biased in cross-sectional tests. In this study, the predictor workplace friendship opportunity, as well as the mediators POS and IM, are relatively stable variables; therefore, the mediation effects might have been positively biased. Also, unlike longitudinal designs that allow for examinations of which variables are causes and which variables are effects (MacKinnon, Lockwood, Hoffman, West & Sheets, 2002), cross-sectional analyses do not allow examination of causal relations. Therefore, we cannot draw a firm conclusion about the causal direction of the relations between workplace friendship and OCB, and it is possible that engaging in more OCBs may cause people to have more/better quality friends. Future research can try to collect panel data to address this issue.

Secondly, in this study we used self-report measures for all the variables. In the case of OCB, it is possible that employees tend to see themselves in a positive light and hence may have inflated their self-reports of OCB. This may have caused the data for OCB to be inaccurate. However, the alternative approach of using supervisors and co-workers to report on OCBs is potentially more biased than self-report measures (see Monte Carlo study by Steel & Kammeyer-Mueller, 2002). One reason for this may be that others do not have the opportunity to see all of the relevant behaviours included in the OCB measures. For example, for the OCBO, there is one item that asks about how often an employee attends work events that are not required but that help the image of the organization. Managers or co-workers may not know if employees attend these events because the events are not required, and they may not attend either. Consistent with this, Dalal (2005) stated that supervisors will make judgments about employee OCBs on the basis of their general impressions of the employees, which is an instance of halo error. Still, it is possible that relations observed in this study were inflated due to common source bias because all the data in this study was provided by the same source (i.e., the focal participants). According to Spector's responses to questions about how to deal with common method bias, one way to rule out this problem is by pointing to correlations in the study that are non-significant and near zero. (an interview reported in Brannik, Chan, Conway, Lance & Spector, 2010). As shown in Table 1, 23 out of 90 correlations (26%) in this study are not significant and the relation between deviance behaviours and workplace friendship prevalence is r = .00 (p = .95). This makes us more confident that the results we have are not simply a result of the characteristics of the participants or their moods at that particular moment. Another way to rule out the possibility of inflated relations due to a possible third variable is to show that variables in this study are not related to social desirability or to negative affectivity, which are known to affect self-report ratings (Brannik et al., 2010). In this study, impression management may be considered as a proxy variable for social desirability. As shown in Table 1, IM is not significantly related to POS, in-role behaviours and deviance behaviours. We also measured negative affect. It is not significantly related to OCBO and OCBI (see Table 1), which are the dependent variables of our model; it also is not significantly related to workplace friendship quality and workplace friendship prevalence, which are the independent variables. Based on all these results, I am rather confident that the results are not unduly biased due to having a single source for all measured variables. This said, I still admit that having all data provided at a single time by a single source is a weak study design.

A third limitation is that I measured workplace friendship quality by asking participants to rate all their friends in general, instead of on individual basis. This can be problematic when one has high and low quality friends at the same time. Each participant may have averaged these ratings in their own way. It may have been more accurate if we had asked participants to name each friend they have at work and then rate the quality of friendship with each individual, and calculate the average friendship quality afterwards, but this involves much more work for the participants, especially when they have many friends at work.

Another limitation of this study is that workplace friendship prevalence is captured by a single item (i.e., "how many friends do you have at work?") and I could not assess the internal consistency of this measure given that there is only one answer. However, I do have 74 participants who filled out the follow up survey and stayed in the same job as in the first survey. By comparing their answers at both times, I was able to examine whether the measurement of friendship prevalence has high test-retest reliability. The correlation of friends at time 1 and time 2 is significant (N=74, r=.57, p<.001). This provides some evidence that the measure of friendship prevalence is reliable.

The last limitation pertains to the generalizability of this study beyond the convenience sample that was studied. Participants in this study are young and are mostly part-time workers. They have been with their current employers for a relatively short period of time (on average about 2 years). It is possible that older workers, full-time workers, or employees with long tenure will attach different importance to informal workplace relationships, which could affect the associations between these relationships and citizenship behaviors. Also, many participants worked in jobs that had an interpersonal nature (e.g., customer service, retail sales); as a result, they may have more opportunities to engage in helping behaviors. Future research should expand the sampling from the population of workers to study employees of different ages, tenures, work status, and industries to extend the current study.

#### **Managerial Implications**

The most important finding of the current study for managers is that the opportunity to make friends at work, and the quality of friendships at work, appear to have positive relations with citizenship behaviours directed at both individuals and organizations. This corroborates past research that has shown similar results (e.g., Settoon& Mossholder, 2002). The number of friends at work also predicts citizenship behaviours directed at individuals. Given that OCBs exert positive

effects on organizations, such as influencing the bottom line (Podsakoff et al., 2009), managers should try to provide employees with more opportunity to interact and communicate with each other. Changing the layout of offices and open door policies might be advantageous. Companies can try to arrange some public areas where employees can enter freely and interact with each other. For example, it would be helpful to have communal lunch-rooms where employees can sit down together and communicate. Particularly for companies where employees work on their own and do not interact with each often, this may be useful. Organizations should also try encouraging informal networks of communication which can provide more opportunities for workplace friendships to form (Song, 2006).

Another important finding of this study is that it is the quality of friendship, not the quantity of friends, that seems to be associated with more positive affective states of employees and in turn more citizenship behaviours. Therefore, companies should not just offer opportunities for employees to make friends, it is equally important to create an environment where employees can really get to know each other, trust each other and build up strong relationships. Companies can organize events that are targeted at strengthening employee relationships or can redesign projects in a way that employees can work together.

Another way to think about building friendships at work is to think about how employees are hired into the organization. Bird (1989) identified forces that bring people together for any purpose, such as likeability, proximity and alikeness. Attraction theory posits that similarity with a target, with respect to personality traits, attitudes or other attributes, is associated with attraction to the target (see meta-analysis by Montoya and Horton, 2013). Based on many tests of this theory, people are more likely to form relationships with others with whom they share similarity. Companies can consider hiring people who share similar interests, personality traits and values. In this way, employees may be more likely to develop friendships and high quality friendships. It should be noted, however, that companies should avoid focusing on surface-level similarities, such as gender, age and ethnicity, as this can lead to discrimination in hiring processes.

Despite the benefits of workplace friendship, there are potential downsides as well. For example, there is evidence that workplace friendship can lead to romantic relationships, as well as sexual harassment (Song, 2006). The results of an empirical study also suggest that workplace friendship has the possibility of undermining employees' loyalty to the organization and generating favouritism (Berman et al., 2002). Some companies may be worried that people will

slack off if they have too many friends at work, but the data in this study do not show this would be a problem. I collected data on other work-related behaviours such as in-role performance and workplace deviance, and I looked at the relations of these variables with workplace friendship opportunity, workplace friendship prevalence and workplace friendship quality. As shown in **Table 1**, workplace friendship opportunity is positively related to in-role behaviours (r = .28, P<.001) but negatively related to deviance behaviours (r=-.20, p<.001). The relations between workplace friendship prevalence and these variables are not significant. Workplace friendship quality and deviance behaviours are negatively correlated (r = .20, p<.001). The results suggest that friendship opportunity and high quality friendship make people more likely to do the work that they are required to do, more likely to engage in OCBs, and also less likely to engage in minor deviance behaviours.

#### **Directions for Future Research**

This study offers some avenues for future research. First, as noted above, the sample of this study is representative of young employees, who are doing mostly entry-level jobs and who are receiving university education. Goldgehn (2004) states that millennials desire authenticity and meaningfulness when establishing relationships. The significant relations between variables might due to the fact that millennials (who form the majority of the sample) attach more importance to friendship at work than professionals of other generations or that young professionals attach more importance to friendship at work than older professionals, which would lead them to engage in more citizenship behaviors. Future research should probably examine whether it is a generational factor or life stage factor, and whether the findings observed here would apply to a broader population. It would be worth exploring, for example, if millennials will continue to care about friendship at work as they get older or if this variable will become less important over time for employees of that generation. A longitudinal study could help find out the answer to this question.

Another possible direction for future research is to look at personal needs that might influence the consequences of workplace friendships. One need that could be worth exploring is the need for relatedness. The need for relatedness refers to an individual's desire to be socially connected with people around them and be supported by them (Gagné & Deci, 2005) and there

may be individual differences in the strength and intensity of this need (Baumeister & Leary, 1995). Individuals who have a higher need for relatedness may place more importance on workplace friendship opportunity and the quality of workplace friendships. If so, they may be more likely to engage in citizenship behaviors when they have higher friendship opportunity and higher friendship quality at work. Future research should examine more factors that may affect the relation between workplace friendship and engagement in citizenship behaviors.

Last, future research could try to determine whether there is something truly special about informal friendships at work that goes beyond support that is received in formal coworker relations. As noted earlier, Chiaburu and Harrison's (2008) meta-analysis found that when an employee receives support from coworkers, the focal employee is more likely to engage in OCBIs. We found a similar result in this study which shows that having high quality friendships leads to more OCBs. Future research can probably explore whether there is a difference between formal coworker relationships and informal friendships at work in contributing to OCBs. Researches can try to answer weather informal friendships at work will add extra OCBs to workplace on top of formal coworker relationships.

#### Conclusion

As citizenship behaviors have the capacity to improve organizational life and facilitate the effective functioning of organizations, OCB has received considerable research attention. This study intended to find out whether friendship at work is associated with employees' engagement in citizenship behaviors. And the answer is yes; when employees have the opportunity to make friends, they are better citizens in terms of their actions toward both individuals and the organization as a whole. These relations are mediated in part by employees' impression management tactics and perceived organizational support, respectively. Having more friends are work is also related to people being more helpful to their coworkers. Having high quality friendships at work is related to people being happier and engaging in more citizenship behaviors that are beneficial for both individuals and the organization. This study enriches the literature on both workplace friendship and OCB by adding insights into social influences on OCB that go

beyond formal workplace dyads and by studying multiple aspects of workplace friendship. Companies can benefit from creating more friendship opportunity at work and promoting high friendship quality among employees. Given the fact that our sample is mostly young and they are university students, these results may be most applicable to organizations who have hired, or who intend to hire, young professionals from the millennial generation.

## References

Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, *84*, 888-918.

Armeli, S., Eisenberger, R., Fasolo, P., & Lynch, P. (1998). Perceived organizational support and police performance: the moderating influence of socioemotional needs. *Journal of Applied Psychology*, *83*, 288-297.

Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship". *Academy of Management Journal*, *26*, 587-595.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497-529.

Berman, E. M., West, J. P., & Richter Jr, M. N. (2002). Workplace relations: Friendship patterns and consequences (according to managers). *Public Administration Review*, *62*, 217-230.

Beauregard, T. A., & Henry, L. C. (2009). Making the link between work-life balance practices and organizational performance. *Human resource management review*, *19*, 9-22.

Bird, B. J. (1989). Entrepreneurial Behaviour. Engineering Management Journal, 1, 37-40.

Blau, P. M. (1965). The comparative study of organizations. ILR Review, 18, 323-338.

Bowler, W. M., & Brass, D. J. (2006). Relational correlates of interpersonal citizenship behavior: a social network perspective. *Journal of Applied Psychology*, *91*, 70-82.

Borman, W. C., & Motowidlo, S. M. (1993). Expanding the criterion domain to include elements of contextual performance. *Personnel Selection in Organizations; San Francisco: Jossey-Bass*, 71-98.

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

Bolino, M. C., & Turnley, W. H. (1999). Measuring impression management in organizations: A scale development based on the Jones and Pittman Taxonomy. *Organizational Research Methods, 2,* 187-206.

Brannick, M.T., Chan, D., Conway, J.M., Lance, C.E., & Spector, P.E. (2010). What is method variance and how can we cope with it? *Organizational Research Methods*, *13*, 407-420.

Clark, L. A., Watson, D., & Leeka, J. (1989). Diurnal variation in the positive affect. *Motivation and Emotion*, 13, 205-234.

Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, *37*, 12-24.

Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, *93*, 1082-1103.

Cohen, A., & Abedallah, M. (2015). The mediating role of burnout on the relationship of emotional intelligence and self-efficacy with ocb and performance. *Management Research Review*, *38*, 2-28.

Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance*, *13*, 46-78.

Ducharme, L. J., & Martin, J. K. (2000). Unrewarding work, coworker support, and job satisfaction a test of the buffering hypothesis. *Work and Occupations*, *27*, 223-243

Ehrhart, M. G. (2004). Leadership and procedural justice climate as antecedents of unit-level organizational citizenship behavior. *Personnel Psychology*, *57*, 61-94.

Ehrhart, M. G., & Naumann, S. E. (2004). Organizational citizenship behavior in work groups: a group norms approach. *Journal of Applied Psychology*, *89*, 960-974.

Farh, J. L., Podsakoff, P. M., & Organ, D. W. (1990). Accounting for organizational citizenship behavior: Leader fairness and task scope versus satisfaction. *Journal of Management*, *16*, 705-721.

Fritz, C., & Sonnentag, S. (2007). Antecedents of day-level proactive behavior: A look at job stressors and positive affect during the workday. *Journal of Management, 34,* 94-111.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior, 26, 331-362.* 

George, J. M., & Brief, A. P. (1992). Feeling good-doing good: a conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological Bulletin*, *112*, 310-329.

Gould, S., & Penley, L. E. (1984). Career strategies and salary progression: A study of their relationships in a municipal bureaucracy. *Organizational Behavior and Human Performance*, *34*, 244-265.

Gibbons, D. E. (2004). Friendship and advice networks in the context of changing professional values. *Administrative Science Quarterly*, *49*, 238-262.

Goldgehn, L. A. (2004). Generation who, what, Y? What you need to know about Generation Y. *International Journal of Educational Advancement*, *5*, 24-34.

Graham, J. W. (1989). Organizational citizenship behavior: Construct redefinition, operationalization and validation. Working paper, Loyola University, Chicago.

Graham, J. W. (1991). An essay on organizational citizenship behavior. *Employee Responsibilities and Rights Journal*, *4*, 249-270.

Hackman, J. R., & Lawler, E. E. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology*, 55, 259-286.

Isen, A. M., & Baron, R. A. (1991). Positive affect as a factor in organizationalbehavior. *Research in organizational behavior*, *13*, 1-53.

Jones, E. E., & Pittman, T. S. (1982). Toward a general theory of strategic selfpresentation. *Psychological perspectives on the self*, *1*, 231-262.

Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, *9*, 131-146.

Konovsky, M. A., & Organ, D. W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. *Journal of Organizational Behavior*, *17*, 253-266.

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of applied psychology*, *87*, 131.

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods*, *12*, 23-44.

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, *7*, 83–104.

Morrison, R. (2004). Informal Relationships in the Workplace: Associations with Job Satisfaction, Organizational Commitment and Turnover Intentions. *New Zealand Journal of Psychology*, *33*, 114-128

Mao, H. Y. (2006). The relationship between organizational level and workplace friendship. *The International Journal of Human Resource Management*, 17, 1819-1833.

Mendelson, M. J., & Aboud, F. E. (1999). Measuring friendship quality in late adolescents and young adults: McGill Friendship Questionnaires. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, *31*, 130-149.

Montoya, R. M., & Horton, R. S. (2013). A meta-analytic investigation of the processes underlying the similarity-attraction effect. *Journal of Social and Personal Relationships*, *30*, 64-94.

Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management Journal*, *36*, 527-556.

Nielsen, I. K., Jex, S. M., & Adams, G. A. (2000). Development and validation of scores on a two-dimensional workplace friendship scale. *Educational and Psychological Measurement*, *60*, 628-643

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, *48*, 775-802.

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

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

Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. *Research in organizational behavior*, *12*, 43-72.

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.

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual-and organizational-level consequences of organizational citizenship behaviors: A metaanalysis. *Journal of Applied Psychology*, *94*, 122-141.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of Applied Psychology*, 87, 698-714.

Riordan, C. M., & Griffeth, R. W. (1995). The opportunity for friendship in the workplace: An underexplored construct. *Journal of Business and Psychology*, *10*, 141-154.

Rosenfeld, P. R., Giacalone, R. A., & Riordan, C. A. (1995). Impression management in organizations: Theory, measurement, and practice. New York: Routledge.

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of management journal*, *38*, 555-572.

Sapadin, L. A. (1988). Friendship and gender: Perspectives of professional men and women. *Journal of Social and Personal Relationships*, *5*, 387-403.

Settoon, R. P., & Mossholder, K. W. (2002). Relationship quality and relationship context as antecedents of person-and task-focused interpersonal citizenship behavior. *Journal of Applied Psychology*, *87*, 255-267.

Scott, B. A., & Colquitt, J. A. (2007). Are organizational justice effects bounded by individual differences? An examination of equity sensitivity, exchange ideology, and the Big Five. *Group & Organization Management*, *32*, 290-325.

Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of applied psychology*, *68*, 653-663.

Song, S.H. (2006) Workplace Friendship and Employees' Productivity: LMX Theory and the Case of the Seoul City Government, *International Review of Public Administration*, *11*, 47-58.

Steel, P. D., & Kammeyer-Mueller, J. D. (2002). Comparing meta-analytic moderator estimation techniques under realistic conditions. *Journal of Applied Psychology*, 87, 96-111.

Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology*, *78*, 774-780.

Vandyne, L., Cummings, L. L., & Parks, J. M. (1995). Extra-role behaviors-in pursuit of construct and definitional clarity (a bridge over muddied waters). *Research in organizational behavior: an annual series of analytical essays and critical reviews*, *17*, 215-285.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, *54*, 1063-1070.

Wayne, S. J., & Green, S. A. (1993). The effects of leader- member exchange on employee citizenship and impression management behavior. *Human Relations*, *46*, 1431-1440.

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leadermember exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82-111.

Wegener, D. T., & Petty, R. E. (1994). Mood management across affective states: the hedonic contingency hypothesis. *Journal of Personality and Social Psychology*, *66*, 1034-1048.

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

Williams, S., & Shiaw, W. T. (1999). Mood and organizational citizenship behavior: The effects of positive affect on employee organizational citizenship behavior intentions. *The Journal of Psychology*, *133*, 656-668.

Winstead, B. A., Derlega, V. J., Montgomery, M. J., & Pilkington, C. (1995). The quality of friendships at work and job satisfaction. *Journal of social and personal relationships*, *12*, 199-215.

Wright, P.H (1984). Self-referent Motivation and the Intrinsic Quality of Friendship. *Journal of Social and Personal Relationship*, *1*, 115-130.

Zagenczyk, T. J., Gibney, R., Murrell, A. J., & Boss, S. R. (2008). Friends don't make friends good citizens, but advisors do. *Group & Organization Management*, *33*, 760-780.

## Appendix A

For the purpose of this study, we define a "friend at work" as someone with whom you choose to have a relationship because you find the relationship enjoyable. A friend at work would be someone with whom you socialize outside of work and/or with whom you share personal information or other interests beyond your job. A friend at work involves more than being friendly and courteous with a colleague when you are at work; it involves having a pleasing relationship with that person outside of work as well.

Thinking about your friends at work (consistent with the definition above), please indicate how much you agree or disagree with the statements below. Click the choice that is the most accurate overall, even if does not describe each and every friendship that you have.

Overall, my friends at work...

- 1. have good ideas about entertaining things to do. (4)
- 2. make me laugh. (7)
- 3. are exciting to be with. (22)
- 4. are fun to sit and talk with. (28)
- 5. know when I am upset. (8)
- 6. are those who I can tell secrets to. (15)
- 7. know when something bothers me. (21)
- 8. are easy to talk to about private things. (29)
- 9. would want to stay my friend if we didn't see each other for a few months. (5)
- 10. would still want to be my friend even if we had a fight. (12)
- 11. would stay my friend even if other people criticized me. (16)
- 12. would stay my friend even if other people did not like me. (20)
- 13. make me feel smart. (6)
- 14. make me feel special. (19)
- 15. compliment me when I do something well. (17)
- 16. point out things that I am good at. (10)
- 17. make me feel that I can do things well. (25)
- 18. would make me feel comfortable in a new situation. (2)
- 19. would be good to have around if I were frightened. (11)
- 20. would make me feel calmer if I were nervous. (23)
- 21. make me feel better when I'm upset. (30)

*Note.* We adopted the McGill Friendship Questionnaire—Friend's Functions (Mendelson & Aboud, 1999). The numbers in the brackets at the end of each item refer to official numbering of the original scale.

# Appendix **B**

Impression management items

- 1. I talked proudly at work about my experience or education.
- 2. I made other people at work aware of my talents or qualifications.
- 3. I let other people at work know that I am valuable to the organization.
- 4. I made other people at work aware of my accomplishments.
- 5. I praised my colleagues for their accomplishments so they would consider me a nice person.

Note. We adopted items developed by Bolino & Turnley (1999, p. 199)