Antecedents of government employees' organizational citizenship behavior: impacts of prosocial orientation, organizational identification and subjective OCB norms

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ANTECEDENTS OF GOVERNMENT EMPLOYEES’ ORGANIZATIONAL CITIZENSHIP BEHAVIOR: THE IMPACTS OF PROSOCIAL ORIENTATION, ORGANIZATIONAL IDENTIFICATION AND SUBJECTIVE OCB NORMS

by

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Abstract

This study attempts to provide a comprehensive understanding of the antecedents of public employees’ organizational citizenship behaviors (OCBs). Using Deci and Ryan’s Self-determination theory as an overarching framework, this study tests the argument put forth by public management researchers that public employees’ OCB will be influenced by their personal beliefs and organizational values as well as by their general satisfaction with their work environment. Based on this notion, public employees’ prosocial orientation, organizational identification and subjective OCB norms are thus examined as major antecedents of OCB in this study.

The sample was drawn from Korean local government employees who were students in the Korean Training Institute. Out of 610 surveys distributed, 471 surveys were returned. Hypothesis tests were conducted using ordinary least square (OLS) regression analyses. Interaction effects of subjective OCB norms and organizational identification on OCB variables were examined using simple slope analysis; and the potential mediation role of organizational identification between OCB antecedents and OCB variables was also examined.

The overall results of the hypothesis tests provided mixed support. Primary job satisfaction, procedural justice, and LMX leadership exhibited statistically significant associations with OCB variables. However, the strength of associations either decreased or disappeared when the self-concept variables were entered. Organizational identification, subjective OCB norms, and task interdependence were found to have
positive associations with OCB variables, and the significant increases of various indexes of goodness of fit suggested that the addition of those variables enhanced the explanatory power of the suggested regression models. Prosocial behavior was excluded from further analyses, and scales of several variables were modified based on the results of the factor analyses. Although interaction effects could not be fully examined in the current data analyses, negative associations between organizational identification and OCBs were found as hypothesized. The findings from this study suggest that public managers can enhance employees’ OCBs in their organizations by developing organizational cultures or providing appropriate work environments that encourage such behaviors.
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Organizational Citizenship Behavior (OCB) can be described as behavior that contributes “to the maintenance and enhancement of the social and psychological context that supports task performance” (Organ, 1997, p. 91). According to Organ and his colleagues (Bateman & Organ, 1983; Organ, 1990, 1997; Organ & Konovsky, 1989; Organ & Lingl, 1995; Organ, Podsakoff, & MacKenzie, 2005; Smith, Organ, & Near, 1983), OCB is an important antecedent of organizational performance in that it can facilitate work processes by filling the gaps associated with non-prescribed tasks that job descriptions might not cover clearly (Bateman & Organ, 1983; Smith, et al., 1983). Katz (1964) argued that an organization should encourage organizational members to engage in innovative and spontaneous activities to improve organizational performance. According to Katz, employees’ extra-role behaviors such as helping others, suggesting constructive ideas to their organizations, participating in training activities that will enhance their job performance, and helping their organizations to have a favorable image in their communities can be essential for organizational survival and effectiveness.

These employee citizenship behaviors are particularly critical in enhancing government organizations’ productivity since they can help government organizations fill the gaps that formal bureaucratic processes cannot cover completely due to limited resources and administrative procedures. When engaging in citizenship behaviors, public employees, similar to their counterparts in the private sector, can seek ways to enhance organizational performance. In doing so, they would provide better public service and build a better organizational atmosphere; citizenship behaviors of public employees can
improve the welfare of citizens and enhance the image of public organizations (Vigoda & Golembiewski, 2001). Thus, public services can be delivered at a higher quality and with greater economic efficiency when employees interact with their clients in ways that exhibit high levels of citizenship behavior.

1. Overview of Study

This study attempts to provide a comprehensive understanding of public employees’ antecedents of OCB. First, this study draws on traditional OCB studies from traditional management literatures and identifies public employees’ job satisfaction, organizational justice, leader-member exchange and task interdependence as major antecedents of OCB. A basic tenet of this traditional approach is the assumption that public employees will be more likely to engage in OCB when they are satisfied with their work environment. In other words, OCB is understood as employees’ discretionary contribution to their organizations when they perceive that they are well taken care of by their employing organizations. However, public employees’ citizenship behaviors might not be fully explained by traditional OCB studies. For example, how can we explain why many firefighters came to the World Trade Center on 9/11 and died trying to save others’ lives even when they were off-duty on that day? Why do many policemen get involved in crime scenes even when they have not been called to the crime scene? And many social welfare case workers get involved in voluntary work that is not directly part of their job.

Ryan and colleagues’ (Deci & Ryan, 2000; Gagne & Deci, 2005; Ryan & Deci, 2000) Self-determination theory (SDT) provides one approach for examining these
questions by explaining motivation along a continuum from external regulation to intrinsic motivation. Using SDT as an overarching framework, this study will test the argument put forth by public management researchers that public employees’ OCB will be influenced by their personal beliefs and moral obligations as well as by their general satisfaction with the work environment. Several empirical studies have examined the utility of public service motivation, and found that public employees place a high value on providing better service to citizens and become involved in altruistic behaviors based on their convictions (e.g., Brewer & Gardner, 1996; Crewson, 1997; Perry, 1996, 1997; Perry & Wise, 1990). In line with previous public management studies, this study will test whether public employees’ prosocial orientation provides their primary behavioral guideline with respect to OCB. However, this study does not just limit its focus to examining personal orientation or conviction to explain public employees’ citizenship behaviors. Rather, this study will also test the implications of various identity theories, which suggest that public employees learn the value of OCB through their organizational life in government organizations. Public workers might learn about the appropriate citizenship behaviors from other co-workers (Ehrhart & Naumann, 2004; Kamdar, McAllister, & Turban, 2006; Morrison, 1994), or they might engage in citizenship behaviors as they identify with their organizations (Dick, Grojean, Christ, & Wieseke, 2006; Dukerich, Golden, & Shortell, 2002; Mael & Ashforth, 1992). Thus, the value of government agencies as public institutions will play a role as public employees’ behavioral guidelines. Based on this notion, public employees’ prosocial orientation, organizational identification and OCB norms are proposed as important antecedents for understanding public employees’ citizenship behaviors. Thus, this study attempts to
provide a clearer picture of why public employees engage in OCB using SDT as an overarching theoretical framework to explain public employees’ citizenship behavior. Interaction effects among three variables will be examined based on SDT’s theoretical implications.

The present study was conducted with a field survey of local government employees in Korea. The survey items were developed using multiple items used in previous studies. A total of 610 surveys were distributed and 452 responses were used for the data analyses.

2. Self-determination Theory and Implication to OCB

The core concept of SDT lies in the distinction between autonomous motivation and controlled motivation (Deci & Ryan, 1985, 2000; Ryan & Deci, 2000). Based on findings regarding intrinsic motivation in various experimental settings (Deci, Koestner, & Ryan, 1999; Deci & Ryan, 1980), SDT suggests that feelings of competence and autonomy enhance an individual’s intrinsic motivation, and lead an individual to pursue his/her goal with persistence. On the other hand, SDT theory also acknowledges that external rewards and punishment can serve as extrinsic motivation factors to control individuals’ behaviors. SDT defines motivation by reward and punishment as external regulation since the continuation of the behavior will be short and the consistency of the behavior will fluctuate according to the importance of the contingent rewards and punishment to the individual.

On the continuum from external regulation to intrinsic motivation, SDT also examines how extrinsic motivation can influence individuals’ behaviors using the
concept of internalization. Internalization refers to the degree to which individuals take on rules and regulations as their internal values. More specifically, three different types of internalization—introjected regulation, identified regulation and integrated regulation—have been defined according to the degree of internalization of external rules or values. Different types of extrinsic motivation can emerge depending on how much individuals accept organizational rules and internalize the value of organizational norms to guide their behaviors. While individuals motivated by introjected regulation internalize organizational rules partially to protect their self-esteem, individuals motivated by integrated regulation internalize organizational rules fully and identify such rules with their self-concept. Figure I-1 presents the SDT continuum, and suggests that different types of extrinsic motivation can emerge depending on the degree of the individual’s internalization.

SDT has important implications for work motivation theories (Gagne & Deci, 2005). First, the notion of autonomous motivation explains why employees would show higher job performance when they find meaning in their jobs. More importantly, SDT explains how employees who do not experience intrinsic motivation from their work can still show consistent work behaviors. SDT recognizes that employees’ work motivation can also be influenced by such factors as the instrumentality of rewards and punishment that are contingent on their work performance, and the degree of individuals’ internalization of organizational rules and values. Since many jobs cannot be practically ‘intrinsically interesting’ and monetary rewards are still important motivation factors in their organizational lives, the acknowledgement of extrinsic motivation processes can
provide reasonable explanations of employees’ organizational behaviors (Gagne & Deci, 2005).

**Figure I-1 The self-determination continuum**

![The self-determination continuum diagram](image)

(Source: Gagne & Deci, 2005, p. 336)

SDT can also provide an integrative perspective for OCB studies. First, autonomous motivation processes suggest that public employees who find their intrinsic value from helping others are more likely to engage in OCB. Since employees’ autonomous motivation can be enhanced when public employees find meaning in their jobs, these employees are more likely to engage in OCB when they have intrinsic motivation to help others in their organizations. On the other hand, identified and
integrated regulation processes imply that employees can engage in OCB, not only because they can benefit from economic incentives but also because they may internalize organizational rules or values that emphasize OCB. Thus, by using SDT, this study can examine broader antecedents and provide a more refined understanding of the relationships between these antecedents and employees’ OCB (Gagne & Deci, 2005).

3. Of What Importance Is Public Employees’ Citizenship Behavior?

Merton (1940) pointed out that bureaucrats tend to be constrained by the formality of bureaucratic rules. Since bureaucrats are expected to focus on abstract categorizations of cases to provide generalized service to most citizens, public service should be impersonalized. On the other hand, when citizens expect that their cases will be given special care, they are likely to be frustrated with government services. Similarly, government services that emphasize professionalism and formality to accomplish their work efficiently have been criticized due to their inflexibility and lack of ability to provide adequate service to the public. Moreover, since bureaucrats are appointed to their positions not elected, the bureaucratic organizational structure can make it harder for public employees to see themselves as responsible for public policy outcomes and the quality of public service. Thus, government organizations can easily lose democratic values due to their bureaucratic nature, and it is difficult to bring the will of citizens to government work processes.

Wise (2005) argued that public sector employees need to have more personal involvement to overcome the aforementioned limitations of bureaucracy, and pointed out that public servants should be involved in implementing public policy actively and should
make their own voices heard. In addition, he argued that public employees should be engaged in issue networks to “identify pitfalls and problems that can undermine program success” (p. 349). From this perspective, public sector agencies should craft their jobs more proactively, and public managers should include entrepreneurship in defining the scope of their work (Gawthrop, 1998). As a result, public employees would be expected to develop more initiatives rather than just follow bureaucratic rules (Frederickson, 1971). As public employees engage in these types of citizenship behaviors, they would also contribute to building a stronger democratic governance structure (Vigoda & Golembiewski, 2001).

Public employees’ citizenship behaviors that include their spontaneity, proactive involvement in citizens’ problem, and active engagement in finding the problems of current public service provision with a high level of entrepreneurship also can be critical in the context of New Public Management initiatives. NPM proponents have argued that public sector organizations need to optimize the use of government resources and improve organizational performance by encouraging competition and adopting business practices in such areas as customer service, performance measurement, and market incentives (Barzelay, 2001; Dunleavy & Hood, 1994; Kaboolian, 1998; McLaughlin, Osborne, & Ferlie, 2002; Osborne & Gaebler, 1992). In principle, public sector employees’ initiatives and proactiveness are critical as government organizations are deregulated in ways that provide more power to public managers and more flexibility to public employees.

However, critics of NPM initiatives have pointed out that the importance of public employees’ citizenship behaviors has been overshadowed rather than emphasized
by the New Public Management efforts (Vigoda & Golembiewski, 2001). As NPM reforms emphasize market-driven management practices, public employees in agencies initiating such reforms are likely to focus on roles established through market transactions and put less energy into efforts that go beyond these required roles (Kanfer, 1991; P. M. Wright, George, Farnsworth, & McMahan, 1993). As a result, the importance of public employees’ citizenship behaviors, which have traditionally been overshadowed by traditional bureaucratic values that focused on impersonality and neutrality, could now be diminished due to current market-driven reform initiatives. In addition, as regulations designed to protect citizens are removed, government institutions might lose citizens’ trust, which would have further negative outcomes for government organizations (Comfort, 2002; Peters & Pierre, 1998; L. D. Terry, 2005). Moreover, NPM’s efforts to eliminate red tape might ultimately reduce the organizational capacity and integrity of government agencies without public employees’ active engagement in citizenship behaviors. In that regard, it is worthwhile to revisit the role of citizenship behaviors of government employees (Vigoda & Golembiewski, 2001).

Although the importance of OCB has been recognized by several public management scholars, the antecedents of OCB have not yet been fully examined in the context of government organizations. As noted above, public service motivation scholars have argued that public employees have distinct motivational bases that could lead public employees to engage in citizenship behavior (Crewson, 1997; Houston, 2000; Kim, 2005; Perry, 2000), but this research says little about how individuals learn and develop prosocial values in their organizational lives. Alternatively, several studies have adopted a social exchange perspective and examined the influence of such variables as job
satisfaction, justice perception and perceived supervisory support as important predictors (e.g., Alotaibi, 2001; Coyle-Shapiro & Kessler, 2002; Coyle-Shapiro, Morrow, & Kessler, 2006). Although these approaches are helpful in explaining government employees’ OCB, they are limited in explaining why public employees tend to engage in citizenship behavior proactively in the face of unsatisfactory working conditions. Moreover, previous studies have examined different sets of variables and a comprehensive examination of various antecedents has not been conducted in a single study. This study plans to provide a clearer picture of public employees’ citizenship behaviors by drawing on different theoretical explanations of OCB.

4. Organization of the Dissertation

Chapter II of this dissertation will review the literatures on OCB and examine its relationships with major antecedents such as job satisfaction, procedural justice, leader-member exchange, prosocial orientation and organizational identification. Major hypotheses will be developed based on the integration of several literatures in this review. In Chapter III, the research methodology, including sampling procedure, measurement and data collection process will be described. Chapter IV will present the empirical results of data analyses and examine the validity of the measurement model, as well as describe the causal relationships among antecedents and OCBs. Chapter V will discuss the implications of findings and suggest directions for future research based on the limitations of the current study as well as issues raised in the findings. The theoretical and practical contribution of this study will be also discussed in Chapter V.
5. Chapter Summary

This chapter has briefly reviewed previous OCB studies and discussed their limitations for studying public sector employees. It has also introduced SDT as a theoretical background for this study. Based on the assumptions underlying of SDT, this chapter identified major variables for the current study and briefly examined a basic conceptual model for the current study. The theoretical and practical significance of current study was also discussed, as well as potential theoretical implications of the study for current OCB literatures. The following chapter will review literatures that serve as a foundation for the current study and develop hypotheses based on these literatures.
Chapter II. Literature Review and Hypotheses

The purpose of this chapter is to review the OCB literatures that have examined OCB from different theoretical perspectives. First, this chapter clarifies the definition of OCB and distinguishes it from other constructs that share commonalties with OCB. This chapter also reviews previous OCB studies from two different theoretical perspectives—social exchange theory and public employees’ self-concept. This chapter shows that different theoretical perspectives have focused on different antecedents, and this study suggests that public employees’ prosocial orientation, organizational identification and OCB norms should be considered as important antecedents of OCB for public sector employees. A conceptual framework that includes main and interactional effects of those three variables is presented.

1. Definition of OCB

Organ (1988) defined organizational citizenship behaviors as follows:

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. By discretionary, we mean that the behavior is not an enforceable requirement of the role or the job description, that is, the clearly specifiable terms of the person’s employment contract with the organization; the behavior is rather a matter of personal choice, such that its omission is not generally understood as punishable (p. 4).

According to this definition, employees’ citizenship behavior differs from task performance in that OCBs do not contribute directly to the technical core of an organization (Borman & Motowidlo, 1992). For example, while the task performance of engineers and operations performed by medical doctors contribute directly to the
technical core of their organizations, their volunteering, helping, cooperating, participating in organizational decision making, and believing in organizational values are not directly related to the task performance of their organizations. OCB can be either role prescribed or seen as extra-role behavior. Behaviors such as providing high quality service to clients, and being courteous and helpful to other group members can be part of the job of employees in service departments and frontline government workers while they can be interpreted as extra-role behaviors for some professionals (Brief & Motowidlo, 1986; Organ, 1997). In essence, the core concept of OCB is whether the behavior facilitates an organizational atmosphere where employees are more likely to cooperate and so promotes an organizational context that ultimately supports enhanced organizational performance (Organ, 1997). In this context, enthusiasm, volition and predisposition to provide one’s best efforts are emphasized as citizenship behaviors (Borman & Motowidlo, 1992).

2. OCB and Other Related Constructs

Seemingly analogous constructs such as prosocial organizational behavior (e.g., Brief & Motowidlo, 1986; George, 1990), organizational spontaneity (e.g., George & Brief, 1992; George & Jones, 1997), extra-role behavior (e.g., Dyne, Cummings, & Parks, 1995) and altruism (e.g., Krebs, 1970; Rushton, Fulker, Neale, Nias, & Eysenck, 1986) have also explained employees’ cooperative and extended role behaviors. Although some of those constructs have several similarities with OCB, there exist some conceptual distinctions among those constructs.
First, prosocial organizational behavior can be defined as employees’ behaviors that enhance the welfare of individuals or organizations carrying out their organizational roles. Some prosocial organizational behavior qualifies as OCB in that both constructs 1) aim to benefit either the employing organization or organizational members, and 2) both include such behaviors as complying with organizational values, participating in organizational decision making for organizational improvement and helping other coworkers. However, prosocial organizational behavior is a broader construct than is OCB in that it includes both functional and dysfunctional behaviors directed at organizations (Brief & Motowidlo, 1986). For example, a manager in an organization can show leniency in personnel decisions such as in hiring and promoting employees. The behavior might be a prosocial organizational behavior in that it benefits the target employees. However, it cannot be classified as OCB since it does not enhance the functioning of the organization and might even decrease organizational effectiveness. Thus, OCB is a specific form of prosocial organizational behavior that focuses on the functionality of the organization.

Organizational spontaneity also has some similarity with OCB in that organizational spontaneity focuses on employees’ extra-role behaviors voluntarily conducted to enhance organizational effectiveness. Thus, both constructs 1) presume organizational effectiveness as an outcome of behaviors, and 2) recognize active efforts by employees to make their organizations different (George & Brief, 1992). However, some OCB dimensions such as conscientiousness and sportsmanship are not included in organizational spontaneity since organizational spontaneity focuses more on employees’ active extra-role behaviors and excludes their passive acceptance of organizational values.
In this regards, organizational spontaneity is a certain form of OCB. Since this study focuses on contextual factors that can facilitate organizational performance, organizational spontaneity might be limited in reviewing many other types of employee behaviors.

Studies of altruism might also have implications for studying OCB in that altruism can be one of the motivational bases for employees’ helping behavior. However, the construct of altruism tends to presume that individuals’ motivation for helping others is based on individual selflessness, while OCB does not presume a single motivational base. In addition, altruism focuses on individuals’ various helping behaviors in different contexts while OCB focuses on employees’ helping behaviors only in the organizational context. The construct of extra-role behavior is similar to OCB in that extra-role behavior includes employees’ voluntarily initiated behaviors that go beyond their required roles. However, the concept of OCB is not limited to “extra-role” behaviors, since it is not clear in all situations what should be classified as “extra-role” (Organ, 1997).

3. Components of OCB

Various dimensions of OCB have been proposed by different researchers. Smith, Organ and Near (Smith, et al., 1983) proposed two dimensions of OCB: altruism and generalized compliance. Altruism includes the types of behaviors that help “a specific person in face-to-face situations” (p. 657), while generalized compliance includes “a more impersonal form of conscientiousness that does not provide immediate aid to any one specific person, but rather is indirectly helpful to others in the system” (p. 657). Organ (1988) proposed a five-dimensional model of OCB consisting of altruism,
courtesy, conscientiousness, civic virtue, and sportsmanship. Altruism includes helping coworkers and supervisors do work-relevant tasks or problems. Courtesy includes showing consideration to the parties who will be influenced by one’s decision. Conscientiousness includes discretionary behavior beyond minimum role requirements. Civic virtue includes active participation in organizational decision-making processes and policies with responsible ownership. Sportsmanship involves showing constructive devotedness to the organization’s effectiveness by maximizing one’s effort in the face of troubled situations. Podsakoff, MacKenzie, Moorman and Fetter (1990) developed instruments to measure OCB based on Organ’s five dimensions using Q Sort methods.

Van Dyne, Graham and Dienesch (1994) tried to reconceptualize OCB using elements of civic citizenship studies in political science. Van Dyne et al. defined OCB as “a global concept that includes all positive organizationally relevant behaviors of individual organization members” (p. 766), and proposed three dimensions of OCB: 1) organizational obedience, 2) loyalty and 3) participation. Obedience reflects the level of employees’ acceptance of organizational rules, procedures and policies. Organizational loyalty involves the degree to which employees identify organizational interests as theirs, and provide extra effort to protect the interest of their organizations. Organizational participation includes the extent of employees’ involvement in organizational decision making. In their empirical study, they found that participation has three sub-dimensions: social participation, advocacy participation and functional participation. Social participation includes participation using interpersonal and social relationships; advocacy participation reflects the degree of intention to participate and express one’s opinions
about controversial agendas in an organization; and functional participation involves one’s willingness to take on additional activities and assignments.

Podsakoff, MacKenzie, Paine, and Bachrach (2000) reviewed current OCB studies, and identified over 30 different forms of OCB. After comparing those, they proposed seven common dimensions of OCB: 1) helping behavior 2) sportsmanship, 3) organizational loyalty, 4) organizational compliance, 5) individual initiative, 6) civic virtue and 7) self development. Helping behaviors is defined as helping others to solve or prevent work-related problems. They suggested that this definition combines Organ’s (1988) OCB dimensions of “altruism” and “courtesy.” The basic definition of sportsmanship is similar to Organ’s definition, but Podsakoff et al.’s definition of sportsmanship is more active than Organ’s (1988) definition in that while Organ’s definition stressed not complaining, Podsakoff et al. added “willing to sacrifice their personal interest for the good of the work group and not take the rejection of their ideas personally” (p. 517). Organizational loyalty concerns maintaining and enhancing commitment to one’s organization in the face of external threat and promoting its missions and beliefs. This concept is similar to Van Dyne et al.’s definition of loyalty. Organizational compliance involves employees’ internalized obedience to the organization’s rules and policies. Individual initiative involves employees’ voluntary engagement beyond the organization’s requirement, which is similar to Organ’s conscientiousness. Civic virtue is similar to Van Dyne’s civic participation. It includes active participation in organizational governance and policy making in the face of personal cost. Finally, Podsakoff et al. proposed self development as a key dimension
involving “voluntary behaviors employees engage in to improve their knowledge, skills and abilities” (p. 525).

Williams and Anderson (1991) categorized OCB into two dimensions: OCB directed toward the organization (OCBO) and OCB directed toward other individuals such as coworkers or supervisors (OCBI). An example of OCBO would be employees’ adherence to informal rules devised to maintain order and attendance at work above the norm. OCBO is in line with Smith et al.’s (1983) compliance and Van Dyne et al.’s (1994) loyalty and organizational obedience in that employees can show OCB by accepting organizational rules and values. Although they might have clear job boundaries, they might excel in their work simply by adhering to the highest standards of organizational rules in their job performance. Such behaviors may be recognized as OCB by employers since organizations are limited in their ability to set and enforce maximum performance standards since these might engender opposition from employees. On the other hand, some OCBI involves more spontaneous and innovative role-crafting behaviors that go beyond one’s role duties. These behaviors are different from OCBO in that employees might even break organizational rules in some situations. Thus, employees who engage in OCBI might show more initiative in their work, craft their jobs more actively and recreate the boundary of their jobs. Helping others who have been absent and taking a personal interest in other employees are examples of OCBI. OCBI is in line with other dimensions such as altruism (Organ 1988; Smith et al. 1983), helping behavior (Podsakoff et al. 2000) and civic virtue (Organ 1998; Podsakoff et al. 2000).

An aspect of OCB that is unique to government organization would be government employees’ citizenship behavior toward individual citizens. For example,
public employees might initiate citizenship behaviors to provide better public services to citizens who need help. They can voluntarily assist citizens who request help or petition for help for these individuals even if this goes beyond their job requirements. An important aspect of this type of OCB is that these behaviors can reduce citizens’ frustration with bureaucratic work processes. Although this aspect has not received much attention in traditional OCB studies, a few studies have recognized the importance of employees’ prosocial service behaviors and pointed out that external customers can be an important target of OCB (Ackfeldt & Wong, 2006; Bettencourt & Brown, 1997, 2003; Netemeyer, Boles, McKee, & McMurrian, 1997). This aspect is in line with OCBI in that the purpose of OCB is to provide direct benefit toward specific individuals. However, it can also be seen as an additional dimension of OCB in that these behaviors are targeted beyond the organizational members. Based on previous definitions and this component of OCB, this study will attempt to examine three different components of OCB: 1) OCBI, 2) OCBO and 3) public employees’ citizenship behavior toward citizens (OCBC).

4. Antecedents of OCB

Previous studies of OCB have identified various predictors based on different theoretical perspectives. As a result, different variables have been addressed in separate literatures and so have not yet been integrated into a single study. In addition, most previous studies have examined the relationships among major predictors based on social exchange theory. In general, previous studies can be categorized into two groups: 1) OCB studies based on social exchange theory and 2) OCB studies that are related to employees’ self-concept. Although organizational justice, job characteristics, perceived
supervisory support and job satisfaction as well as organizational identification and OCB norms have been recognized as major predictors in separate studies, the joint influence of those variables on OCB has not been examined to any degree.

4.1. Traditional OCB antecedents based on social exchange theory

Although social exchange theory was developed by several different scholars (Blau, 1986; Emerson, 1976; Gouldner, 1960; Homans, 1958), there is a consistent basic assumption that individuals engage in social relations when they can expect value/rewards from their counterparts. Social exchange theory is different from economic exchange theory in that it emphasizes long-term social relationships based on one’s personal ties, and assumes individuals have information regarding their counterparts’ exchange histories, while economic exchange theory mainly focuses on ahistorical individual transactions (Emerson, 1976). In addition, while economic exchanges are fairly predictable, visible and codifiable, social exchanges have none of those properties due to their inherent uncertainty (Blau, 1986). Perceived organizational support (POS) theory applied social exchange theory to an organizational context and suggested that employees tend to develop global beliefs about the extent to which their organizations treat them favorably (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002). According to POS theory, favorable treatment by an organization reflected in promotions, favorable job conditions, organizational policies and appropriate payment can promote employees’ OCB because employees feel an obligation to reciprocate. Based on this notion, OCB researchers have explained that employees tend to decide their level of OCB based on the quality of their relationship with their employer (Coyle-Shapiro, et al., 2006; Gould-Williams & Davies, 2005). The social exchange
perspective implies that employees engage in OCB to get better access to their organization’s resources and to gain favors in the future since individuals who show helping behaviors are more likely to obtain social approval, a good reputation, respect, prestige and instrumental rewards. In this context, some employees’ motives for OCB can originate from impression management since ‘good citizens’ can acquire more resources in an organization (Bolino, Varela, Bande, & Turnley, 2006; Chen, Lin, Tung, & Ko, 2008; Rioux & Penner, 2001). Using this perspective, several variables such as job satisfaction, organizational justice, and leader-member exchange (LMX) leadership have been recognized as important predictors of OCB.

4.1.1. Job satisfaction

Early OCB studies focused on the relationships between job satisfaction and OCB based on the assumption that satisfied employees would be more grateful toward their employers and show more OCB (Smith, et al., 1983). Early OCB researchers suggested that the criticism of employee satisfaction studies may be rooted in the failure of these studies to recognize the importance of OCB. They argued that employees’ citizenship behavior can be an alternative performance dimension since showing a higher level of OCB is relatively easier than showing high job performance given that OCB is under employees’ discretion (Bateman & Organ, 1983; Smith, et al., 1983). Meta-analyses conducted by Organ and Ryan (1995) and Fassina, Jones, and Uggerslev (2008) showed a positive relationship between job satisfaction and OCB. Other studies (Bateman & Organ, 1983; 1994; LePine, Erez, & Johnson, 2002; Morrison, 1994; Yoon & Suh, 2003) also confirmed job satisfaction as an independent predictor of OCB. However, some studies have found that job satisfaction is not a significant predictor of OCB. Meta-analyses
studies conducted by LePine, Erez and Johnson (2002) and Podsakoff, MacKenzie and Bommer (1996) found that the relationship between OCB and job satisfaction is only moderate and not stronger than the relationship between job satisfaction and job performance. A non-significant influence was also reported in other studies (Alotaibi, 2001; Moorman, Niehoff, & Organ, 1993), and OCB scholars’ interests in job satisfaction seem to have moved into other variables without coming to a consensus on the role of job satisfaction.

One of the reasons that job satisfaction has shown inconsistent relationships with OCB is that multiple facets of job satisfaction have not been clearly specified. Job satisfaction measures used frequently in OCB studies include the global job satisfaction measures (Fassina, et al., 2008; Morrison, 1994; Organ & Ryan, 1995), the Job Description Index (Bateman & Organ, 1983) and the Minnesota Satisfaction Questionnaire (Bowler & Brass, 2006; Chiu & Chen, 2005; Schappe, 1998). Although those measures examine multiple facets of job satisfaction such as satisfaction toward supervision, satisfaction toward coworkers, and satisfaction toward the amount of work, most OCB studies have used shortened measures and focused only on overall job satisfaction. Such approaches might be limited in understanding which aspects of job satisfaction have influence (or have no influence on) on OCB. For example, employees with a high level of growth needs will evaluate their job satisfaction based on recognition and the work itself, while employees who have a high level of affiliation needs might evaluate their overall satisfaction based on their relationships with coworkers and supervisors (Locke, 1976). Although, both cases might report a high or low level of
general job satisfaction, the nature of their job satisfaction will be different and statistical analyses may lead to different relationships with different antecedents and outcomes.

This study proposes that two components of job satisfaction—intrinsically job satisfaction and extrinsically job satisfaction—will have differentiated relationships with different OCB components. Weiss, Dawis, England, and Lofquist (1967) developed the Minnesota Satisfaction Questionnaire (MSQ), which comprises 100 questions that tap 20 subscales of job satisfaction. They also developed the short version of the MSQ, which can also be divided into intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction refers to the extent to which employees feel positively about their job tasks themselves (e.g., satisfaction with feelings of accomplishment from the job) while extrinsic job satisfaction refers to the extent to which employees feel positively about the work environment (e.g., satisfaction with pay and supervision) (Spector, 1997). While a few studies have defined job satisfaction as a latent variable with two indicators—intrinsic and extrinsic satisfaction (Schmitt & Bedeian, 1982; Vandenberg & Scarpello, 1990)—other studies have defined job satisfaction as comprising two components and found discriminant validity between the components (Arvey, Bouchard, Segal, & Abraham, 1989; Brown, 1996; Hirschfeld, 2000; Moorman, 1993). By separating job satisfaction into intrinsic and extrinsic job satisfaction, this study proposes that different types of job satisfaction will have differentiated relationships with OCBs.

4.1.2. Organizational justice

Studies of organizational justice have provided consistent evidence that employees’ attitudes and behavioral reactions toward their organizations are influenced by their justice/fairness perceptions (Greenberg, 1987, 1990). Several components of
organizational justice—distributive, procedural and interactional justice—have been recognized by researchers (e.g., Colquitt, 2001; Colquitt, 2004; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Greenberg, 1987, 1990). Distributive justice is based on equity theory (Adams, 1965) and focuses on an employee’s perception of whether there exists an equal balance across employees with respect to the ratio of each person’s contribution to the organization to the compensation each person receives from the organization (Levinthal, 1980). Procedural justice theory stems from dispute-resolution processes in the law (Thibaut & Walker, 1975) and refers to employees’ perceived fairness of organizational processes (Tom R. Tyler, Degoey, & Smith, 1996). Finally, interactional justice examines employees’ fairness perceptions regarding the quality of interpersonal treatment (Bies & Moag, 1986).

Researchers have recognized organizational justice variables as important predictors of OCB (Greenberg, 1990; Moorman, et al., 1993; Organ, 1990; Organ & Moorman, 1993; Tom R. Tyler, et al., 1996). Since employees tend to judge the possibility of receiving reciprocity and the other parties’ engagement in cooperative behaviors based on their perception of how fairly they are treated (Coyle-Shapiro, 2002; Tom R. Tyler & Blader, 2000; T. R. Tyler & Blader, 2003), organizational justice provides an important barometer for employees who are willing to subordinate their short-term benefits and engage in OCB for the betterment of their coworkers or their employing organization in the long run (Organ & Moorman, 1993).

However, it is not clear whether one dimension of organizational justice has a stronger relationship with OCB than others. Some researchers have argued that it might be harder for employees to engage in OCB based on distributive justice since employees
might not be cognitively capable of evaluating distributive justice and making complex comparisons of their input/output ratios with others (Organ & Moorman, 1993). Thus, OCB determined by employees’ long-term relationships with their employing organizations tends to be more influenced by procedural justice, which is more related to their overall evaluation of organizational policies than is distributive justice, which focuses more on the specific allocations of benefits (Greenberg, 1993). Several studies have reported procedural justice as a significant predictor of OCB (e.g., Colquitt, et al., 2001; Cremera, Tyler, & Oudena, 2005; Ehrhart, 2004; Kamdar, et al., 2006; Konovsky & Pugh, 1994; Moorman, 1991; Moorman, et al., 1993; Mossholder, Settoon, & Henagan, 2005; Naumann & Bennett, 2002).

On the other hand, some studies have suggested that distributive justice and procedural justice might have different relationships with different OCB dimensions. For example, Cohen-Charash and Spector (2001) conducted a meta-analysis and reported that the three organizational justice variables have similar levels of correlates with OCB. Fassina et al. (2008) also conducted a meta-analysis, but found that while procedural justice does not have a significant relationship with altruism, conscientiousness and courtesy, interactional justice has a significant relationship with all dimensions of OCB and distributive justice has a significant relationship with civic virtue. Other empirical studies also found differentiated relationships between different dimensions OCB and those of organizational justice (Alotaibi, 2001; Byrne, 2005; Chen, et al., 2008).

4.1.3. Leader-member exchange (LMX)

A number of studies have shown that leaders can have a significant impact on employees’ citizenship behaviors (Podsakoff, et al., 2000). Since leaders can set an
example for their followers and provide the organizational context for their employees to see the value of OCB, different leadership styles (e.g., charismatic leadership, transformational leadership) or leader behaviors (e.g., leader supportiveness) have been recognized as important antecedents of OCB (e.g., Cremer & Knippenberg, 2002; Deluga, 1994; Den Hartog, De Hoogh, & Keegan, 2007; Ehrhart, 2004; Piccolo & Colquitt, 2006; Whittington, Goodwin, & Murray, 2004). For example, leaders can encourage employees to engage in OCB by identifying broader organizational goals (Ellemers, De Gilder, & Haslam, 2004; Knippenberg, Knippenberg, Cremer, & Hogg, 2004; Lord & Brown, 2001), while leaders’ manipulative behaviors can reduce the likelihood of employees engaging in OCB since such behaviors can lead employees to focus on their self-interests (Podsakoff, et al., 2000).

While traditional leadership studies have focused on the leaders’ characteristics and behaviors, more recent studies have also focused on the dyadic relationship between leaders and each of their followers; this approach is called leader-member exchange (LMX) (Dansereau, Graen, & Haga, 1975). In traditional behavioral and trait-based leadership studies, it is assumed that leaders would have a similar influence on their entire group of subordinates. However, LMX theory assumes that each employee can develop a unique relationship with his/her leader, so that some employees will develop a high level of LMX while other employees do not (Graen & Cashman, 1975). LMX theory is also based on social exchange theory in that it assumes that subordinates are more likely to be satisfied with their jobs, commit to their work with higher motivation and have lower turnover intention when a leader and a subordinate succeed in developing a high quality of LMX (Erdogan & Enders, 2007; Gerstner & Day, 1997).
LMX theory can be an alternative approach to explain a leader’s influence on employees’ OCB. If an employee has a high quality of relationship with his/her leader, the close relationship can make the employee feel an obligation to reciprocate the benefit they get by engaging in OCB. Smith et al. (1983) found that leaders have a positive direct impact on compliance and an indirect impact on altruism as well. Ilies, Nahrgang and Morgeson (2007) examined the effect of leader-member exchange on OCB using meta-analysis. Their analysis included over 50 studies, and found a moderate positive relationship between OCB and LMX leadership. Other empirical studies have also consistently found a positive impact of LMX on OCB (Deluga, 1994; Hofmann, Morgeson, & Gerrass, 2003; Lapierre & Hackett, 2007; Wang, Law, Hackett, Wang, & Chen, 2005).

Several studies also suggest that LMX might have an interactive effect with other leadership variables influencing OCB. For example, Piccolo and Colquitt (2006) examined the interaction effects of transformational leadership and LMX leadership. They pointed out that followers tend to decide whether to accept or resist leaders’ visions based on their “potential boundary conditions” (p. 331). Followers interpret leaders’ behaviors differently according to their relationships with leaders. They found that the effectiveness of transformational leadership on OCB is significantly larger in high LMX groups than in low LMX groups. Sparrowe, Soetjipto and Kraimer (2006) suggested that employees can decide the level at which they will engage in helping behaviors based on the quality of their relationship with their leader. For example, a leader’s inspirational appeals to increase OCB can be interpreted as empty if the leader does not have a close relationship with employees. Using a sample of 173 employees and supervisors of
Midwestern companies, these researchers found interaction effects between leaders’ tactics (appeals, consultation and exchange) and LMX leadership on employees’ OCB.

4.2. Antecedents of OCB that are related to employees’ self-concept

Although OCB studies based on social exchange theory offer important insights for explaining public employees’ citizenship behavior, this approach suggests that employees’ citizenship behaviors can evaporate easily if employees do not receive reciprocity from their employers. If citizenship behavior is solely a function of employees’ satisfaction and their calculation of future benefits, what explains persistent examples of public workers’ taking initiative in the face of less than satisfactory working environments? Public employees might engage in citizenship behaviors not because they are satisfied but because they simply think that it is a part of their job (Lee & Olshfski, 2002; Morrison, 1994). Moreover, the value of engaging in citizenship behaviors can be shared among coworkers and developed through interactions among group members (Ehrhart & Naumann, 2004).

Some scholars also argue that individuals’ work motivations can be guided by their personal identity and moral obligation rather than by hedonic reinforcements—primarily satisfaction from monetary transactions (Perry, 2000; Shamir, 1991). Perry (2000) pointed out that current motivational theories based on individuals’ self-interest are limited in explaining public workers’ prosocial behaviors, noting that traditional OCB studies have been silent on public employees’ intrinsic motivations to help others as well as on their sense of moral obligation to engage in prosocial behaviors. He argued that public employees are not just driven by utility maximization but are influenced by affective bonding and by their self-concept. Thus, public employees sometimes are not so
much motivated by monetary incentives but may pursue personal values in which they believe. Several empirical studies have examined the utility of public service motivation and found that public employees place a high value on providing better service to citizens and are involved in more altruistic behaviors based on their values (Perry, 1996, 1997; Perry & Wise, 1990).

Self-concept is a question of “who am I?”; it is a profound and consequential question in that individual behaviors are influenced by this definition. Individuals use different aspects of self-concept to define themselves. First, self-concepts are influenced by individual beliefs and values developed through one’s early life experiences. In this respect, individuals will bring their personal identity into an organization, and their citizenship behaviors will be influenced by their personal beliefs and values. Second, employees’ self-concepts will be partly formed through their organizational life by identifying with their organizations and their role in their organizations. From this perspective, a question of “who am I?” can be answered by “what I am doing (or what I should do)” and “where I belong (or where I want to belong).” Thus, individuals might identify with the distinctive image of social foci (family, school, work organization) or that of a role (policeman, firefighter, bureaucrat, doctor), and then make a cognitive connection with these entities to define themselves, which is defined as an identification or self-conception process (Dutton, Dukerich, & Harquail, 1994). From this perspective, an individual’s self-concept is composed of different types of identities, and individuals tend to use appropriate identities to define themselves (Ashforth & Johnson, 2001; Ashforth, Kreiner, & Fugate, 2000).
From this perspective, OCB values can be both an individual’s value expression and a reflection of shared norms among organizational group members (Ehrhart & Naumann, 2004). At the same time, individuals who strongly identify with their organizations might also engage in OCB to enhance their self-concept by enhancing the organizational image of their employing agency (Dukerich, et al., 2002). Moreover, public employees might learn the value of OCB in the organization and engage in OCB because they recognize it as a part of their job to enhance group productivity (Morrison, 1994). In sum, this study assumes that public employees’ OCB may not only be a reflection of their personal values but may also be a product of their identifications. Based on this notion, public employees’ prosocial orientation, organizational identification and OCB norms will be examined in this study.

4.2.1. Prosocial orientation and OCB

Adlerian psychologists (e.g., Ansbacher, 1991; Bass, Curlette, Kern, & McWilliams Jr, 2002; Crandall, 1981; Curlett & Kern, 2002; Leak & Leak, 2006) posit that individuals are more likely to cooperate with others when they have developed *social interest*. According to this school of thought, individuals are not always driven by their self-interest, and will overcome self-centeredness for superior social goals, develop empathy toward others, and, ultimately, will contribute to their community and society by developing social interest. Thus, the core concept of social interest is concern for others (Crandall, 1981; Leak & Leak, 2006) as an inherent orientation of individuals who strive to be a part of society (Ansbacher, 1991; Bass, et al., 2002; Curlett & Kern, 2002; Leak & Leak, 2006). From the Adlerian psychologists’ perspective, individuals tend to develop empathy as a fundamental aspect of becoming part of their society, and go beyond their
self-centeredness and pursue self-transcendence to have close relationships with others and to be a part of their communities (Ansbacher, 1991).

Adlerian psychologists’ assertions imply that an individual’s prosocial orientation can be a source of group cooperation as well as an important individual characteristic. Individuals with a high level of empathy are more likely to understand and identify others’ difficulties, and to cooperate with others to be good members of their team. Accordingly, from this perspective, individuals’ helping behavior can be influenced by this individual orientation. This perspective is different from previous OCB studies’ perspectives based on social exchange theory. While previous OCB studies based on social exchange theory have assumed that employees’ OCB will be based on employees’ reactions to positive treatment from their organization, OCB studies from the perspective of individuals’ prosocial orientation assume that OCB is an expression of individuals’ values influenced by their empathetic orientation. From this perspective, individuals’ citizenship behavior can be more persistent since it is more based on individuals’ internal orientation than on their current job satisfaction. These individual differences have been also emphasized in public organization studies based on the presumption that public employees will have a higher level of prosocial orientation and will want to improve society (e.g., Brewer & Gardner, 1996; Crewson, 1997; Perry, 1996, 1997; Perry & Wise, 1990).

Early OCB studies examined individual differences from a similar perspective. Organ (1994) suggested that individuals bring their personal characteristics such as conscientiousness, agreeableness and affectivity into organizations and OCB scholars expected that those individual traits and beliefs would be important predictors of OCB
(LePine, et al., 2002; Zellars, Tepper, & Duffy, 2002). However, many previous studies failed to show clear relationships between personality factors and OCB. Smith et al. (1983) reviewed the impacts of employees’ dispositional factors on OCB, and found that there is no direct impact of extraversion or neuroticism on OCB. Organ et al. (1995) also reviewed the influence of dispositional factors on OCB using meta-analysis, but did not find any direct relationships. Conscientiousness and agreeableness, out of the ‘big five’ personality dimensions, did not show as strong relationships with OCB as attitude measures showed. Organ et al. suggested that those dispositional factors might have an indirect relationship with OCB through attitudinal variables.

Penner and colleagues (Finkelstein, Penner, & Brannick, 2005; Penner, 2002; Penner, Midili, & Kegelmeyer, 1997) suggested that previous OCB studies tended to focus too much on the ‘big five’ personality factors. Rather than focusing on those factors, they suggested that researchers need to explore employees’ prosocial orientation to explain why people help others. Previous empirical studies have found significant relationships between prosocial orientations and citizenship behaviors and voluntary behaviors. Using the Prosocial Personality Battery (PSB), Penner (2002) examined the relationship between two prosocial personality factors (other-oriented empathy and helpfulness) and volunteerism, and found that these prosocial personality factors have significant associations with engagement in volunteer activities. Finkelstein and Penner (2004) found that prosocial motives (organization concern, personal values and impression management) have significant influences on employees’ citizenship behaviors. Table II-1 summarizes the empirical studies that have examined the effect of individual differences on OCB and prosocial behaviors.
<table>
<thead>
<tr>
<th>Authors</th>
<th>Individual differences</th>
<th>OCB components</th>
<th>Antecedents of OCB</th>
<th>Sample/Major findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crewson (1997)</td>
<td>Public service motivation</td>
<td>Helping others</td>
<td>No antecedents</td>
<td>1994 Institute of Electrical and Electronics Engineers (IEEE) survey; 1989 General Social Survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Higher level of helping behaviors among public sector employees than private sector employees</td>
</tr>
<tr>
<td>Finkelstein and Penner (2004)</td>
<td>Prosocial orientation, organizational concern and citizenship role identity</td>
<td>OCBI, OCBO</td>
<td>Organizational concern, personal values and impression management</td>
<td>242 full-time county employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Personal orientation (prosocial orientation and organizational concern) has indirect effects through employees’ citizenship role identity</td>
</tr>
<tr>
<td>Houston (2006)</td>
<td>Public service motivation</td>
<td>Prosocial behaviors (charitable gift, blood donation and money donation)</td>
<td>Public service motivation</td>
<td>1,796 respondents of 2002 General Social Survey</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Significant difference was found between public employees and non-public employees in prosocial behaviors</td>
</tr>
<tr>
<td>Kim (2006)</td>
<td>Public service motivation</td>
<td>Altruism and generalized compliance</td>
<td>Job satisfaction, affective commitment and public service motivation</td>
<td>1,584 civil servants in Korea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Positive impact of PSM was found both for altruism and compliance</td>
</tr>
<tr>
<td>LePine et al. (2002)</td>
<td>Personality (conscientiousness)</td>
<td>Organ’s five dimensions of OCB</td>
<td>Satisfaction, commitment, fairness, leader support and conscientiousness</td>
<td>Meta analysis for OCB antecedents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Positive influence of employees’ conscientiousness on OCB</td>
</tr>
</tbody>
</table>
Table II-1 (cont.) OCB studies based on individual differences and prosocial orientation

<table>
<thead>
<tr>
<th>Authors</th>
<th>Individual differences</th>
<th>OCB components</th>
<th>Antecedents of OCB</th>
<th>Sample/Major findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organ et al. (1995)</td>
<td>Personality (conscientiousness and agreeableness)</td>
<td>Altruism and generalized compliance</td>
<td>Job fairness, organizational commitment, leader supportiveness and job satisfaction</td>
<td>Meta analysis of previous 55 studies No significant relationship was found with altruism and compliance</td>
</tr>
<tr>
<td>Rioux and Penner (2001)</td>
<td>Prosocial personality (Other-oriented empathy and helpfulness)</td>
<td>Organ’s five dimensions of OCB</td>
<td>Prosocial personality, prosocial value, organizational justice and positive mood</td>
<td>145 city government employees in Florida 1) No significant influence of prosocial personality 2) Significant influence of prosocial value on altruism, civic virtue</td>
</tr>
</tbody>
</table>

4.2.2. Organizational identification and OCB

Social identity theory posits that members of a society tend to use depersonalized social information to categorize other social members into several distinct groups. For example, they can categorize their social members with information such as ethnicity, social status, gender and age. In addition, societies tend to fortify those identities by setting social customs in interacting with other groups. As a result, members of a society tend to construct part of their self-concept by identifying with certain social groups in their society, and they tend to answer the question of “who am I” with their socially defined information of “where do I belong” (Tajfel, 1974).

Organizational identity can be understood as one type of social identity that individuals can develop to define themselves in a society. Individuals who develop a strong “perception of oneness with or belongingness to” their focal organization
are more likely to depend on their organizational identity to define themselves. For example, an alumnus from a prestigious school is more likely to identify with the school since the identification with the school can help building a positive self-concept, and he/she might actively participate in ceremonies to fortify his/her social identity. Thus, organizational identification results partially from individuals’ efforts to maintain their membership in a society, and individuals’ organizational identity can be an important source of self-concept.

Although the concept of organizational identification was developed from social identity theory, organizational identification has some definitional similarity with organizational commitment as developed by Allen and Meyer and colleagues (Allen & Meyer, 1990, 1996; Meyer, Allen, & Smith, 1993), whose studies have identified three forms of organizational commitment—affective commitment, continuance commitment and normative commitment—based on previous sociological studies. This conception of organizational commitment has spurred a substantial body of empirical research focusing on antecedents and outcomes of organizational commitment in private as well as government organizational settings (e.g., Coyle-Shapiro & Kessler, 2003; Irving & Coleman, 2003; Kwon, 2002; Moynihan & Pandey, 2007; Payne & Huffman, 2005; B. Wright & Rohrbaugh, 2002). In particular, affective organizational commitment is similar to organizational identification in that affective organizational commitment has been defined as an “employee’s emotional attachment to, identification with, and involvement in, the organization” (Mowday, Steers, & Porter, 1979, p. 226).

However, Ashforth and Mael (1989) pointed out that organizational identification does not necessarily presume strong affective attachment to the
organization since organizational identification is more of a cognitive process that enhances individuals’ self-esteem, rather than an affective process. In addition, while organizational identification has greater influence on individuals’ self-concept development based on the cognitive connection of social identity with self-concept, affective organizational commitment has greater influence on behavioral variables such as job involvement and turnover intention. These conceptual differences are also reflected in Ashforth and Mael’s organizational identification measure, which they intentionally designed to not overlap with organizational commitment and so does not contain statements that measure affective status. Riketta (2005) conducted a comprehensive meta-analysis and found that organizational identification is empirically distinct from affective organizational commitment. Although the distinction between organizational identification and affective commitment is still under the debate and many scholars use organizational commitment and organizational identification interchangeably (e.g., Bergami & Bagozzi, 2000; Chattopadhyay, 1999; Cremer & Knippenberg, 2002), this study uses organizational identification rather than organizational commitment since this study is interested in public employees’ self-concept rather than their affective attachment to their focal organizations to explain public employees’ OCB.

Based on the underlying assumptions of social identity theory, this study examines whether organizational identification will result in public employees’ citizenship behaviors. Social identity theory implies that government employees who identify with their organizations are more likely to engage in OCB since citizenship behaviors can enhance their self-worth in their organizations. Since individuals view themselves through the status of the groups to which they belong, they engage in
cooperative behaviors to influence the status of their groups, which ultimately enhances their own self-esteem (Tom R. Tyler & Blader, 2000). Thus, people who have a high level of collective identity will see their group’s success as their own personal success and engage in OCB to enhance the group’s productivity.

Empirical studies based on social identity theory have shown a positive relationship between organizational identification and OCB (Carmeli, 2005; Dick, et al., 2006; Dukerich, et al., 2002; Jiao & Hackett, 2007; Mael & Ashforth, 1992). For example, Mael and Ashforth (1992) found a positive relationship between university alumni’s organizational identification and their helping behaviors (donation). Dick, Grojean, Christ and Wieseke (2006) reviewed the relationship between organizational identification and OCB in 10 different samples and found consistent positive relationships between organizational identification and OCB. Dukerich et al. (2002) examined the impact of organizational identification on physicians’ OCB, and found that organizational identification mediates the influence of physicians’ perceived organizational image and the attractiveness of the perceived organizational image on OCB. Van der Vegt, Van de Vliert and Oosterhof (2003) also found that team identification mediates the influence of dissimilarity in educational backgrounds and inter-group interdependence on OCB. Based on these previous findings, this study hypothesizes that government employees are more likely to engage in OCB when they have a high level of organizational identification. Table II-2 summarizes the findings of previous empirical studies examining the relationship between organizational identification and OCB.
<table>
<thead>
<tr>
<th>Authors</th>
<th>Identity/identification</th>
<th>OCB components</th>
<th>Antecedents of OCB</th>
<th>Sample/Major findings</th>
</tr>
</thead>
</table>
| Bergami and Bagozzi (2000)  | Three components of social identity (self-esteem; social categorization; affective commitment) | Konovsky and Pugh’s (1994) five dimensions of OCB   | Organizational prestige and stereotype          | Two samples from Korea and Italy  
1) Indirect effect of cognitive organizational identification through affective commitment and self-esteem  
2) Differentiated effect of affective commitment and organizational-based self-esteem on five citizenship behaviors |
| Cremer and Knippenberg (2002) | Group belonging                                                                        | Contribution to public good                         | Charismatic leadership and perceived leader’s procedural justice | Two experimental designs  
1) Interaction effect of charismatic leadership and procedural justice on group belonging and OCB |
| Dick et al. (2006)          | Organizational identification                                                             | Discretionary individual extra-role behavior         | Not reviewed                                    | 10 different samples  
Consistent findings of positive effect of social identity on OCB |
| Dukerich et al. (2002)      | Organizational identification                                                             | Participation in various taskforces/committees and participation in community service | External image and perceived fitness of organizational identity | 1,504 physicians affiliated with three health care systems  
1) Partial mediating effect of organizational identification (OID)  
2) Positive effect of organizational identification on OCB |
| Jiao and Hackett (2007)     | Organizational identification                                                             | Podsakoff et al. (1990)’s five dimensions of OCB   | LMX leadership and employees’ role breadth     | Employees in financial company in China  
1) Partial mediating effect of organizational identification  
2) Positive effect of social identity on employees’ role breadth  
3) Direct and indirect effect of LMX leadership |
Table II-2 (cont.) OCB studies based on organizational identification

<table>
<thead>
<tr>
<th>Authors</th>
<th>Identity/identification</th>
<th>OCB components</th>
<th>Antecedents of OCB</th>
<th>Sample/Major findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mael and Ashforth (1992)</td>
<td>Organizational</td>
<td>Helping behavior for college</td>
<td>Organizational factors (organizational distinctiveness, prestige and inter-organizational competition) and individual factors (tenure and satisfaction)</td>
<td>297 college alumni</td>
</tr>
<tr>
<td></td>
<td>identification</td>
<td>(financial contribution, willingness to advise, read alumni magazine and tapes, and attend alumni ceremony)</td>
<td></td>
<td>1) Organizational identification as partial mediator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2) Positive effect of organizational identification on helping behavior</td>
</tr>
<tr>
<td>Tyler and Blader (2000)</td>
<td>Pride (judgment about status of group) and respect (judgment about one’s status within a group)</td>
<td>Discretionary cooperative behaviors (compliance, deference and extra-role performance)</td>
<td>Procedural justice and instrumentality of being a group member</td>
<td>404 public employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1) Mediating effect of social identity (judgment of status)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2) Positive effect of social identity on OCB</td>
</tr>
<tr>
<td>Van der Vegt et al. (2003)</td>
<td>Team identification</td>
<td>Helping behavior and loyalty</td>
<td>Information dissimilarity (differences in educational level, background and functional specialty), task interdependence and goal interdependence</td>
<td>129 members of 20 multidisciplinary project teams</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Goal interdependency, task interdependence and information dissimilarity have interaction effect on OCB</td>
</tr>
</tbody>
</table>

4.2.3. Subjective OCB norms and OCB

Social identity theory also has implications for explaining the influence of group norms in determining employees’ behaviors. According to Hogg and Terry (2000), individuals tend to share certain values and attitudes and emulate other group members’ behaviors since individuals who possess prototypical characteristics are more likely to be recognized as in-group members. As a result, people tend to share similar characteristics.
with other in-group members and their identities are depersonalized by following prototypical values. Thus, from a social identity perspective, individuals’ self-concepts are influenced by normative perceptions of other organizational group members and individuals set their personal behavioral guidelines based on normative organizational values (D. J. Terry & Hogg, 1996).

From this perspective, the value of engaging in citizenship behaviors can be shared among group members, and developed through interactions among them (Ehrhart & Naumann, 2004). Variables such as shared norms and other employees’ values can be important antecedents in this context. For example, street-level bureaucrats might go the “extra mile” for citizens not just because they think they are treated well by their government agencies but also because they think their citizens and coworkers expect such behaviors (Lee & Olshfski, 2002; Stryker, 1968). Morrison (1994) suggested that employees tend to make sense of the scope of their jobs differently according to the organizational culture and socialization processes employees have experienced. In particular, Morrison found that individuals in the work group also tend to develop an extended role definition and engage in OCB when their supervisors and team members have extended the definition of their jobs since they also interpret it as their job. In this context, OCB is not a discretionary behavior but closer to behavior that is externally regulated by an organizational norm formed through others’ expectations.

Ehrhart and Nauman (2004) provided a theoretical foundation to explain the relationship between OCB norms and employees’ OCB. According to these researchers, group norms are more likely to form when group norms are critical for group survival and performance. Since OCB is critical for group performance, the formation of OCB
norms can be critical for an organization’s survival, and employees can be regulated by
OCB norms in their organization. For example, since information about others’ work
behaviors (e.g., who will help employees when they are in trouble, and how employees
fill the gaps that bureaucratic procedures cannot provide in their formal procedures) is
important information for enhancing their group performance, employees might seek
information about the general OCB norms in their organizations, interpret whether there
are strong informal rules about engaging in OCB or not, and use this information as their
behavioral guideline to cooperate with other workers in their organizations.

Ehrhart and Nauman (2004) differentiated different types of OCB norms based
on the literature examining group norms, and suggested four different types of norms: 1)
descriptive OCB norms, 2) group-prescribed OCB norms, 3) subjective OCB norms and
4) personal OCB norms. This model is based on a multi-level perspective in that
descriptive OCB norms and group-prescribed OCB norms are group-level variables,
while subjective OCB norms and personal OCB norms are individual-level variables.
Descriptive OCB norms are formed by observing other group members’ OCB in one’s
work context. According to Ehrhart and Nauman, descriptive OCB norms will be formed
when more group members consistently engage in OCB. Group members learn their
group’s OCB values by observing their group members’ citizenship behaviors; when they
find that other group members also expect those behaviors from them, they recognize that
these behaviors reflect a behavioral guideline. From this perspective, engaging in OCB in
their groups is learned behavior. Group-prescribed OCB norms are stronger OCB
guidelines since they develop through normative pressures, as well as actual rewards and
sanctions for engaging in or not engaging in OCB. According to Ehrhart and Nauman,
group members engage in OCB in this context to be a part of their group, and sometimes
to avoid sanctions from other group members. Subjective OCB norms are individuals’
perceptions of whether persons who are important to them engage in OCB. Finally,
personal norms are different from other OCB norms in that they are not related to
external norms but are more like internal convictions and behavioral guidelines.
According to Ehrhart and Nauman, group-level OCB norms will influence individuals’
subjective and personal OCB norms and individuals’ OCB norms will also strengthen or
weaken group-level OCB norms as individuals engage in OCB in their groups. Thus,
OCB norms serve as an important behavioral guidelines as external regulators, and
employees tend to seek the information especially when they do not have clear idea about
how to behave in their organizations. Although all four components of OCB norms have
theoretical implications, this study will focus on subjective OCB norms since the study
will be conducted at the individual level. Although personal OCB norms also might have
important implications, the concept can overlap with individual prosocial orientation, and
so will be excluded from this study.

4.2.4. Task interdependence

Using symbolic interactionism as an intellectual framework, role identity theorists
have focused on explaining individuals’ role-related behaviors (Burke, 1980; Burke &
Reitzes, 1981; Burke & Tully, 1977; Stets & Burke, 2000; Stryker, 1968, 1980). Role
identity theory suggests that individuals develop their meaning of self in a society by
performing their roles when interacting with others (Burke, 1980). The community
surrounding individuals expresses expectations to individuals by providing information
about appropriate role behaviors (Stryker, 1968, 1980) and evaluates a person based on
his/her role-related attitudes and performance (Turner, 1978). At the same time, individuals also interpret the expectations of society, and develop a socially appropriate meaning of self through their role interpretations (Burke, 1980; Burke & Reitzes, 1981; Burke & Tully, 1977). From this perspective, individuals’ role conceptions can be more relational (in that these conceptions are generated through reciprocal relations with counter roles), reflexive (in that individuals monitor themselves as role occupants and evaluate themselves as role performers), and situational (in that different role identities will be salient according to the situation) when the individuals have more chances to develop an OCB role identity (Callero, 1985, 1992; Callero, Howard, & Piliavin, 1987; Finkelstein & Penner, 2004).

Task interdependence will be an important antecedent in that it provides organizational members with a job setting where employees are more likely to experience OCB and so they may develop an OCB role identity since individuals might expand their role definitions and transcend the bounds of their roles by interacting with others. Grant (2007) suggested that task interdependence, which he referred to as relational job architecture, can provide employees opportunities to connect to other employees or to their clients and thus promote employees’ prosocial motivation. As employees’ jobs have a greater impact on other organizational members or clients, employees tend to develop a higher level of responsibility and find the importance of their jobs in relationship to other members’ outcomes, which increases employees’ prosocial motivation (Kiggundu, 1983; Pearce & Gregersen, 1991). Employees may also develop prosocial motivation when they have more opportunity to interact with other organizational members, and thus develop an extended definition of their role as they come to understand what is expected from
others and are concerned about others’ work outcomes (Anderson & Williams, 1996). Thus, role performers tend to soften their prototyped role, and expand their roles based on their interpersonal relations, which can be developed under conditions of high task interdependence (Sluss & Ashforth, 2007).

By definition, task interdependence is the degree to which an employee in a certain job or performing a specific task needs to coordinate his/her work with other employees in his/her work unit team or with other teams or units (Kiggundu, 1983). In general, task interdependence focuses on the structural context of a job, and how the job is embedded in or related with other tasks (Brass, 1981; Van der Vegt & Van de Vliert, 2005). However, it also involves relational aspects of a job in that task interdependence may evolve based on the dynamics of interactions among employees (Brass, 1981). Thus, task interdependence describes a job characteristic in that it shapes employees’ relationships with other coworkers and increases employees’ responsibility for their outcomes as they collaborate with other unit members (Kiggundu, 1983). Different approaches have been used to conceptualize task interdependence. Thompson’s (1967) typology of interdependence based on task structure and complexity is the mostly widely used classification for task interdependence. According to Thompson, organizations tend to have three types of task interdependence: 1) pooled interdependence, 2) sequential interdependence, and 3) reciprocal interdependence. Van de Ven, Delbecq and Koenig (1976) followed Thompson’s conceptualization and added a fourth category, team interdependence, to reflect the coordination situations in which group members work simultaneously in a purely collective manner. Pearce and Gregersen (1991) also followed Thompson’s definition and developed multiple facets of task interdependence to allow
Kiggundu (1983) used a different approach to measure task interdependence, and suggested that task interdependence has three dimensions: 1) scope, 2) resources and 3) criticality. Scope is the degree to which a certain job is related to other jobs. Resources refers the degree to which resources such as materials, information and money are exchanged between the focal job and other jobs. Criticality is defined as the degree to which the interdependence between the focal job and other jobs is important for the performance of the focal job.

Several empirical studies have examined the relationship between task interdependence and OCB. Although a few studies have shown a direct impact of task interdependence on OCB (e.g., Anderson & Williams, 1996; Cleavenger, Gardner, & Mhatre, 2007), most studies have examined indirect (Pearce & Gregersen, 1991) or moderating effects (e.g., Cleavenger, et al., 2007; Van der Vegt & Van de Vliert, 2005; Van der Vegt, et al., 2003). For example, Cleavenger et al. (2007) examined the interaction effect of task interdependence and supportive help-seeking norms conditions, and found that task interdependence has a significant effect when supportive norms are less operative within working units. Van der Vegt and his colleagues (Van der Vegt & Van de Vliert, 2005; Van der Vegt, et al., 2003) also found that variables such as employees’ different backgrounds (defined as information or skill dissimilarity) and task interdependence have an interactional effect on employees’ OCB. In their study, task interdependence was found to be critical for enhancing OCB when organizational members have different backgrounds.
5. Research Hypotheses

This literature review has categorized major antecedents of OCB into two groups: 1) antecedents based on social exchange theory (job satisfaction, organizational justice and LMX leadership) and 2) antecedents that are related to employees’ self-concept (prosocial orientation, organizational identification, subjective OCB norms and task interdependence). Figure II-1 presents a research model for the current study. Based on previous public management scholars’ assertions, this study will test whether government employees’ prosocial behaviors are not only the products of government employees’ job satisfaction or work environment but also value expressions of public employees’ work experience.

First, the current study will examine traditional OCB antecedents based on social exchange theory perspective. OCB scholars have identified job satisfaction, organizational justice and LMX leadership as major OCB antecedents, and this study will also examine those variables as basic OCB antecedents in government organizations. However, as noted above, previous OCB studies have not reached a clear consensus on the roles of traditional antecedents. This study hypothesizes a positive relationship by considering the current research context within local government organizations. For example, this study points out that the unclear or even conflicting results regarding the relationship between job satisfaction and OCB might have occurred because previous studies might have ignored the different aspects of job satisfaction. This study attempts to review these relationships by distinguishing among different aspects of job satisfaction: 1) intrinsic job satisfaction and 2) extrinsic job satisfaction, and hypothesizes that extrinsic job satisfaction will have a stronger influence on OCB than will intrinsic job
satisfaction. When early OCB scholars recognized job satisfaction as an important antecedent of OCB, it was based on the assumption that employees’ general belief that being treated favorably will lead to higher levels of employees’ OCB. Such favorable treatment can be better reflected in extrinsic job satisfaction associated with such factors as favorable job conditions, monetary rewards and the possibility of being promoted. Thus, it is hypothesized that employees’ satisfaction with their jobs will be more determined by external job factors than by intrinsic job satisfaction factors since they might determine their general job satisfaction based on the external work environment rather than the intrinsic nature of their jobs. Based on this notion, the first hypothesis was developed.

**Hypothesis 1:** Public employees’ intrinsic and extrinsic job satisfaction will be positively related to their engagement in OCB. Extrinsic job satisfaction will have a stronger relationship with OCB than will intrinsic job satisfaction.

Fairness is among the most important employee perception in determining their future contribution to the organization, and previous studies have consistently reported the positive influence of organizational justice. This study will examine two organizational justice variables—procedural justice and distributive justice—and predicts that distributive justice might have a stronger relationship with OCB in government organizations for the following reasons. Procedural justice in public sector organizations might not be very different across employees since public organizations are expected to follow civil service regulations and procedures due to the existence of the merit system. That is, procedural justice might not vary substantially at the individual level, even if
organizational-level differences exist. In this context, distributive justice can be a direct source of fairness conception. Although interactional justice can reflect individual differences in an organization, the concepts of interactional justice and leader-member exchange (LMX) might overlap, given that most of employees’ perceptions of interactional justice can be determined by the quality of their relationship with their supervisors. LMX is also recognized as an important antecedent based social exchange theory in this study. As discussed in the literature review, since employees tend to interpret general organizational policy and support through the leaders’ behaviors and supports, the quality of their relationship with their leaders can be an important source for employees to decide to go “the extra mile” for their organization and coworkers. Based on this notion, the following two hypotheses are developed.

**Hypothesis 2:** Public employees’ procedural and distributive justice will be positively related to their engagement in OCB. Distributive justice will have a stronger relationship with OCB than will procedural justice.

**Hypothesis 3:** Public employees’ perceived LMX will be positively related to their engagement in OCB.
This study also examines whether public employees’ personal values, their institution’s norms toward OCB and identification with their public organization can contribute to enhancing their OCB. First, the current study hypothesizes that government
employees’ prosocial orientation will have a significant effect on OCB. Based on both the work of Adlerian psychologists and previous prosocial orientation studies, this study will examine public employees’ prosocial orientation as an important intrinsic motivator to help others. It is expected that public employees with a high level of prosocial orientation are more likely to engage in citizenship behaviors and persist in these behaviors in that their OCB might not be negatively influenced by unsatisfying work experiences.

Although the importance of workers’ prosocial orientation has received much attention in public management studies, there are relatively few empirical studies that have directly examined the influence of public employees’ prosocial orientation on OCB. Based on this notion, the following hypothesis was developed.

**Hypothesis 4:** Public employees’ prosocial orientation will be positively related to their engagement in OCB.

The fifth hypothesis examines the relationship between organizational identification and OCB. Since public employees might build part of their self-concept through their identification with their employing institution, employees with a high level of organizational identification might engage in OCB to enhance the status of their organization. In addition to this basic implication, which derives from organizational identification theory, scholars who have examined the content of organizational identity have pointed out that a significant relationship between organizational identification and OCB will be found in government organizations since the strength of the relationships is also influenced by the types of organizational identity with which employees identify since perceived organizational image also influences employees’ self-concept (Gioia &
Thomas, 1996). Albert and Whetten (1985) suggested that there exist two different types of organizational identities: *utilitarian* and *normative*. *Utilitarian organizations* focus on maximizing financial returns with updated market information, efficient organizational structures, and employees’ enhanced productivity. In those types of organization, OCB might not be an important value since they focus more on efficiency and marketability of their organizations. *Normative organizations* are organizations that focus on contributing to society and trying to find a larger role in their community. In normative organizations, employees’ OCB might be critical since they depend on their employees’ participation and commitment. Since the content of identities in public organizations make them closer by definition to normative organizations, this study hypothesizes that a positive relationship between organizational identification and OCB will be found in government organizations. Thus,

**Hypothesis 5: Public employees’ organizational identification will be positively related to their engagement in OCB.**

The sixth hypothesis examines the relationship between public employees’ perceptions of OCB norms in their work groups and OCB, based on the presumption that public employees will learn the value of OCB through their organizational life. In particular, the development of OCB norms can be critical to frontline government workers who need to help other coworkers to enhance the productivity and flexibility of their organizations. For example, firefighters are expected to help other firefighters in certain situations, and police officers are expected to back up other officers to protect them from danger. Newcomers who enter those types of organizations tend to learn OCB
norms from their coworkers or supervisors, and employees’ adoption of the value of OCB will be part of their socialization process. Thus, OCB is not just extra-role or discretionary behavior in this context but it can be viewed as employees’ learning and externally regulated behaviors that make their work process smoother and more efficient. Based on this notion, the following hypothesis was developed as follows.

*Hypothesis 6: Public employees’ subjective OCB norms will be positively related to their engagement in OCB.*

While the previous three hypotheses (from Hypothesis 4, 5 and 6) examine the independent influence of three antecedents, this study is also interested in the interaction effects of the three variables. How do public employees develop their behavioral guidelines based these three variables? Which behavioral guideline will be more important in determining public employees’ OCB? Do the variables have only independent influence or do they have any interactive effect? This study suggests that these three antecedents (prosocial orientation, organizational identification and OCB norms) can be also understood in the context of SDT. First, prosocial orientation can be understood as an intrinsic motivator to engage in OCB. Deci and Ryan (Deci, et al., 1999; Deci & Ryan, 1980, 1985, 2000) have asserted that individuals’ intrinsic motivation is the strongest and most consistent motivational factor in determining individuals’ behaviors. If prosocial orientation is an individual’s natural inclination, an essential part of the

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1 While SDT might be also applied to examine the roles of antecedents based on social exchange theory, this study only applies SDT to those variables related to self-concept antecedents—prosocial orientation, organizational identification and subjective OCB norms.
individual’s development, the individual’s OCB based on a prosocial orientation will persist and not diminish easily. Accordingly, this study presumes that prosocial orientation will be the most consistent predictor for OCB. On the other hand, individuals with a high level of organizational identification are closer on the continuum to integrated or identified regulation in that individuals with a high level of organizational identification tend to internalize organizational rules and values. Previous intrinsic motivation studies have found that intrinsic motivation will be the most important behavioral guideline and integrated or identified motivation will be a secondary behavioral guideline when individuals lack intrinsic motivation. Based on this notion, this study presumes that organizational identification will be a secondary guideline for government employees. In other words, when government employees do not have a high level of prosocial orientation, their organizational identification toward government organizations will serve as a behavioral guideline. In the same vein, this study also recognizes subjective OCB norms as public employees’ final behavioral guideline. Since subjective OCB norms are simply the recognition of others’ behavioral patterns, they can be seen as closer to external regulation. If public employees have not developed a prosocial orientation and organizational identification, their perceptions of organizational norms will play a role as an external regulator to guide their OCB in the organization. Based on this notion, two additional hypotheses were developed.

_Hypothesis 7-1: The relationship between organizational identification and OCB will be stronger when public employees have a low level of prosocial orientation than when public employees have a high level of prosocial orientation._
Hypothesis 7-2: The relationship between subjective OCB norms and OCB will be stronger when public employees have a low level of prosocial orientation and organizational identification than when public employees have a high level of prosocial orientation and organizational identification.

Although task interdependence is not a component of employees’ self-concept, it will be examined as an antecedent of OCB in that task interdependence provides the context for employees to help others in their work places. Role identity theories have found that individuals will tend to form a certain type of role identity as they have to conduct their role behaviors (Callero, 1985, 1992). For example, if an individual has to engage in the role of being a father, his role identity as a father is more likely to be salient his definition of self. In the same vein, the repetitive experience of conducting OCB in an organization can develop individuals’ OCB role identity, which can make employees’ OCB more persistent even in an unsatisfactory work environment (Finkelstein & Penner, 2004). Task interdependence can contribute to enhancing OCB by providing more chance for employees to develop an OCB role identity as employees have more chances to help others in their work context. As noted above, task interdependence also develops employees’ responsibility to others and provides a chance to build affective relationships with beneficiaries of OCB (Grant, 2007). Based on this notion, the final hypothesis was developed.

Hypothesis 8: Task interdependence will be positively related to public employees’ engagement in OCB.
6. **Chapter Summary**

This chapter has reviewed the literature on OCB. While previous OCB studies have developed theoretical or empirical models based primarily on social exchange theory, this study suggests that variables based on different identity theories can expand our understanding of the antecedents of OCB. In particular, prosocial orientation, organizational identification, subjective OCB norms and task interdependence are suggested as important antecedents in the current study. To examine the importance of these four variables, hypotheses were developed based on the implications of previous studies examining social, role and personal identity theories. In addition, the current study will examine the interaction effects among these variables. Based on self-determination theory the current study suggests that individuals will depend on behavioral guidelines that are closer to intrinsic motivation. Since prosocial orientation can be understood as intrinsic motivation to help others, this study suggests that one’s prosocial orientation will serves as a primary behavioral guideline that leads employees to engage in OCB. When public employees do not have a high level of prosocial orientation, this study suggests they will adopt organizational identification as their behavioral guideline to determine their OCB level since it is closer to identified or integrated regulation in the SDT. As a last resort, subjective OCB norms were identified as a behavioral guideline that leads employees to engage in OCB when employees have not yet developed a prosocial orientation or organizational identification. The next chapter will present the plan for collecting and analyzing data to be used for this empirical study.
Chapter III. Methodology

This chapter describes the methodology used in this study. First, the chapter describes the targeted sample and data collection procedure to test the suggested hypotheses. Next, it describes how the survey instrument was developed and explains each of the measures in detail. As explained below, most of the measures were based on other established studies. Two pretests were also conducted to test the measures with government employees. The data for the study were collected from Korean local government employees.

1. Sample and Data Collection Procedure

The sample was drawn from Korean local government employees who were students in the Korean Training Institute (KTI hereafter). The Korean Training Institute provides specialized training and educational programs including expert training, basic capacity building and long-term education programs. Many students are senior government employees who want to be promoted into managerial positions in the near future, and several thousand government employees are taught in KTI programs every year. On the beginning days of their programs, the purpose of the survey was explained. Students were also told that their participation in the survey was completely voluntary and their responses would be anonymous; that is, those who wanted to participate in the survey could leave their responses in the designated mail box at KTI by the completion day of their programs, but no coding of surveys was done to determine who had actually
participated. A total of 610 participants who were students at KTI at the time of data collection were included as the sample of the current study.

Out of 610 surveys distributed, 471 surveys were returned. Responses that had unreasonable or inappropriate answers were screened. For example, it was assumed that when respondents answered all the 12 items of OCB with all the highest or lowest values they were not carefully responding to the items and so those responses were removed from the sample. Out of 471 responses, 19 responses (4.03%) were dropped, and 452 responses were deemed to be usable surveys, resulting in a total response rate of 74.10%.

An overview of demographic characteristics and regional distributions of respondents is presented in the Table III-1. Since KTI was established to educate senior local government employees, the age and tenure of respondents are relatively high. Ages ranged from 25 to 58 with a mean of 49.81 and a standard deviation of 5.18. Tenure in current organization ranged from less than 1 year to 37 years with a mean of 10.04 and a standard deviation of 11.04. Tenure in the public sector ranged from less than 1 year to 37 years with a mean of 26.21 and a standard deviation of 6.77. The Korean ranking system for government workers uses 9 grades. In the ranking system, employees at the 1st, 2nd or 3rd grade are recognized as high-ranking workers and those at the 9th grade are recognized as entry-level workers. In the current sample, the vast majority (85.84%) of respondents were of rank 5 or 6, and 61.73% of respondents reported that they were not in a managerial position.
2. Measures

The survey was developed with 77 questions, designed to examine employee perceptions of their work situation and basic demographic information. The questionnaire included measures of such variables as organizational justice, subjective OCB norms, and task interdependence as well as self-reports of respondents’ behaviors and subjective perceptions of their OCB, job satisfaction and organizational identification. Most of the survey items were borrowed from previous empirical studies, and most variables were measured using a seven-point or five-point scale. Items for each of the measures are included in the Appendices.

**Organizational citizenship behavior.** Twelve OCB items were selected by combining Williams and Anderson’s (1991), Moorman and Blakely’s (1995) and Ackfeldt and Wong’s (2006) scales to include employees’ citizenship behaviors targeted at coworkers (OCBI), organizations (OCBO) and citizens (OCBC). Four items were used for OCBI, five items for OCBO, and three items for OCBC. The OCBC measure was developed by adapting prosocial service behaviors to a government context. Examples of items are “I help others who have heavy workloads” (OCBI), “I adhere to informal rules devised to maintain order” (OCBO) and “I voluntarily help a citizen in trouble beyond what is expected or required of me by management” (OCBC). A seven-point scale was used (1= strongly disagree and 7= strongly agree).

**Prosocial orientation.** Penner, Fritzsche, Craiger and Freifeld (1995) initially developed the Prosocial Personality Battery (PSB) as a measure of prosocial personality. The measure comprises 56 items based on items from different scales, and includes various components of prosocial personality such as empathic concern, ascription of
responsibility, other-oriented moral reasoning and perspective taking, and self-reported altruism. Studies have shown that the 56 items lead to a two-factor solution: other-oriented empathy and helpfulness. Penner (2002) later developed a 30-item short version of the PSB and found that the two factors emerged consistently. Due to space limitations, this study adopted 4 items from the 30-item version of the PBS scale. Examples of measurements are “It doesn't make much sense to be very concerned about how we act when we are sick and feeling miserable (R)” and “I do not feel much compassion when I see people in distress (R).” In addition, four more items were added. Two items were added from the public service motivation scales developed by Perry (1996) to include more empathy items (“I am often reminded by daily events how dependent we are on one another” and “I unselfishly contribute to my community”). Two items were also developed to reflect helpfulness (“I have volunteered to help others in the past six months” and “I have donated money or belongings to help people in need in the last six months”). A five-point scale was used (1= strongly disagree and 5= strongly agree).

**Subjective OCB norms.** In order to measure subjective OCB norms, the existing OCB scales were modified to focus on other individuals in participants’ work groups. That is, 12 OCB measures were modified and respondents were asked to describe behaviors of their coworkers within their work groups. The items used “Members of my work unit” instead of “I” to measure subjective OCB norms. Examples of measures are “Members of my work unit help others who have heavy workloads” and “Members of my work unit rarely miss work even when they have a legitimate reason for doing so.” A seven-point scale was used (1= strongly disagree and 7= strongly agree).
**Organizational identification.** Organizational identification was measured using five items developed in Mael and Ashforth’s (1992) previous study. Riketta (2005) found that the organizational identification items developed by Mael and Ashforth had discriminant validity with regard to affective organizational commitment. Examples of items are “This organization’s successes are my successes” and “When I talk about this organization, I usually say ‘we’ rather than ‘they.’” A five-point scale was used (1= strongly disagree and 5= strongly agree).

**Organizational justice.** To measure two types of organizational justice (procedural justice and distributive justice), a total of eight items developed by Parker, Baltes and Christiansen (1997) and Jos and Witt (1992) were used. Examples of items measuring procedural justice include “Members of my work unit are involved in making decisions that directly affect their work” and “People with the most knowledge are involved in the resolution of problems.” Examples of items measuring distributive justice include “If one performs well, there is appropriate recognition and reward” and “Most of my job assignments have been fair.” A five-point scale was used (1= strongly disagree and 5= strongly agree).

**Job satisfaction.** The 11 items of job satisfaction were adapted from the 20-item Minnesota Satisfaction Questionnaire (MSQ). In addition, one item was added (“Work atmosphere without corruption”). A total of 12 items were used with 5 items measuring intrinsic job satisfaction and 7 items measuring extrinsic job satisfaction. Examples of items for extrinsic job satisfaction include “The way my job provides for steady employment” and “The amount of work that I do.” Examples of items measuring intrinsic job satisfaction include “The chance to do something that makes use of my
ability” and “The feeling of accomplishment I get from the job.” A five-point scale was used and respondents were asked to answer their level of satisfaction for each aspect of their jobs (1= very dissatisfied with this aspect of my job; 5= very satisfied with this aspect of my job).

**Task interdependence.** To measure task interdependence, the study used Pearce and Gregersen’s (1991) nine-item interdependence measure based on Thompson’s (1967) theoretical guidelines. Examples of items are “I work closely with others in doing my work” and “I frequently must coordinate my efforts with others.” A seven-point scale was used (1= strongly disagree and 7= strongly agree).

**Leader-member exchange (LMX).** Items measuring LMX were adopted from Graen and Uhl-Bien’s (1995) scale. Due to space limitations, only five of the seven items were used in this study. Since the current study collected data only from employees, it only used employee perceptions of LMX. A five-point scale was used and examples include “How would you characterize your working relationship with your leader? (1= extremely ineffective and 5= extremely effective)” and “How well does your supervisor understand your job problems and needs? (1=not a bit and 5=a great deal).”

**Demographic variables.** Respondents’ sex, age, education, years of public sector employment and years in current organization were also collected as control variables. Males were coded as 1 and females were coded as 0 for the sex variable. Years in one’s career, both in the employees’ current organization and in the public sector in general, were also included as control variables. Based on information with respect to respondents’ job title, rank and their major responsibilities, respondents were also categorized as either managers or non-managerial employees.
3. Development of the Survey Instrument

To develop the survey instrument, two types of pretests were conducted. First, the researcher conducted a pretest using the Iowa League of Cities’ listserv. The Iowa League of Cities developed an e-mail list for city employees located in the large cities in Iowa; the list includes 549 complete e-mail addresses for employees in the 21 cities with populations over 25,000. The researcher collected 94 responses. Validity and reliability were tested.

Survey items were then translated by the researcher, and subsequently reviewed and modified by two other Korean social scientists for use in this study. Whenever disagreement existed in translation, the researchers discussed and resolved the differences. After the researchers agreed to the Korean version of the survey, an additional pretest was conducted. The pretest involved a web-based survey, initially distributed to ten Korean central government employees who recently graduated from the University at Albany. After they answered the survey, these individuals were also asked to distribute the survey to their work colleagues. Using this snowball sampling method, the researcher collected 87 responses from Korean central government employees. The researcher was also provided with informal feedback from the respondents. Items were modified, and the survey instrument was finalized based on the feedback and results.

4. Data Analysis

Since several measures were developed by modifying and/or combining existing measures, exploratory factor analyses (EFA) were conducted for both independent and dependent variables, and several items were dropped for the further analysis. For example,
among 12 items originally developed to measure OCB variables, only 8 items were used. The expected three-factor model (i.e., OCBI, OCBO and OCBC) was not supported but a two-factor OCB model was supported in the data. In addition, prosocial orientation items were completely dropped due to the concerns regarding crossloading of the items. In addition, Cronbach alpha statistics were calculated to examine the reliability of the modified scales. Next, univariate and correlation scores were calculated. After examining the normality of the distributions of the modified scales, hypothesis tests were conducted using ordinary least square (OLS) regression analyses. The results of data analysis will be reported in the next chapter in detail.

5. Chapter Summary

This chapter described the methodology used to collect data for this study including measures of the variables and data collection procedures. The Korean government employees who took managerial training courses from KTI were selected as potential respondents. The survey included 77 items, and most of the scales were based on existing scales used in previous studies. In the next chapter, the results of the analyses including univariate statistics, correlational analysis and multivariate regression to test the proposed hypotheses will be presented.
Table III-1 Demographic characteristics of respondents (n=452)

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<td>Associate degree, some college, or technical school, B.S.W., B.A., B.S., or other college degree</td>
<td>301</td>
<td>66.59</td>
</tr>
<tr>
<td>Master’s degree and some graduate study beyond college degree</td>
<td>54</td>
<td>11.95</td>
</tr>
<tr>
<td>Doctoral degree or beyond Master’s degree</td>
<td>8</td>
<td>1.77</td>
</tr>
<tr>
<td><strong>REGION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seoul-KyeonGi-Do</td>
<td>106</td>
<td>23.45</td>
</tr>
<tr>
<td>ChungCheong-Do</td>
<td>88</td>
<td>19.47</td>
</tr>
<tr>
<td>JeolLa-Do</td>
<td>75</td>
<td>16.59</td>
</tr>
<tr>
<td>GangWon-Do</td>
<td>40</td>
<td>8.85</td>
</tr>
<tr>
<td>GyeongSang-Do</td>
<td>125</td>
<td>27.65</td>
</tr>
<tr>
<td>JeJu-Do</td>
<td>6</td>
<td>1.33</td>
</tr>
<tr>
<td>Missing</td>
<td>12</td>
<td>2.65</td>
</tr>
<tr>
<td><strong>POSITION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>173</td>
<td>38.27</td>
</tr>
<tr>
<td>Non-manager</td>
<td>279</td>
<td>61.73</td>
</tr>
<tr>
<td><strong>RANK</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td>3</td>
<td>0.66</td>
</tr>
<tr>
<td>5th</td>
<td>116</td>
<td>25.66</td>
</tr>
<tr>
<td>6th</td>
<td>272</td>
<td>60.18</td>
</tr>
<tr>
<td>7th</td>
<td>33</td>
<td>7.3</td>
</tr>
<tr>
<td>8th</td>
<td>5</td>
<td>1.11</td>
</tr>
<tr>
<td>9th</td>
<td>4</td>
<td>0.88</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td>4.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TENURE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years in Current Organization</td>
<td>10.04</td>
<td>11.04</td>
</tr>
<tr>
<td>Years in the Public Sector Job</td>
<td>26.21</td>
<td>6.77</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years in 2011</td>
<td>49.81</td>
<td>5.18</td>
</tr>
</tbody>
</table>
Chapter IV. Results of Field Study

This chapter reports the results of data analyses. As a first step in the data analysis, data were screened for outliers, non-normality, heteroskedasticity and multicollinearity problems. Next, the validity and reliability of each of the measure was examined. Since several measures (e.g., subjective OCB norms, OCBC and prosocial orientation) were developed specifically for the purpose of this study and all items were translated from English to create a Korean version of survey, exploratory factor analysis (EFA) was conducted. Cronbach’s alpha statistics were also examined to check the reliability of scales, and bivariate correlations were examined to check the construct validity of the measurements. In order to test the study hypothesis several multivariate OLS regression analyses were conducted to examine the antecedents of OCBs. First, predictors based on social exchange theory (job satisfaction, organizational justice, LMX leadership) were entered. As the second step, self-concept related predictors (organizational identification, subjective OCB norms and task interdependence) were examined. Interaction effects were also examined in the final models. In addition, the current study examined the mediating role of organizational identification.

1. Analysis to Screen Data

Prior to conducting the statistical analyses to test the study hypotheses, the data were screened to minimize the influence of missing data. Out of the remaining 452 responses, 57 (12.61%) were found to have at least one missing value in their responses. To test whether the data were missing at random, dichotomous codes were created (cases with missing data were coded as 1 and cases with all data were coded as 0) and group
differences were examined. T-tests were used for continuous items and chi-square tests were conducted for categorical items. Although most group comparisons revealed no differences, employees with higher tenure in their organizations \(t=-3.07, p=0.001\) and those with higher education [more than B.A. degree \(p(\chi^2)=0.04\)] were found to have higher levels of missing values. Several respondents omitted their demographic information such as tenure in their current organizations and in the public sector. In this case, the arithmetic mean was used to replace missing values. In addition, if a scale had only one missing value, the missing value was replaced with the arithmetic mean of the other relevant items for that variable; if more than ten items were used to measure a variable, two missing items were allowed to be replaced with arithmetic mean of the other items. Missing values from 40 responses were filled through this process.

2. Exploratory Factor Analysis

Exploratory factor analyses (EFA) has been used widely for various purposes, and researchers use different data extraction methods depending on the characteristics of their data and research purposes (Gorsuch, 1983). For the purpose of this study, Principal Component Factor Analysis (PCFA) was used for factor extraction. While Principal Component Analysis (PCA) is a widely used method, several researchers have pointed out its limitations. For example, Costello and Osborne (2005) noted that PCA is based on the assumption that components’ structures can be calculated exactly without any consideration of sampling errors, and researchers should not have any prior assumptions about factor structures. Because these assumptions may not apply in the social sciences, PCFA can be a good alternative in this context. Although PCFA uses the same data
extraction method as PCA, PCFA assumes that the given data are collected from a limited sample and identifies the unique error term of each observation. As such, it provides estimated factor scores and statistical significance tests with indexes of goodness of fit.

The exploratory factor analyses was conducted in two stages in this study. First, separate factor analyses were conducted for items associated with each variable to examine convergent validity. Next, to examine the discriminant validity, an additional factor analysis was conducted with all retained items from all the independent variables to be used in the analysis to check whether there would be crossloading of items. Table IV-1 presents the final results of the EFAs. To decide how many factors to retain for rotation, this study considered both eigenvalues and scree tests. The eigenvalue is the most widely used statistical index in deciding the number of retained factors; factors were retained when their eigenvalues were greater than one. The scree test is a graphic presentation of eigenvalues; it presents the break point of data where the relevant eigenvalues flatten out. The number of factors before the break point was considered in determining the number of factors to use for each of the measures. When scree tests and eigenvalues failed to provide a clear guideline, the researcher tested multiple EFA models by choosing the number of factors to retain manually and compared how factor loadings changed depending on different approaches. For example, when it was not clear whether one factor or two factors were appropriate for the given data, both models were examined and the factor loadings structure was compared between the two models.

After the number of factors was decided, this study conducted factor rotations to provide a better interpretation of factor extractions both for both independent and
dependent variables. There are two different types of factor rotations—orthogonal and oblique. The most important difference between the two methods is whether the factors are assumed to be correlated with one another or not. Orthogonal rotations assume uncorrelated factor structures, while oblique rotations assume correlated factor structures. Following Costello and Osborne’s (2005) argument, this study used a promax rotation, which is an oblique rotation. Costello and Osborne argued that it is difficult to use an orthogonal rotations in the social sciences because we cannot expect perfectly uncorrelated variables since people’s behaviors and motivations cannot be “partitioned into neatly packaged units that function independently of one another” (p. 3). In this case, using an oblique approach might be more appropriate for examining the various OCBs since it would be inappropriate to assume that one type of citizenship behavior is unrelated to another. Promax rotation uses an orthogonal solution as a default model and alters the solutions to allow correlation among components (Gorsuch, 1983).

Organizational Citizenship Behavior. The current study proposed a three-factor model of OCB (OCBI, OCBO and OCBC), and 12 items were included in the survey. The model was not supported in the given dataset, although a two-factor model was supported both in the examination of eigenvalues and the scree test. In particular, the OCBC items did not load on the same factor, but two OCBC items (“I voluntarily help a citizen in trouble beyond what is expected or required of me by management” and “I go beyond call of duty to provide better public service”) loaded onto OCBI and OCBO, respectively. Of the 12 items, 4 items were dropped due to their crossloadings and low loading scores; 63.86% of variance was explained by the two factors. Cronbach’s alpha of OCBI was 0.86, and that of OCBO was 0.66
**Prosocial orientation.** Originally, eight items were adopted from various sources to measure prosocial orientation. It was expected that two different factors (helpfulness and compassion) would emerge based on the findings of Penner et al. (1995). However, the prosocial orientation items did not load consistently, and two items were dropped due to high uniqueness\(^2\) and low factor loadings. Four items were retained for helpfulness and two items were retained for compassion. Since two items are generally not considered to be an adequate measure of a concept, a decision was made to drop compassion from the study. Even after the items of compassion were dropped, however, the remaining four items were found to have crossloadings with items of other variables, and Cronbach’s alpha was lower than 0.6 (0.52) for the four items. Based on this finding, prosocial orientation was completely dropped from the further analyses.

**Subjective OCB norms.** Twelve items were developed to measure subjective OCB norms. One factor was extracted for the subjective OCB norms. No items were dropped since no problems of uniqueness or low factor loadings were found. Cronbach’s alpha of subjective OCB norms was 0.94.

**Organizational identification.** Five items were adopted from Mael and Ashforth’s (1992) previous study. Among the items, one item was dropped due to the high unique value of the item (“I am very interested in what others think about my organization”), and four items were retained for the organizational identification scale. Cronbach’s alpha of organizational identification was 0.73.

**Job satisfaction.** Originally, 12 items based on the Minnesota Satisfaction Questionnaire (MSQ) were used to measure two types of job satisfaction. Based on the

\(^2\) When uniqueness is above 0.6 (communality is below 0.4 \((h^2 <0.4)\)), the items were dropped since they will generate low reliability.
factor analysis, one item was dropped due to problems of crossloading (“The chance for advancement on this job”). Thus, 11 items were retained, and the items loaded on two separate factors. Originally, it was expected that the two factors would measure extrinsic job satisfaction and intrinsic job satisfaction. However, two extrinsic job satisfaction items (“The way my coworkers get along with each other” and “The way my job provides for steady employment”) factored together with the intrinsic job satisfaction items. In addition, an item added by the researcher (“Work atmosphere without corruption”) loaded with the intrinsic job satisfaction. Thus, the two factor structures in the given data did not seem to reflect “intrinsic” or “extrinsic” job satisfaction. Rather, they seemed to reflect characteristics of public sector jobs that Korean government employees value differently. For example, job security and work atmosphere as well as intrinsic job satisfaction might be aspects of jobs that Korean government employees think important. On the other hand, the amount of work, physical working condition and payment might reflect work conditions that government employees have to accept in their government jobs. Descriptive statistics revealed that respondents have higher opinions of the aspects of public sector jobs (arithmetic mean = 3.85) than of their work conditions (arithmetic mean = 3.27) in the given data. In addition, while only 4.67% of respondents reported that they were generally not satisfied with the aspects of their jobs, 26.11% of respondents reported that they are generally not satisfied with their work conditions. In this study, the aspects of public sector jobs were labeled “primary job satisfaction” and satisfaction related to work conditions were labeled “secondary job satisfaction.”

3 Respondents were recognized as “generally not satisfied” when the arithmetic mean of responses are below 3 on a 5-point scale.
Cronbach’s alpha of primary job satisfaction was 0.88, while that of secondary job satisfaction was 0.69.

**Organizational justice.** Initially 8 items were adopted from scale developed by Parker, Baltes and Christianen (1997) and Jos and Witt (1992). Of the eight items, six items were retained and two were dropped due to crossloading (“People with the most knowledge are involved in the resolution of problems” and “Most of my job assignments have been fair”). Three items each were retained for procedural justice and distributive justice. Cronbach’s alpha of procedural justice was 0.83, while that of distributive justice was 0.78.

**Task interdependence.** Out of nine items adopted from Pearce and Gregersen’s (1991) scale, four items were dropped due to their high uniqueness (“I frequently must coordinate my efforts with others”; “I can plan my own work with little need to coordinate with others”; “The way I perform my job has a significant impact on others”; and “I work fairly independently of others in my work”). The remaining items loaded on one factor, and Cronbach’s alpha was 0.71.

**Leader-member exchange (LMX).** Five items adopted from the scale developed by Graen and Uhl-Bien (1995) were used for LMX. All items loaded onto one factor in the EFA, and no problems of uniqueness or low factor loading were found. Cronbach’s alpha was 0.86.
Table IV-1 Rotated factor loadings for independent and dependent variables

<table>
<thead>
<tr>
<th>Rotated factor loadings for OCB variables</th>
<th>Factor Loading</th>
<th>Unique -ness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OCBI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I help others who have heavy work loads</td>
<td>0.87</td>
<td>0.33</td>
</tr>
<tr>
<td>I go out of my way to help new employees</td>
<td>0.88</td>
<td>0.27</td>
</tr>
<tr>
<td>I assist my supervisor with my work even when not asked</td>
<td>0.86</td>
<td>0.30</td>
</tr>
<tr>
<td>I take time to listen to co-workers’ problems and worries</td>
<td>0.69</td>
<td>0.43</td>
</tr>
<tr>
<td>I voluntarily help a citizen in trouble beyond what is expected or required of me by management</td>
<td>0.66</td>
<td>0.46</td>
</tr>
<tr>
<td>Initial Eigenvalue</td>
<td></td>
<td>4.01</td>
</tr>
<tr>
<td><strong>OCBO</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I rarely miss work even when I have a legitimate reason for doing so</td>
<td>0.95</td>
<td>0.25</td>
</tr>
<tr>
<td>I adhere to informal rules devised to maintain order</td>
<td>0.73</td>
<td>0.35</td>
</tr>
<tr>
<td>I go beyond call of duty to provide better public service</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Initial Eigenvalue</td>
<td></td>
<td>1.09</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rotated factor loadings for Independent variables</th>
<th>Factor Loading</th>
<th>Unique -ness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government employees' primary job satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The chance to be “somebody” in the community</td>
<td>0.69</td>
<td>0.44</td>
</tr>
<tr>
<td>The way my job provides for steady employment</td>
<td>0.72</td>
<td>0.51</td>
</tr>
<tr>
<td>The way my co-workers get along with each other</td>
<td>0.70</td>
<td>0.44</td>
</tr>
<tr>
<td>Work atmosphere without corruption</td>
<td>0.82</td>
<td>0.45</td>
</tr>
<tr>
<td>The chance to do something that makes use of my ability</td>
<td>0.70</td>
<td>0.38</td>
</tr>
<tr>
<td>The chance to work for the public good</td>
<td>0.81</td>
<td>0.34</td>
</tr>
<tr>
<td>Being able to do things that don’t go against my conscience</td>
<td>0.60</td>
<td>0.39</td>
</tr>
<tr>
<td>The feeling of accomplishment I get from the job</td>
<td>0.67</td>
<td>0.38</td>
</tr>
<tr>
<td>Initial Eigenvalue</td>
<td></td>
<td>3.92</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Government employees' secondary job satisfaction</strong></th>
<th>Factor Loading</th>
<th>Unique -ness</th>
</tr>
</thead>
<tbody>
<tr>
<td>The payment that I receive in the organization</td>
<td>0.63</td>
<td>0.51</td>
</tr>
<tr>
<td>The amount of work that I do</td>
<td>0.84</td>
<td>0.28</td>
</tr>
<tr>
<td>Physical working condition</td>
<td>0.75</td>
<td>0.36</td>
</tr>
<tr>
<td>Initial Eigenvalue</td>
<td></td>
<td>1.01</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>LMX leadership</strong></th>
<th>Factor Loading</th>
<th>Unique -ness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you usually know how satisfied your supervisor is with what you do?</td>
<td>0.67</td>
<td>0.49</td>
</tr>
<tr>
<td>How well does your supervisor understand your job problems and needs?</td>
<td>0.82</td>
<td>0.31</td>
</tr>
<tr>
<td>Regardless of how much formal authority he/she has built into his/her position, what are the chances that your supervisor would use his/her power to help you solve problems in your work?</td>
<td>0.86</td>
<td>0.26</td>
</tr>
<tr>
<td>Table IV-1. (cont.) Rotated factor loadings for independent and dependent variables</td>
<td>Factor Loading</td>
<td>Uniqueness</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Regardless of the amount of formal authority your manager has, what are the chances that he/she would “bail you out,” at his/her expense?</td>
<td>0.82</td>
<td>0.34</td>
</tr>
<tr>
<td>How would you characterize your working relationship with your supervisor?</td>
<td>0.77</td>
<td>0.34</td>
</tr>
<tr>
<td>Initial Eigenvalue</td>
<td>2.50</td>
<td></td>
</tr>
</tbody>
</table>

**Organizational identification**

- When someone criticizes my organization, it feels like a personal insult | 0.76 | 0.45 |
- When I talk about my organization, I usually say "we" rather than "they" | 0.63 | 0.56 |
- This organization’s successes are my successes | 0.65 | 0.34 |
- When someone praises my organization, it feels like a personal compliment | 0.77 | 0.32 |

**Procedural justice**

- People involved in implementing decisions have a say in making the decisions | 0.73 | 0.29 |
- Members of my work unit are involved in making decisions that directly affect their work | 0.86 | 0.23 |
- Decisions are made on the basis of research, data and professional criteria, as opposed to political concerns | 0.80 | 0.31 |

**Distributive justice**

- If a work unit performs well, there is appropriate recognition and rewards for all | 0.86 | 0.21 |
- If one performs well, there is appropriate recognition and reward | 0.90 | 0.22 |
- I have received a fair performance evaluation | 0.56 | 0.45 |

**Subjective OCB norms**

- Members of my work unit……
  - help others who have heavy workloads | 0.79 | 0.28 |
  - go out of their way to help new employees | 0.84 | 0.23 |
  - assist their supervisor with their work even when not asked | 0.81 | 0.30 |
  - take time to listen to co-workers’ problems and worries | 0.79 | 0.32 |
  - express opinions honestly even when others may disagree on issues that may have serious consequences | 0.76 | 0.30 |
  - encourage others to try new and more effective ways of doing their job | 0.83 | 0.25 |
Table IV-1. (cont.) Rotated factor loadings for independent and dependent variables

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor Loading</th>
<th>Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>frequently communicate to co-workers suggestions on how the group can improve</td>
<td>0.72</td>
<td>0.30</td>
</tr>
<tr>
<td>rarely miss work even when they have a legitimate reason for doing so</td>
<td>0.69</td>
<td>0.46</td>
</tr>
<tr>
<td>adhere to informal rules devised to maintain order</td>
<td>0.68</td>
<td>0.32</td>
</tr>
<tr>
<td>go beyond call of duty to provide better public service</td>
<td>0.75</td>
<td>0.24</td>
</tr>
<tr>
<td>voluntarily help a citizen in trouble beyond what is expected or required by management</td>
<td>0.67</td>
<td>0.24</td>
</tr>
<tr>
<td>enjoy going the extra miles to make a citizen satisfied</td>
<td>0.64</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Initial Eigenvalue 12.35

Extraction Method: Principal Component Factor Analysis; Rotation Method: Promax

3. Regression Diagnostic

Before testing the hypotheses, the data set was also screened for the influence of outliers, non-normality, heteroskedasticity and multicollinearity based on the guidelines suggested by Wooldridge (2008) and Studenmund (2010). Outliers were examined by using Cook’s distance and studentized residuals. Full multiple regression models for the hypotheses tests, including interaction terms, were used to identify outliers. Individual cases recognized as outliers were dropped in the final multiple regression analyses if both the value of Cook’s distance (0.009)\(^4\) and that of studentized residual fell beyond the critical value (2.5). Seven observations (1.55%) were dropped, and a total of 447 responses were used for the hypothesis tests.

Skewness and kurtosis were examined to test the normality of the dependent variables. Statistical significance tests of skewness and kurtosis were conducted using SPSS, and a critical value above 3.0 was used as criterion. A joint significance test of

\(^4\) This study follows Bollen and Jackman’s (1990) guideline to determine outliers. (D\(_i\) = 4 / n-k-1 = 4/(452-14-2) = 0.009), where n is the number of observations, and k denotes the number of variables.
normality (using information regarding both skewness and kurtosis) was also conducted using STATA. OCBI presented a significant degree of non-normality for skewness (critical value = 5.00) and OCBO exhibited a significant degree of non-normality both for skewness (critical value = 9.07) and kurtosis (critical value = 5.59). The chi-square tests for joint significance for OCBI ($\chi^2 = 7.88$) and OCBO ($\chi^2 = 50.47$) also suggested that normality assumptions for the dependent variables were violated in the current data set. Although the normality assumptions of dependent variables (OCBI and OCBO) were violated, the use of OLS estimation for the further analyses is still acceptable, since OLS estimators satisfy asymptomatic normality in large sample sizes (Studenmund, 2010, Wooldridge, 2008). Since the number of observations for the current sample is over 450, t-statistics and F-statistics for the statistical inference can be used.

White’s test and a Breusch-Pagan test (BP test) were conducted to examine heteroskedasticity. These two tests have similar approaches in that they run a regression of squared residuals on independent variables. However, White’s test requires more estimators, since it considers all possible squares and cross products of independent variables. The null hypotheses for homoskedasticity was rejected both by the BP test [$\chi^2 = 4.01$ (p<0.05) for OCBI; $\chi^2 = 23.06$ (p<0.01) for OCBO] and by White’s test [$\chi^2 = 134.27$ (p<0.01) for OCBI; $\chi^2 = 126.23$ (p<0.01) for OCBO]. Since statistics such as t-values and F-values are questionable when there is heteroskedasticity because standard errors are more likely to be inflated in most cases, this study followed a heteroskedasticity-robust procedure and reports heteroskedasticity-robust t-statistics in the multivariate regression analyses.
Multicollinearity tests among the independent variables were examined, but no significant multicollinearity problems were found. First, correlation coefficients among the independent variables were examined and no high correlations (r>0.7) were found. Test of multicollinearity problems should also be conducted when an unreasonably high multiple $R^2$ is reported with few statistically significant individual regression coefficients in a given regression model. This is not the case in the current regression models, since regression coefficients of several independent variables were statistically significant with relatively moderate multiple $R^2$s. More formal tests were also conducted using Variance Influence Factors (VIF) across different regression models. VIF is calculated as $\frac{1}{1-R^2_j}$, where $R^2_j$ denotes the multiple regression coefficient of determination between a given independent variable and other independent variables. Thus, when an independent variable is more highly correlated with other independent variables, the value of VIF is higher. Multicollinearity problems are to be considered if the value of VIF is above 10.0, but none of the VIF values for the current independent variables in this study exceeded 2. VIF values ranged from 1.04 to 1.77, with a mean value of VIF of 1.37 for predictors. Based on these results, multicollinearity was not considered further in the hypothesis tests.

4. Correlation

After conducting the factor analyses, scales for each of the variables were generated based on the results of factor analyses. Table IV-2 presents the correlations among variables with descriptive statistics for each variable.

The descriptive statistics of the variables reveal that both dependent variables (OCBI and OCBO) and independent variables (subjective OCB norms, organizational
justice, LMX leadership and job satisfaction) are negatively skewed. For example, the mean values of distributive justice (arithmetic mean= 3.54), procedural justice (arithmetic mean= 3.78), primary job satisfaction (arithmetic mean= 3.84) and organizational identification (arithmetic mean = 4.00) are relatively high. It should be also noted that respondents tended to report that they engage in OCBs actively (arithmetic mean of OCBI = 5.73; arithmetic mean of OCBO=5.85).

The correlation coefficients between independent and dependent variables ranged from 0.11 to 0.61, and the directions of correlation between OCBs and the independent variables were in line with the hypotheses based on different theories. For example, in line with social exchange theory, job satisfaction, organizational justice, and LMX leadership were found to have positive associations with OCBs in this data set. In addition, in line with self-concept theory, organizational identification and subjective OCB norms had positive associations with OCBs. The correlation coefficient of subjective OCB norms and OCBI was the highest among the correlations of independent and dependent variables.

The correlation coefficients between OCBs and variables such as ‘position’ and ‘tenure in current organization’ were not statistically significant. While ‘sex’ had a weak, but statistically significant, relationship with OCBI (r=0.11, p<0.05), it did not have a statistically significant relationship with OCBO. ‘Tenure in public sector jobs’ exhibited moderate, but statistically significant, relationships both with OCBI (r=0.18, p<0.05) and with OCBO (r=0.27, p<0.05). Some of the proposed strength of associations did not emerge as expected. For example, procedural justice had a stronger association with OCBI and OCBO than did distributive justic
### Table IV-2 Intercorrelation and reliabilities of measures

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
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<td>(1) OCBI</td>
<td>5.73</td>
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<td>(2) OCBO</td>
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<td>0.57*</td>
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<td>(3) Sex (male=1; female=0)</td>
<td>0.82</td>
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<td>0.11*</td>
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<td>(4) Position (manager=1; non-manager=0)</td>
<td>0.38</td>
<td>0.49</td>
<td>0.03</td>
<td>0.09</td>
<td>0.09</td>
<td>-</td>
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<tr>
<td>(5) Tenure in public sector jobs</td>
<td>26.29</td>
<td>6.69</td>
<td>0.18*</td>
<td>0.27*</td>
<td>0.19*</td>
<td>0.27*</td>
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<tr>
<td>(6) Tenure in current organization</td>
<td>10.04</td>
<td>11.05</td>
<td>0.05</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.04</td>
<td>0.17*</td>
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<tr>
<td>(7) Primary job satisfaction</td>
<td>3.84</td>
<td>0.56</td>
<td>0.33*</td>
<td>0.30*</td>
<td>0.11*</td>
<td>0.07</td>
<td>0.12*</td>
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<td>(8) Secondary job satisfaction</td>
<td>3.29</td>
<td>0.64</td>
<td>0.19*</td>
<td>0.14*</td>
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<td>0.06</td>
<td>0.17*</td>
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<tr>
<td>(9) Procedural justice</td>
<td>3.78</td>
<td>0.66</td>
<td>0.43*</td>
<td>0.40*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.15*</td>
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<td>(10) Distributive justice</td>
<td>3.54</td>
<td>0.63</td>
<td>0.26*</td>
<td>0.22*</td>
<td>0.06</td>
<td>-0.01</td>
<td>0.09</td>
<td>0.05</td>
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<td>(11) LMX leadership</td>
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<td>0.71</td>
<td>0.31*</td>
<td>0.21*</td>
<td>0.10*</td>
<td>-0.05</td>
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<td>0.07</td>
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<td>(12) Organizational identification</td>
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<td>0.39*</td>
<td>0.03</td>
<td>0.07</td>
<td>0.19*</td>
<td>0.09</td>
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<tr>
<td>(13) Subjective OCB norms</td>
<td>5.32</td>
<td>0.83</td>
<td>0.61*</td>
<td>0.54*</td>
<td>0.08</td>
<td>0.01</td>
<td>0.17*</td>
<td>0.01</td>
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<tr>
<td>(14) Task interdependence</td>
<td>4.63</td>
<td>0.91</td>
<td>0.26*</td>
<td>0.24*</td>
<td>0.17*</td>
<td>-0.13*</td>
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<tr>
<th></th>
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<tr>
<td>(8) Secondary job satisfaction</td>
<td>0.53*</td>
<td>(0.69)</td>
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<tr>
<td>(9) Procedural justice</td>
<td>0.31*</td>
<td>0.21*</td>
<td>(0.83)</td>
<td></td>
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<td>(10) Distributive justice</td>
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<td>0.42*</td>
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<td>(11) LMX leadership</td>
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<td>0.43*</td>
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<tr>
<td>(12) Organizational identification</td>
<td>0.36*</td>
<td>0.18*</td>
<td>0.31*</td>
<td>0.20*</td>
<td>0.24*</td>
<td>(0.73)</td>
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<tr>
<td>(13) Subjective OCB norms</td>
<td>0.34*</td>
<td>0.17*</td>
<td>0.56*</td>
<td>0.43*</td>
<td>0.39*</td>
<td>0.35*</td>
<td>(0.94)</td>
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<tr>
<td>(14) Task interdependence</td>
<td>0.13*</td>
<td>0.09</td>
<td>0.26*</td>
<td>0.28*</td>
<td>0.25*</td>
<td>0.19*</td>
<td>0.30</td>
<td>(0.71)</td>
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*a Pairwise deletion. Cronbach’s alphas for multiple items are along the diagonal in parentheses

* p < 0.05
5. Results of OLS Regression and Tests of Hypotheses

Table IV-3 provides the results of the multivariate regression analyses. The two separate dependent variables—OCBI and OCBO—were examined in separate models, and independent variables were entered in different steps. In Model 1 (OCBI) and Model 2 (OCBO), potential control variables in the data set were entered. ‘Sex’ (male=1 and female=0) and ‘Position’ (managerial position=1; non-managerial position=0) were entered as control variables, along with both tenure in ‘current organization’ and in ‘public sector jobs.’ In Model 3 (OCBI) and Model 4 (OCBO), variables based on social exchange theory (primary job satisfaction, secondary job satisfaction, procedural justice, distributive justice and LMX leadership) were entered. In Model 5 (OCBI) and Model 6 (OCBO), variables from the perspective of employees’ self-concept (organizational identification, subjective OCB norms and task interdependence) were entered. As noted above, measures of prosocial orientation were not entered due to low reliability and inconsistent factor loadings and so Hypotheses 4 and 7 were not able to be tested. In Model 7 (OCBI) and Model 8 (OCBO), the interaction terms of organizational identification and subjective OCB norms were entered. All the scales in Model 7 and Model 8 were centered following Aiken and West’s (1991) guidelines. Table IV-3 presents standardized coefficients to allow for coefficient comparisons across the models. T-values are also reported under each of standardized regression coefficients. F-values and multiple coefficients of determination ($R^2$) are reported to examine general model fit; and adjusted $R^2$ and Akaike Information Criterion (AIC) are also presented to compare the relative goodness of fits of different models.
Prior to conducting the hypothesis tests, the influence of control variables was examined in Model 1 and Model 2. Consistent statistically significant associations (p < 0.05) were found only for ‘tenure in public sector jobs’ (Model 1: $\beta=0.16, t=3.66$; Model 2: $\beta=0.27, t=5.62$; Model 3: $\beta=0.10, t=2.35$; Model 4: $\beta=0.24, t=5.10$; Model 6: $\beta=0.17, t=3.82$; Model 8: $\beta=0.18, t=4.15$). ‘Sex’ was statistically significant only in Model 1 ($\beta=0.08; t=1.66$), although even in the model, the magnitude of its standardized coefficient was close to zero. It also should be noted that multiple coefficients of determination were close to zero in the models that included only control variables ($R^2=0.04$ in Model 1; $R^2=0.08$ in Model 2).

Hypothesis 1 which posited that extrinsic jobs satisfaction would have a stronger positive association with OCB variables than intrinsic job satisfaction, was not tested because the items of job satisfaction did not load onto expected intrinsic and extrinsic job satisfaction in the given data set. However, Hypothesis 1 also posited that public employees’ job satisfaction would be positively related to their engagement in OCBs. Holding other variables constant, statistically significant positive main effects were found for primary job satisfaction (Model 3: $\beta=0.18, t=2.77$; Model 4: $\beta=0.24, t=4.26$; Model 6: $\beta=0.14, t=3.01$; Model 8: $\beta=0.13, t=2.84$), but expected positive associations were not found in any of the models for secondary job satisfaction. It should be also noted that several regression coefficients of secondary job satisfaction were found to have statistically significant negative associations (Model 4: $\beta=-0.1, t=-2.06$; Model 8: $\beta=-0.08, t=-1.77$). As such, the current data analyses suggest that government employees’ satisfaction with their level of payment, amount of work, and physical work conditions do not contribute to government employees’ engagement in OCBs.
Hypothesis 2 posited that public employees’ justice perception would have a positive association with government employees’ engagement in OCBs. Hypothesis 2 was partially supported in that procedural justice exhibited statistically significant positive associations with OCB variables in five out of six models (Model 3: $\beta=0.32$, $t=5.93$; Model 4: $\beta=0.31$, $t=5.38$; Model 5: $\beta=0.09$, $t=1.71$; Model 6: $\beta=0.10$, $t=1.95$; Model 8: $\beta=0.09$, $t=1.66$). However, no statistically positive association was found in the associations between distributive justice and the OCB variables. Thus, the hypothesis that distributive justice would have stronger positive associations with OCBs than procedural justice was not supported in the given data.

Hypothesis 3 posited that LMX leadership would have a positive association with government employees’ engagement in OCBs. A positive association was found only in Model 3 ($\beta=0.12$, $t=2.36$), but no significant associations were found in the other Models. Thus, Hypothesis 3 was not supported in the current study.

Hypothesis 5 posited that organizational identification would be positively associated with employees’ engagement in OCBs. Hypothesis 5 was supported, and statistically significant associations were found consistently in all models including this variable (Model 5: $\beta=0.27$, $t=5.77$; Model 6: $\beta=0.16$, $t=3.26$; Model 7: $\beta=0.28$, $t=6.44$; Model 8: $\beta=0.17$, $t=3.74$).

Hypothesis 6 posited that subjective OCB norms would be positively related to employees’ OCBs. Hypothesis 6 was also fully supported since significant positive associations were confirmed in each of the models including this variable (Model 5: $\beta=0.48$, $t=9.12$; Model 6: $\beta=0.38$, $t=6.94$; Model 7: $\beta=0.49$, $t=10.32$; Model 8: $\beta=0.40$, $t=8.17$).
Hypothesis 8 posited that task interdependence would be positively associated with OCBs. Hypothesis 8 was partially supported in that positive significant associations were found between task interdependence and OCBO (Model 6: $\beta = 0.08, t= 1.78$; Model 8: $\beta = 0.09, t = 2.05$). However, no positive associations were found between task interdependence and OCBI.

It should also be noted that insertion of the three self-concept variables (organizational identification, subjective OCB norms and task interdependence) improved the goodness of fit of the models significantly. F-value, $R^2$, and adjusted $R^2$ improved consistently from Model 1 through Model 6, and AIC statistics were also significantly reduced. Thus, variables derived from the perspectives of self-concept theories were found to have additional significant influence on OCB variables when holding constant variables derived from social exchange theory. It should be also noted that the strength of the association of primary job satisfaction, procedural justice, and LMX leadership with OCB variables was reduced or disappeared consistently after organizational identification and subjective OCB norms were entered in Model 5 and Model 6. In fact, the relationships of primary job satisfaction, procedural justice and LMX with OCBI became statistically insignificant in Model 5. Similarly, the relationships of primary job satisfaction and procedural justice with OCBO decreased (from 0.24 to 0.14 for primary job satisfaction; from 0.31 to 0.10 for procedural justice) in Model 6.

The potential mediating role of organizational identification was also examined based on Tyler and Blader’s (2003) finding that organizational identification played a mediating role in the relationship between procedural justice and individuals’ cooperative
behaviors. According to these researchers, if employees believe that their employing organization has fair processes, they are more likely to identify with their organizations and, as a result, employees are more likely to engage in citizenship behaviors in their organizations. Although the mediating role of organizational identification was not the original interest of this study, the potential mediation effects were examined since they can provide an alternative explanation about the consistent decreases in the influence of procedural justice and job satisfaction on OCB.

Mediation analysis requires the examination of three sets of relationships (Baron & Kenny, 1986). First, the relationship between predictors [e.g., job satisfaction, LMX leadership, and procedural justice and the two OCB variables (OCBI and OCBO)] is examined without the mediating variable (organizational identification). Second, the relationship between the three predictors and the dependent variables is examined with the mediator. Finally, the relationship between predictors and the mediator is examined. A mediating role of organizational identification would be observed if the initially significant relationship between the three predictors and OCBs disappears after organizational identification is entered into the model and if significant associations are found between the predictors and mediator.

A comparison of regression coefficients in Table IV-4 did not support the full mediation model. The statistically significant relationship between the three predictors and the two OCB variables only disappeared in the association between LMX leadership and OCBI, but the association between LMX leadership and organizational identification was not statistically significant. However, a partial mediating role for organizational identification between primary job satisfaction and procedural justice and the OCB
variables was found. The beta coefficients of job satisfaction and procedural justice were consistently reduced and a test of significance in the beta changes (Baron & Kenny, 1986) showed that the decreases in the strength of the relationships between the predictors and the OCB variables were statistically significant.

Although the proposed hypotheses about interaction effects could not be fully examined in the current data, it is worthwhile examining the moderating effect of organizational identification on the association between subjective OCB norms and the OCB variables. Hypothesis 7-2 stipulated that the relationships between OCB norms and OCB would be weaker in employees with a high level of organizational identification than in employees with a low level of organizational identification. In the final two models (Model 7 and Model 8), the interaction term of organizational identification and OCB norms was entered both for OCBI and OCBO. Although it was a marginal difference, the addition did increase the adjusted $R^2$ (OCBI: $\Delta R_{adj}^2=0.02$; OCBO: $\Delta R_{adj}^2=0.04$) and reduce AIC (OCBI: $\Delta AIC=-11.93$; OCBO: $\Delta AIC =-27.01$). Consistent with the hypothesis, as shown in Model 7 and Model 8, the interactive effect of organizational identification and OCB norm was negative (OCBI: $\beta=-0.13, t=-3.19$; OCBO: $\beta=-0.21, t=-4.63$). Figure IV-1 and Figure IV-2 show the nature of the interaction effects. In the figures, one standard deviation below the mean is defined as a low level of organizational identification, and one standard above the mean is defined as a high level of organizational identification. This study also followed Aiken and West’s

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5 The coefficient of mediating effect was calculated by subtracting regression coefficient, including the mediating effect from the regression coefficients excluding the mediating effect. The standard error of the mediating effect was calculated following Baron and Kenny’s (1986) guideline ($\sqrt{\hat{a}^2 + \hat{b}^2 + \hat{a}\hat{b} + \hat{a}\hat{c}}$, where the path from the independent variable to the mediator is denoted as $a$ and $s_a$ denotes its standard error; the path from the mediator to the dependent variable is denoted as $b$, and $s_b$ is its standard error).
(1991) suggestion and conducted a simple slope analysis to calculate the slope coefficient and conduct a statistical test of the simple slope.

Figure IV-1 shows that a high level of OCBI is associated with a high level of organizational identification irrespective of subjective OCB norms. However, the strength of association between subjective OCB norms and OCBI was stronger under conditions of a low level of organizational identification (b=0.55, t=11.37) than under conditions of a high level of organizational identification (b=0.32, t=5.21). Both slopes were found to be statistically significant. Thus, subjective OCB norms were found to be a more important predictor for OCBI when employees had a lower level of organizational identification. As shown in Figure IV-2, a similar result was reported regarding OCBO. The simple slope analysis revealed that the association between subjective OCB norms and OCBO was stronger under conditions of a low level of organizational identification (low organizational identification: b=0.59, t=3.8; high organizational identification: b=0.19, t=1.21). The simple slope for high organizational identification was not statistically significant.
### Table IV-3 Results of OLS regressions

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
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</thead>
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<td>0.022</td>
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<td>-0.042</td>
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<td>Position (manager=1; non-manager=0)</td>
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<td>0.169*</td>
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<td>(5.378)</td>
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<td>(1.549)</td>
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<td>(6.439)</td>
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<td>0.488*</td>
<td>0.399*</td>
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<td>(1.775)</td>
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</tr>
</tbody>
</table>

1) Standardized regression coefficients (beta) are reported, and values in parentheses are t-values.
2) * denotes support of expected hypothesis. One-tailed tests were conducted for hypothesis tests (α = 0.05; critical t value = ±1.645).
### Table IV-4 Results of regression analyses for mediation test

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>OCBI</th>
<th>OCBO</th>
<th>Org. Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (male=1; female=0)</td>
<td>0.041 (0.091)</td>
<td>-0.102 (0.096)</td>
<td>-0.109 (0.070)</td>
</tr>
<tr>
<td>Position (manager=1; non-manager=0)</td>
<td>-0.090 (0.064)</td>
<td>-0.052 (0.073)</td>
<td>-0.014 (0.054)</td>
</tr>
<tr>
<td>Tenure in public sector jobs</td>
<td>0.011* (0.005)</td>
<td>0.029* (0.006)</td>
<td>0.012* (0.004)</td>
</tr>
<tr>
<td>Tenure in current organization</td>
<td>0.001 (0.003)</td>
<td>-0.005 (0.003)</td>
<td>0.000 (0.002)</td>
</tr>
<tr>
<td>Primary job satisfaction</td>
<td>0.241* (0.087)</td>
<td>0.359* (0.084)</td>
<td>0.273* (0.077)</td>
</tr>
<tr>
<td>Secondary job satisfaction</td>
<td>-0.036 (0.061)</td>
<td>-0.127* (0.062)</td>
<td>-0.044 (0.050)</td>
</tr>
<tr>
<td>Procedural justice</td>
<td>0.355* (0.060)</td>
<td>0.389* (0.072)</td>
<td>0.183* (0.061)</td>
</tr>
<tr>
<td>Distributive justice</td>
<td>0.024 (0.057)</td>
<td>0.031 (0.071)</td>
<td>0.006 (0.065)</td>
</tr>
<tr>
<td>LMX leadership</td>
<td>0.126* (0.054)</td>
<td>0.009 (0.061)</td>
<td>0.073 (0.046)</td>
</tr>
<tr>
<td>Organizational identification</td>
<td>0.381* (0.070)</td>
<td>0.323* (0.070)</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>5.726* (0.087)</td>
<td>5.940* (0.090)</td>
<td>0.108 (0.069)</td>
</tr>
</tbody>
</table>

| N | 433 | 432 | 432 | 432 |
| R^2 | 0.256 | 0.334 | 0.251 | 0.296 | 0.191 |
| Adj. R^2 | 0.240 | 0.318 | 0.235 | 0.279 | 0.174 |

1) Unstandardized regression coefficients are reported, and values of parentheses are standard error.
2) * One-tailed tests were conducted for hypothesis tests (α = 0.05; critical t value= ±1.645)
Figure IV-1 Organizational identification-OCB norms interaction on OCBI

Simple slope: 0.32 (t=5.21)
Simple slope: 0.55 (t=11.37)

Figure IV-2 Organizational identification-OCB norms interaction on OCBO

Simple slope: 0.19 (t=1.21)
Simple slope: 0.59 (t=3.8)
6. Chapter Summary

This chapter reported the results of the data analyses. First, exploratory factor analyses were conducted using principal component factor analysis and several items were excluded due to low factor loading scores or crossloading problems. In particular, prosocial orientation was excluded from further analyses, and scales of several variables were modified based on the results of the factor analyses. Several diagnostics were conducted before performing correlational and multivariate OLS regression analyses. In particular, because heteroskedasticity problems were reported, heteroskedasticity-robust t-statistics were reported throughout the regression models.

The overall results of the hypothesis tests provided mixed support. First, primary job satisfaction, procedural justice, and LMX leadership exhibited statistically significant associations with OCB variables. However, the strength of associations either decreased or disappeared when the self-concept variables were entered. Organizational identification, subjective OCB norms, and task interdependence were found to have positive associations with OCB variables, and the significant increases of various indexes of goodness of fit suggested that the addition of those variables enhanced the explanatory power of suggested regression models. Although interaction effects could not be fully examined in the current data analyses, negative associations between organizational identification and OCBs were found as hypothesized. Based on the results, the theoretical implications, as well as practical implications, will be discussed in Chapter V. Research limitations and suggestions for future research will be also provided.
Chapter V. Discussion and Conclusion

This study examined antecedents of OCBs in the public sector by analyzing survey data collected from Korean local government employees. Based on a review of the general management literature, this study identified job satisfaction, organizational justice, and LMX leadership as major antecedents of OCBs. However, the proposed hypotheses associated with these variables were only partially supported. Among the suggested variables, only primary job satisfaction and procedural justice had statistically significant associations with both OCBO and OCBI, and the strength of associations between those two variables and the two OCB variables were reduced after the insertion of organizational identification and subjective OCB norms. The association between LMX leadership and OCBI was statistically significant, but the association between LMX leadership and OCBO was not. The study did not find positive associations between secondary job satisfaction or distributive justice and OCB.

Based on self-concept related theories, the current study also identified prosocial orientation, organizational identification, subjective OCB norms, and task interdependence as additional important antecedents of OCBs. A basic tenet of the proposed hypotheses was that government employees’ prosocial behaviors would be influenced by their personal values (prosocial orientation), recognition of the organizational atmosphere (subjective OCB norms), and employees’ value congruence with their organizations (organizational identification). While the influence of prosocial orientation on OCBs could not be tested, due to low reliability and validity of the measurements, organizational identification and subjective OCB norms were found to
have consistently significant associations with OCBs. Task interdependence was also found to have a statistically significant association with OCBO. The current study also examined whether or not organizational identification and subjective OCB norms have an interaction effect in their influence on OCB variables. The results indicated that subjective OCB norms has stronger associations with OCB variables when employees have low levels of organizational identification. Based on the empirical findings, this chapter will discuss the theoretical and practical implications of the current study. It will also describe methodological limitations and provide recommendations for the future research.

1. Theoretical Implications

Social exchange theory and OCB in governmental organizations. OCB studies based on social exchange theory have posited that employees are more likely to be engaged in OCBs when they believe that their employing organizations fulfill their promises and provide the benefits that they value. Statistically significant associations of primary job satisfaction and procedural justice with the OCB variables support hypotheses developed from social exchange theory. In this study, examining the influence of those variables on OCB variables from the perspective of social exchange theory shows how government employees’ work perceptions are associated with their work behaviors. The results of the current study imply that government employees, at least partially, base everyday work commitments on their work experience and withdraw citizenship behaviors based on experiences in their daily organizational lives just as private sector employees do.
The results of the current study, however, did not support several proposed hypotheses. For example, since social exchange theory implies that employees determine their engagement in OCBs based on expected personal benefits that their organizations might provide, the current study hypothesized that government employees’ OCBs would be more influenced by extrinsic job satisfaction and distributive justice than intrinsic job satisfaction and procedural justice. Although the current study could not test the hypotheses due to the crossloading of several extrinsic job satisfaction items onto the intrinsic job satisfaction factor, the current study found that primary job satisfaction, which focuses primarily on satisfaction with job aspects, and procedural justice have statistically significant associations with employees’ OCB variables, while secondary job satisfaction, which deals with work conditions and distributive justice, did not have statistically significant associations with the OCB variables.

The unexpected results might be explained using the theoretical construct of a psychological contract. Based on social exchange theory, scholars studying psychological contracts (e.g., Robinson & Morrison, 1995; Rousseau, 1990, 2001) have posited that employees will engage in OCBs when their employing organizations are perceived to fulfill unwritten, psychologically-based contractual agreements between employees and employers (Coyle-Shapiro, 2002; Coyle-Shapiro & Kessler, 2000; Robinson & Morrison, 1995). Since most employees value having an opportunity to develop a long-term career path within an organization over short-term monetary exchanges without a long-term commitment (MacNeil, 1985; Rousseau, 1990), employees will tend to show more OCBs when they perceive that they can build a relational psychological contract with their employing organizations (Hui, Lee, & Rousseau, 2004). More specifically, it is
more likely that government employees will evaluate their psychological contract with their governmental organizations depending on whether their job is seen as motivating and organizational systems are seen as operating in a fair manner (Konovsky & Pugh, 1994). In the same vein, job security and relationships with coworkers, two job characteristics that are often associated with extrinsic job satisfaction but here loaded with items identified as primary job satisfaction, could be important in determining the type of psychological contract employees have with their organizations.

**Inclusion of OCB norms as an antecedents of OCB.** The current study also suggests that employees’ OCBs are influenced by work group atmosphere (subjective OCB norms). Given that employees decide their levels of OCBs based on other employees’ engagement in OCBs, individuals might engage in higher levels of OCBs if they observe other employees doing so. The significant positive association between task interdependence and OCBO might also reflect the influence of organizational norms on employees’ OCB in that the employees working in high interdependent work units might have more opportunities to be observed by others and feel more of an obligation ‘not to miss work’ and to ‘adhere to the organizational rules.’ In this context, employees’ OCBs would not only reflect individuals’ discretionary behaviors but also externally regulated behaviors. These findings are in line with Morrion’s (1994) and Ehrhart and Nauman’s (2004) assertion that employees might decide their levels of OCBs based on how they craft their job boundaries based on their interactions with other employees in their organizations.

**Organizational identification and its joint associations.** Denhart (1968) suggested that an individual becomes an organizational member (‘organizational citizen’).
when an individual is indoctrinated by the organization’s values, and that organizational citizenship behaviors are the product of value congruence between individuals and their organizations. Since organizational identification can be defined as an individual’s perception of oneness with his/her organization and the inculcation of organizational values, the current study identified organizational identification as a potentially important predictor in government employees’ OCBs. The findings of this study are consistent with social identity theory, which suggests that employees with high levels of organizational identification are more likely to be engaged in OCBs since they want to enhance their self image by maintaining or building their organizational image.

However, the current study was not limited to examining the independent effect of organizational identification on OCBs. It also examined the joint influence of subjective OCB norms and organizational identification on employees’ OCBs. Since organizational identification will occur when an individual’s values are inculcated by organizational values, this study posited that organizational identification is closer to ‘identified’ regulation in Deci and Ryan’s self-determination theory (SDT) (Deci, et al., 1999; Deci & Ryan, 1980, 1985, 2000), while subjective OCB norms are closer to ‘introjected’ or ‘external’ regulation, since subjective OCB norms would be developed as the individual scans and perceives others’ OCBs in their organizations. In line with SDT’s theoretical implications, the current study found that organizational identification is a more consistent behavioral guideline than subjective OCB norms. This finding is theoretically meaningful since the current study is the first study that examines the joint association of the two variables using SDT as a theoretical background.
The mediating role of organizational identification was also examined through additional data analyses. Although specific hypotheses were not developed, the current study examined whether the associations of job satisfaction, procedural organizational justice, and LMX leadership with the OCB variables were mediated by organizational identification. Fully mediated effects were not supported for either OCBI or OCBO, but partial mediated effects of organizational identification on OCBs were found. The examined relationships imply that variables from different theoretical perspectives (i.e., social exchange theory and social identity theories) might have influences on employees’ OCBs through different routes. For example, although the roles of primary job satisfaction and procedural justice were reduced as organizational identification and subjective OCB norms were inserted into the analysis, primary job satisfaction and procedural justice were significant variables in predicting employees’ organizational identification. These findings are in line with Tyler and Blade’s (2003) group engagement model, which examined the mediating role of social identity in the associations between organizational justice and individuals’ cooperative behaviors.

**Herzberg’s motivation and hygiene factor theory and OCB.** The differentiation of job satisfaction into intrinsic and extrinsic job satisfaction is rooted in Herzberg’s Motivation and Hygiene Factor theory (e.g., Herzberg, Mausner, & Snyderman, 1959; House & Wigdor, 1967; Lindsay, Marks, & Gorlow, 1967; Maidani, 1991; Park, Lovrich, & Soden, 1988; Wall & Stephenson, 1970). In Herzberg’s theory, intrinsic job satisfaction is referred to as a motivator and includes employees’ satisfaction with advancement, the work itself, and recognition; while extrinsic job satisfaction is referred to as a hygiene factor and includes satisfaction with work conditions, salary and
interpersonal relations. However, several items recognized as extrinsic job satisfaction in previous studies (“satisfaction with steady employment” and “the way their co-workers get along with each other”) loaded on the same factor as intrinsic job satisfaction items in the current study. In addition, the results of the regression analyses are not consistent with Herzberg’s two-factor theory. Herzberg’s two-factor theory would suggest that hygiene factor items would not be related to employees’ positive work performance (i.e., OCBI and OCBO). However, the current study found that secondary job satisfaction, which has similar elements to Herzberg’s hygiene factor, was negatively associated with employees’ OCBs. Thus, the results of the current study are more consistent with Maidani’s (1991) findings that Herzberg’s two-factor model is not generally supported in the context of government organizations.

**Local government employees and OCB.** This study also has theoretical implications for local government studies. From the perspective of traditional bureaucracy theory, local government employees are expected to implement public policy without imbibing their personal values on public policy implementation (Weber, 1946). Impartiality has been emphasized and discretionary role-crafting behaviors based on individual values and preferences have been discouraged since they can distort the originally intended policy directions (Lipsky, 1983). Although it is beyond the focus of this study to examine in any depth the impact of local government employees’ role-crafting behaviors, the current study implies that some government employees’ role-crafting behaviors (OCBs) can enhance, to some degree, at least contextual performance of government organizations. The current study also suggests that those positive role-
crafting behaviors can be managed since they can be encouraged by socialization and group dynamics within employees’ workgroups.

2. Practical Implications

The current study also provides several implications for public managers. From a managerial perspective, one dilemma associated with the notion of OCB is that managers are not in a position to coerce employees into engaging in OCBs, since OCBs are generally understood as extra-role behaviors. However, the findings from this study suggest that public managers can enhance employees’ OCBs in their organizations by developing organizational cultures or providing appropriate work environments that encourage such behaviors. Since this study recognized various antecedents of OCBs, public managers might be able to develop different strategies to enhance their employees’ citizenship behaviors. Two such strategies that might be used to encourage employees to engage in citizenship behaviors are provided here.

**Developing OCB norms in government organizations.** Managers need to develop an appropriate organizational atmosphere, since employees tend to learn what the appropriate levels of OCBs are in their organizations by observing others. In this context, leaders’ roles would be critical, since they can set examples for employees’ behaviors. In addition, since group norms are not generally set through formal rules and procedures, public managers might be able to understand why groups of employees are not engaged in OCBs by examining informal group dynamics in their organizations. In addition, since the current study suggests that an interdependent work structure can enhance employees’
OCBs (particularly OCBO), public managers should make efforts to develop interdependent work practices within work groups and across their organizations.

**Socialization and development of public organizational values.** The current study also suggests that public managers need to find ways to provide employees with more chances to identify with their organizations. Since employees’ value inculcation is important in forming employees’ organizational identification, public managers need to pay attention to newcomers’ socialization in order to ensure that government employees find meaning in their jobs and accept public organizational values. In addition, public managers also need to understand that employees are more likely to identify with their organizations when they are satisfied with their work environment. Thus, devising fair organizational work procedures and assigning meaningful jobs to individual employees would be potential strategies for developing employees’ OCBs.

**Not one tactic but multiple tactics.** Since the current study also found that different types of OCBs are associated with different variables, public managers need to develop differentiated strategies to enhance OCBs in their organizations. For example, if public employees’ initiatives and active engagement in helping others and citizens are more important in an organization, public managers might need to focus on helping their employees to find meaning in their work so that government employees can identify with their organizational values and contribute actively in this way. On the other hand, if employees’ compliance with organizational procedures and maintaining a high level of loyalty are more important in the context of their work, establishing human resource practices to maintain public employees’ perceptions of fairness and their job satisfaction might also be important. Developing more interdependent job designs might also enhance
those types of behaviors of employees. Thus, public managers need to understand that they need to develop appropriate approaches to enhance employees’ contextual performance depending on their organizational situations.

3. Limitations of the Study

As is true of other studies of public management and organizational behavior, this study had several limitations that need to be considered along with findings. First, common method bias could be a major concern in the current study since the data for employees’ attitudes and their citizenship behaviors were collected using a single survey. In particular, since respondents tend to perceive their work environment and evaluate their behaviors depending on their affective state, spurious associations could be reported between the independent and dependent variables. To reduce the potential threat, the researcher developed the survey so that the criterion variable (OCB) and predictors (e.g., job satisfaction, perceived organizational justice, organizational identification, and subjective OCB norms) were on separate pages with separate instructions. In addition, two different types of Likert scales were developed. Those processes might reduce the influence of general affective status by eliminating the use of recalled information and common retrieval cues (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, there still exists the possibility that the associations among the OCB variables and their antecedents are inflated, and future studies should reexamine the relationships using different data sources.

Second, the possibility of longitudinal development of OCB or reverse causality could not be ruled out in the current study since the data were collected cross-sectionally.
For example, Penner et al. (1997) argued that employees might also find the value of OCBs after they are involved in OCBs. Thus, positive experiences from engaging in OCBs might enhance employees’ prosocial orientation, which can then lead employees to develop more persistent OCBs. Such a developmental aspect of OCBs could not be tested in this study. The possibility of reciprocal causality between organizational justice and OCBs should be also examined in a future study. In other words, the current study identified organizational justice as an antecedent of OCB, since it was assumed that employees who perceived high levels of procedural justice would be more likely to engage in OCBs because they would assume that such behaviors would bring them more personal benefits in the future. However, employees’ justice perceptions might be also influenced by dynamics of employees’ citizenship behaviors. For example, if an employee perceived that he/she is engaged in OCB much more than the others in a work unit, the employee might perceive a low level of fairness in the work group, which would likely reduce their future efforts to engage in OCB. From this perspective, employees’ engagement in OCBs and their perception of fairness might have reciprocal relationships.

Third, this study was limited in identifying the idiosyncratic nature of government employees’ OCBs since the current study adopted existing OCB measures (OCBO and OCBI). Although this study attempted to add local government employees’ citizenship behaviors toward citizens as an OCB component based on the prosocial service behavior literature, the measures did not have sufficient validity and reliability to use in the study. Arguably, the characteristics of sample might be one of a potential reason that OCBC did not emerge as a factor in the given data. Since the majority of the respondents were senior in terms of their tenure and age, they might not have much contact with citizens in
conducting their jobs. As a result, the items measuring citizenship behaviors towards citizens may be less salient with this sample than they would be with a sample of employees who have direct contact with citizens.

Fourth, since the current study was conducted using a sample of Korean local government employees, further studies should examine whether consistent findings are reported in other countries’ settings. For example, the strong association between subjective OCB norms and OCB might originate from Korean culture which has been characterized as highly collectivistic (Hofstede, 1980). In addition, most of the variables in the current study are negatively skewed with small variability because Korean local government employees might feel pressure to evaluate their organizations more positively and report high levels of prosocial behaviors.

Finally, it should be also noted that the data were collected in one educational institute designed to develop local government employees’ management capacity and many respondents were senior in their tenure in their organizations, even though they were not in managerial positions. Although the current study controlled the influence of tenure in the data analyses, the respondents might not represent the attitudes and behavioral patterns of newcomers in Korean local government organizations.

4. Future Research

Future studies need to reexamine the measurement of prosocial orientation. Due to the page limitation of the survey, the current study attempted to use a shortened version of Penner et al.’s (1995) Prosocial Personality Battery (PSB) by combining a few newly developed items. Future research might need to retest the reliability and the
validity of PSB by developing a new combination of items. Also, alternative measures ought to be considered. For example, Mayfield (2008) developed a Prosocial Self-Concept Questionnaire by modifying the Organizational Value Questionnaire, and using eight items to measure prosocial orientation. Measures of public service motivation (Perry, 1996) also contain the subscales of empathy. Rayner, Williams, Lawton and Allison (2011) developed a measure of public service ethos using items focusing on the public interest. Although this measure does not contain employees’ innate orientation for helping others, the items could reflect employees’ internal belief with respect to helping citizens and contributing to public service.

The current study examined the effect of subjective OCB norms on OCBs based on Ehrhart and Nauman’s (2004) theoretical framework. Although the current study contributed to our understanding of the relationships between subjective OCB norms and employees’ OCBs, it did not examine the influence of the other aspects of group norms that Ehrhart and Nauman suggested. By conducting work unit level research in the context of governmental organizations, future studies should examine whether similar associations between antecedents and OCBs could be found in group level studies particularly in the context of government organizations. Multi-level analyses also should

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6 The respondents were asked to evaluate themselves by using the stem, “I see myself as a person who values” 1) being supportive; 2) being socially responsible; 3) being team oriented; 4) being people oriented; 5) being competitive; 6) being distinctive; 7) being reflective; and 8) being results oriented.

7 The four items of empathy are: “It is difficult for me to contain my feelings when I see people in distress”; “I am often reminded by daily events how dependent we are on one another”; “I am rarely moved by the plight of the underprivileged (R)”; and “I have little compassion for people in need who are unwilling to take the first step (R).”

8 The six items of public interest are as follows: “I am interested in what is going on in my community”; “I do not believe there is a ‘common good’”; “People should give back to society at least what they get from it”; “I believe that the public sector should not be concerned with profit”; “I believe the culture of a public sector organization should primarily be concerned with helping clients/citizens”; and “In general, public service should be provided on the basis of need rather than ability to pay.”
be conducted to examine how group-level OCB norms influence employees’ citizenship behaviors. Although several previous studies have examined different influences of unit level climate on employees’ OCBs (e.g., Choi, 2006; Kidwell, Mossholder, & Bennett, 1997; Liao & Rupp, 2005), the impact of group-level OCB norms on employees’ OCBs has not been examined yet.

In addition, future studies also need to examine government employees’ negative discretionary behaviors as well as positive discretionary behaviors. While OCBs are generally seen as positive discretionary behaviors that could improve government organizations’ productivity, there are also negative types of discretionary behaviors such as social loafing and employee retaliation. By examining both types of discretionary behaviors at the same time, future research would be able to provide a more comprehensive understanding of government employees’ role-crafting behaviors. For example, Hoon and Tan (2008) examined the impacts of personality and various organizational contexts on both social loafing and OCB. Miles, Borman, Spector and Fox (2002) also examined the role of emotions (positive emotion and negative emotion) in determining organizational citizenship behavior and counterproductive work behavior (CWB). Future studies should examine the relationships between the antecedents recognized this study and two different types of extra-role behaviors (OCB and CWB) in various government organizations.

Since the current data were collected from Korean local government employees, future studies might expand the sample sets by examining other types of government organizations (e.g., state and federal levels of government organizations as well as other countries’ context). As noted above, since the current study includes a limited number of
newcomers, it would be also worthwhile to examine whether similar results could be found in a sample of newcomers in government organizations. In the same vein, a study focusing on employees in managerial positions would also provide new insights. One of the fundamental assumptions of OCB studies is that government employees’ engagement in OCBs will ultimately enhance the performance of governmental organizations. Although a considerable number of empirical studies has examined the relationships between OCBs and organizational performance in the context of private sector organizations (e.g., Nielsen, Hrivnak, & Shaw, 2009; Whitman, Van Rooy, & Viswesvaran, 2010), it would be worthwhile to investigate the association between these variables in the context of government organizations. For example, Kim (2005) examined whether individuals’ OCBs are related to governmental organization’s performance by using U.S. federal data, and found significant associations between employees’ OCB and organizational performance. Future studies should examine the relationships between OCB and organizational performance in the contexts of different government organizations.

5. Conclusion

Within traditional bureaucratic organizations, public administrators were required to implement public policies as designed. Within these organizations, employees’ initiatives were restricted, and they were required to perform strictly defined jobs. However, the roles of public administrators have evolved as government organizations have gone through various tides of reforms with various attempts to find new public service delivery models. Contemporary governmental organizations have started to
recognize government employees’ initiatives, cooperation, collaboration, and responsiveness as important administrative values (Denhardt 1993; Dilulio, Garvey, and Kettl 1993; Osborne and Gaebler, 1992). The current study is timely and important in this context in that it examined how government employees develop their value of contextual performances in their workplaces.

In particular, in the current economic downturn, the importance of public employees’ citizenship behaviors needs to be more fully appreciated since employees in agencies initiating reforms focusing on creating greater levels of efficiency might focus only on required roles and put less energy into efforts that go beyond these given roles. As a result, citizens might receive a lower quality of public service and government institutions might lose citizens’ trust, which would have further negative outcomes for government organizations. Thus current management reform efforts might, in effect, ultimately reduce the organizational capacity and integrity of government agencies by discouraging public employees’ active engagement in citizenship behaviors. In that regard, it is meaningful to revisit the role of government employees’ citizenship behaviors in the current work context of government organizations.
REFERENCES


APPENDIX A: Recruitment Letter (English)

Title of Research: Antecedents of Government Employees' Work Related Behaviors
Dong Chul Shim, Visiting Assistant Professor and Ph.D. Candidate Department of Public Administration, SUNY at Albany, 518-256-6288
Sue Faerman, Faculty Advisor, 518-442-3950

You have been asked to participate in a research study that has been reviewed by an Institutional Review Board. The purpose of the study, terms of your participation, as well as any expected risks and benefits, must be fully explained to you before you consent to participate in this research study.

You should also know that participation in research is entirely voluntary. Even after you agree to participate in the research, you may decide to leave the study at any time without penalty or loss of benefits to which you may otherwise have been entitled. You should also be aware that the investigator may withdraw you from participation at his/her professional discretion.

All information obtained in this study is strictly confidential unless disclosure is required by law. In addition, the Institutional Review Board may inspect these records.

If at any time you have questions regarding this research or your participation in it, you should contact the investigator, faculty advisor or research assistants who must answer your questions. If you have any questions concerning your rights as a research participant that have not been answered by the investigator or if you wish to report any concerns about the study, you may contact the Office of Regulatory Research Compliance at 518-442-9050 or orrc@uamail.albany.edu.

You will be given a copy of this consent form to keep.

If you agree to participate in the survey, please return this survey by leaving your response in my mailbox at the institution (Dong Chul Shim).

Thank you.
APPENDIX B: Survey Instrument (English)

Thank you again for participating in this study. The following sections are composed of statements that may or may not describe you, your feelings, or your behavior. Please read each statement carefully and choose the answer that corresponds to your opinion. There are no right or wrong responses.

In this first section, we are interested in your workplace behaviors. Please circle the answer that best describes your recent behavior (over a month). (1= strongly disagree and 7= strongly agree)

1. I help others who have heavy workloads.
2. I voluntarily help a citizen in trouble beyond what is expected or required of me by management.
3. I rarely miss work even when I have a legitimate reason for doing so.
4. I frequently communicate to co-workers suggestions on how the group performance can be improved.
5. I enjoy going the extra miles to make a citizen satisfied.
6. I take time to listen to co-workers’ problems and worries.
7. For issues that may have serious consequences, I express opinions honestly even when others may disagree.
8. I go out of my way to help new employees.
9. I assist my supervisor with my work even when not asked.
10. I encourage others to try new and more effective ways of doing their job.
11. I adhere to informal rules devised to maintain order.
12. I go beyond call of duty to provide better public service.

In this section, we are interested in your thoughts about and experience in various situations. Please circle the answer that best describes your opinions and experience. (1= strongly disagree and 5= strongly agree)

1. I have offered to help a handicapped or elderly stranger across a street.
2. I am often reminded by daily events how dependent we are on one another.
3. I unselfishly contribute to my community.
4. I have little compassion for people in need who are unwilling to take the first step to help themselves.
5. I have donated money or belongings to help for the people in need in last six months.
6. I do not feel much compassion when I see people in distress.
7. I have volunteered to help others in recent six months.
8. It doesn't make much sense to be very concerned about how we act when we are sick and feeling miserable.
In this section, we are interested in your general attitude about your local government organization. Please circle the answer that best describes your opinion. (1= strongly disagree and 5= strongly agree)

1. When someone criticizes my organization, it feels like a personal insult.
2. I am very interested in what others think about my organization.
3. When I talk about this organization, I usually say "we" rather than "they."
4. This organization’s successes are my successes.
5. When someone praises my organization, it feels like a personal compliment.

In this section, we are interested in your opinion about other unit members’ workplace behaviors. Please circle the answer that best describes your recent behavior (over a month). (1= strongly disagree and 7= strongly agree)

1. Members of my work unit help others who have heavy workloads.
2. Members of my work unit voluntarily help a citizen in trouble beyond what is expected or required by management.
3. Members of my work unit rarely miss work even when they have a legitimate reason for doing so.
4. Members of my work unit frequently communicate to co-workers suggestions on how the group can improve.
5. Members of my work unit enjoy going the extra miles to make a citizen satisfied.
6. Members of my work unit take time to listen to co-workers’ problems and worries.
7. For issues that may have serious consequences, members of my work unit express opinions honestly even when others may disagree.
8. Members of my work unit go out of their way to help new employees.
9. Members of my work unit assist their supervisor with their work even when not asked.
10. Members of my work unit encourage others to try new and more effective ways of doing their job.
11. Members of my work unit adhere to informal rules devised to maintain order.
12. Members of my work unit go beyond call of duty to provide better public service.
In this section, we are interested in your general satisfaction about your job in your local government. Please circle the answer that best reflects your level of satisfaction with each aspect of your job. (1= very dissatisfied with this aspect of my job; 5= very satisfied with this aspect of my job)

1. The chance to be “somebody” in the community.
2. The way my job provides for steady employment.
3. The chance for advancement on this job.
4. The payment that I receive in the organization.
5. The amount of work that I do.
6. The way my co-workers get along with each other.
7. The physical working conditions.
8. The chance to do something that makes use of my ability.
9. The chance to work for the public good.
10. Being able to do things that don’t go against my conscience.
11. The feeling of accomplishment I get from the job.
12. Work atmosphere without corruption.

In this section, we are interested in your opinions about the work atmosphere in your city government. Please circle the answer that best reflects your opinion. (1= strongly disagree and 5= strongly agree)

1. People involved in implementing decisions have a say in making the decisions.
2. I have received a fair performance evaluation.
3. Members of my work unit are involved in making decisions that directly affect their work.
4. If a work unit performs well, there is appropriate recognition and rewards for all.
5. People with the most knowledge are involved in the resolution of problems.
6. If one performs well, there is appropriate recognition and reward.
7. Decisions are made on the basis of research, data and professional criteria, as opposed to political concerns.
8. Most of my job assignments have been fair.
In this section, we are interested in the degree to which you depend on others in your job. Please circle the answer that best reflects your opinion.
(1= strongly disagree and 7= strongly agree)

1. I work closely with others in doing my work.
2. I frequently must coordinate my efforts with others.
3. My own performance is dependent on receiving accurate information from others.
4. The way I perform my job has a significant impact on others.
5. I can plan my own work with little need to coordinate with others.
6. I rarely have to obtain information from others to complete my work.
7. In order to do my job, I need to spend most of my time talking to other people.
8. In my job I am frequently called on to provide information and advice.
9. I work fairly independently of others in my work.

In this section, we are interested in your relationship with your supervisor. Please circle the answer that best reflects your opinion.

1. Do you know where you stand with your supervisor? Do you usually know how satisfied your supervisor is with what you do? (1=rarely and 5=very often)
2. How well does your supervisor understand your job problems and needs? (1=not a bit and 5= a great deal)
3. Regardless of how much formal authority he/she has built into his/ her position, what are the chances that your supervisor would use his/ her power to help you solve problems in your work? (1=none and 5=very high)
4. Again, regardless of the amount of formal authority your manager has, what are the chances that he/ she would “bail you out,” at his/ her expense? (1= none and 5 = very high)
5. How would you characterize your working relationship with your supervisor? (1= extremely ineffective then and 5= extremely effective)
This final section of question asks for information about you and your career. This information will be very helpful in analyzing some relationships between variables. No information will be used to identify you or your office; however, if you would prefer not to answer all other personal information, please feel free to leave those items blank.

1. In which type of work unit do you currently work? (Please specify below).
   Name of Government Organization ___________________
   Work unit or department _______________

2. Please describe rank and position
   Rank:                                    Position:

3. Which of the following is your highest level of formal education?
   1) High school diploma
   2) Associate degree, some college, or technical school, B.S.W., B.A., B.S., or other college degree
   3) Master’s degree and some graduate study beyond college degree
   4) Doctoral degree or beyond Master’s degree

4. How many years have you worked?
   In current organization ________ years
   For the public sector ________ years

5. You are 1) Female  2) Male

6. In what year were you born? 19____.

I greatly appreciate your willingness to complete this survey. Your input will contribute to understanding local government employees’ work-related behavior. Thank you.
연구 동의서

연구 제목: 공무원들의 근무관련 행동 결정요인에 관한 연구
심동철, 뉴욕 주립대학교 행정학과 방문조교수, 박사과정. 1-518-256-6288 dcshim@gmail.com
지도교수: Sue Faerman, 1- 518-442-3950

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본 연구에 참여하는 것은 귀하의 자발적인 의도로 결정되어야 합니다. 귀하께서 설문에 참가하기로 동의하신 다음에도 귀하가 원하시는 때에는 언제나 어떠한 종류의 불이익이나 손실없이 설문을 그만 두실 수 있습니다. 또한 연구진행자도 귀하가 연구에 참여하시기 부적절하다고 생각될 경우 귀하의 참가를 취소할수 있음을 유념해 주시기 바랍니다.

설문조사는 무기명으로 실시되며 응답내용은 통계적으로 처리되어 학술목적으로만 사용되기 때문에 법으로 요구되지 않는 한 귀하의 대답은 전혀 공개되지 않습니다. 다만 Institutional Review Board는 본 연구의 감독을 위해 연구 결과를 검토할 수 있습니다.

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연구자에의해서 답변되지 않을 수 없는 질문이나 문의사항이 있으시면 뉴욕주립대학에 다음의 이메일이나 전화번호로 연락을 하실 수 있습니다. (Office of Regulatory Research Compliance at orrc@uamail.albany.edu 이나 1-800-365-9139 로 연락하실수 있습니다.)

귀하께서 본 장의 복사본을 연구 동의서로 보관하실 수 있도록 제공될 것입니다.

설문에 답하시는 것을 동의하시면, 설문을 작성후 연구가 끝나시기전에 지정된 우편함에 (수신인: 심동철) 넣어주시면 감사하겠습니다.

귀중한 시간을 할애해 주신데 대해 다시 한 번 깊이 감사 드립니다.
설문에 참가해 주셔서 다시 한번 감사드립니다. 다음에 문항들은 귀하의 행동이나 의견을 설명하는 항목으로 구성되어 있습니다. 항목들을 주의 깊게 읽으시고 답변 해주시면 감사하겠습니다. 여기에는 어떠한 정답이나 오답도 없음을 다시한번 알려드립니다.

다음은 귀하의 직장생활에서 귀하의 행동에 대한 질문입니다. 다음에 열거된 각 설명들이 귀하에게 얼마나 잘 해당되는데를 답변해 주시기 바랍니다.

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<td>1.</td>
<td>나는 직장동료 또는 부하직원들이 과도한 직무로 어려움을 겪고 있을 때, 내 담당업무가 아니라라도 도와준다.</td>
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<td>2.</td>
<td>나는 시민들이 민원에 어려움을 겪고 있을때 그 민원이 내 담당 업무가 아니라라도 도와준다.</td>
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<td>3.</td>
<td>나는 정당한 사유가 있더라도, 결근이나 조퇴를 거의 하지 않는다.</td>
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<td>나는 우리 과/실의 성과향상을 위한 방안들에 대한 의견을 동료들과 자주 교환하는 편이다.</td>
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<td>나는 시민들의 만족도를 높이기 위해서라면 과다한 업무량도 마다하지 않는다.</td>
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<td>나는 동료들의 개인적인 사정이나 사적 용건에 대해서도 관심과 친절을 보이고 노력한다.</td>
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<td>7.</td>
<td>중요 사안에 대하여, 나는 다른 동료들의 지지를 얻지 못하더라도 나의 양심껏 의견을 제시한다.</td>
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<td>나는 우리 과/실에 배속된 새 동료 또는 부하직원의 조속한 업무습득을 위해 적극적 지원을 아끼지 않는다.</td>
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<td>나는 나의 상사가 도움을 필요로 할때 나의 담당업무가 아니라라도 도와준다.</td>
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<td>10.</td>
<td>나는 동료나 부하직원들이 업무수행을 보다 창의적이고 효율적인 방법으로 수행할 것을 겪려하는 편이다.</td>
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<td>11.</td>
<td>나는 업무 수행 시 관련 규칙이나 절차를 제대로 지키고 있는지에 항상 주의를 기울인다.</td>
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<td>12.</td>
<td>나는 보다 나은 공공서비스를 위해 내 최선의 노력을 다한다.</td>
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다음은 귀하의 행동이나 믿음에 대한 질문입니다.
다음에 열거된 각 설명들이 귀하에게 얼마나 잘
해당되는가를 답변해 주시기 바랍니다.

| 1. 나는 길에서 노약자나 장애인을 도운 적이 있다. | 전혀 그렇지 않다 | 별로 그렇지 않다 | 그저 그렇다 | 대체로 그렇다 | 매우 그렇다 |
| 2. 나는 사회의 부분 부분이 서로 유기적으로 연결되어 있음을 일상에서 발견한다. | | | | | |
| 3. 나는 사심없이 우리 지역발전에 이바지하고 있다고 생각한다. | | | | | |
| 4. 나는 스스로 노력하지 않는 사람을 돕는 것은 바람직하지 않다고 생각한다. | | | | | |
| 5. 나는 최근 6개월간 어려운 사람들을 위한 기부를 한적이 있다. | | | | | |
| 6. 나는 가난하거나 불쌍한 처지에 있는 사람들을 보고 그다지 동정심을 느끼지는 않는다. | | | | | |
| 7. 나는 최근 6개월간 사회 봉사활동에 참가 한적이 있다. | | | | | |
| 8. 나는 내 상황이 좋지 않을때에 남을 도우려고 하는 것은 말이 안된다고 생각한다. | | | | | |

다음은 귀하의 직업과 직장에 대해 자신이 느끼는 바를 묻는 질문입니다. 다음의 각 항목들에 대해 어느 정도 동의할 수 있는가, 그 정도를 평가해 주시기 바랍니다.

| 1. 다른 사람들이 내가 속한 조직(청, 위원회)를(을) 비난하면, 나 자신이 공격받는 듯한 느낌을 받는다. | 전혀 그렇지 않다 | 별로 그렇지 않다 | 그저 그렇다 | 대체로 그렇다 | 매우 그렇다 |
| 2. 내가 속한 조직(정, 위원회)에 대해 타인/언론이 어떻게 생각하는지 궁금하다. | | | | | |
| 3. 나는 종종 일상 대화에서 소속 조직을 ‘우리 조직’ 또는 ‘우리 정’, ‘우리 위원회’ 이라 표현한다. | | | | | |
| 4. 우리 조직(정, 위원회)의 성과/성공은 곧 나 자신의 성과/성공이다. | | | | | |
| 5. 타인/언론이 우리조직 (정, 위원회)를(을) 착찬할 때면, 마지막 내가 착찬받는 것처럼 기분이 좋다. | | | | | |

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다음은 귀하의 직장생활에서 귀하의 행동에 대한 질문입니다. 다음과 열거된 각 설명들이 귀하에게 얼마나 잘 해당되는가를 답변해 주시기 바랍니다.

전혀                               매우
그렇지 못하다                      그렇다

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<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12. 나의 과/실의 동료들은 보다 나은 공공서비스를 위해 내 최선의 노력을 다한다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
다음은 귀하의 직업의 만족도를 묻는 질문입니다. 직업의 다음과 같은 측면에 현재 어느 정도 만족 할 수 있는가, 그 정도를 평가해 주시기 바랍니다.

<table>
<thead>
<tr>
<th>측면</th>
<th>매우 불만족</th>
<th>대체로 불만족</th>
<th>그저 그렇다</th>
<th>대체로 만족</th>
<th>매우 만족</th>
</tr>
</thead>
<tbody>
<tr>
<td>조직에서 중요한 역할을 할 수 있는 기회</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>고용안정성</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>승진의 기회</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>연봉</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>업무량</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>직장 내 동료관계</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>업무 수행 환경</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>능력발휘의 기회</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>공익 실현의 기회</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>소신대로 일할 수 있는 환경</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>직업을 통한 성취감</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>정형한 업무 수행 환경</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

다음은 귀하가 속한 조직의 제도나 운영방식에 대해 귀하가 느끼는 바를 묻는 것들입니다. 아래의 각 항목들이 귀하의 소속 조직의 상황과 얼마나 잘 일치하는가를 평가해 주시기 바랍니다.

<table>
<thead>
<tr>
<th>측면</th>
<th>전혀 그렇지 못하다</th>
<th>별로 그렇지 못하다</th>
<th>그저 그렇다</th>
<th>대체로 그렇다</th>
<th>매우 그렇다</th>
</tr>
</thead>
<tbody>
<tr>
<td>우리 과/실에서는 직원들이 업무수행에 직접 관련된 의사결정 과정에 참여할 수 있다.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>우리 과/실 내에서 업무수행평가는 정확하고 공정하게 이루어진다.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>우리 과/실에서는 당사자의 업무에 직접적으로 영향을 줄 수 있는 의사결정에 대해 해당 직원이 직접 참여할 수 있다.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>특정 과/실이 특출한 성과를 보였을 때, 조직 내에서 이에 대해 적절한 보상이나 공로에 대한 치하를 받는다.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>우리 과/실 내 의사결정은 해당 사안과 관련하여 가장 지식이 풍부한 전문가들에 의해 이루어지는 편이다.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>우리 과/실 내 의사결정은 정치적인 이유보다는 자료분석 또는 전문가의 의견과 같은 객관적인 근거에 의해 이루어진다.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>우리가 과/실에서는 개인 직원이 특출한 성과를 옹うこと 때, 이에 대해 적절한 보상이나 공로에 대한 치하가 주어진다.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>우리 과/실에서는 업무분장이 공평하게 이루어진다.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
다음은 귀하가 수행하는 직무의 특성이나 성격에 대해 묻는 것입니다. 아래의 각 항목들이 귀하의 직무를 얼마나 잘 표현하는가를 평가해 주시기 바랍니다.

<table>
<thead>
<tr>
<th>순번</th>
<th>문항</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>내 업무는 동료/다른 과와의 긴밀한 협조를 요구한다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2.</td>
<td>내 업무는 타 업무에 의해 조정/수정해야 하는 경우가 자주 발생한다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3.</td>
<td>내 업무의 성공적 수행은 주어진 기초자료가 얼마나 정확한가에 의해 많이 좌우된다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4.</td>
<td>내 업무 방식에 따라 동료/다른 과들이 많은 영향을 받는다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5.</td>
<td>내 업무는 동료/다른 과들과 별다른 조정을 필요로 하지 않는다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6.</td>
<td>나는 업무 수행을 위해서 직접 정보를 수집해야 하는 경우가 많다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7.</td>
<td>나는 업무 수행을 위해 동료/다른 과와 접촉을 (회의, 조율/조정, 정보수집을 위한 대화 등등) 위해 업무 시간의 대부분을 보내야 한다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8.</td>
<td>나는 내 업무의 성격상 동료/부하직원/타 과/타 부처로부터 질의나 자문요청을 많이 받는다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9.</td>
<td>나는 다른 사람들과 독립적으로 일하는 편이다.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

귀하와 귀하의 상사의 관계를 묻는 질문입니다. 아래의 각 항목들이 귀하와 상사의 관계를 잘 표현하는 것을 고려해주십시오. 여기에서 상사는 귀하의 실이나 과의 책임자를 의미합니다.

<table>
<thead>
<tr>
<th>순번</th>
<th>문항</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>귀하는 귀하의 상사가 귀하의 업무수행에 대체로 어느 정도 만족하고 있는지 알고 계십니까?</td>
<td>□</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>귀하는 귀하의 상사가 귀하의 업무관련 애로사항 또는 요구사항에 대해 잘 알고 있다고 생각하십니까?</td>
<td>전히 모른다</td>
<td>□</td>
<td>약간 안다</td>
<td>□</td>
<td>거의 안다</td>
<td>□</td>
<td>매우 자주</td>
</tr>
<tr>
<td>3.</td>
<td>귀하는 귀하의 상사가 귀하의 과업관련 문제를 해결해주기 위해 최선을 다합 것이라고 생각하십니까?</td>
<td>전히 그렇</td>
<td>□</td>
<td>약간의 가능성은 있다</td>
<td>□</td>
<td>어느 정도의 가능성은 있다</td>
<td>□</td>
<td>그렇</td>
</tr>
<tr>
<td>4.</td>
<td>귀하가 조직내에서 여러음에 처할 경우, 귀하의 상사가 귀하를 돕기 위해 자신을 희생할 가능성이 어느 정도라고 생각하십니까?</td>
<td>전히 그렇</td>
<td>□</td>
<td>약간의 가능성은 있다</td>
<td>□</td>
<td>어느 정도의 가능성은 있다</td>
<td>□</td>
<td>그렇</td>
</tr>
<tr>
<td>5.</td>
<td>귀하와 귀하의 상사의 관계가 업무수행에 얼마나 도움이 된다고 생각하십니까?</td>
<td>전히 도움이 되지 못한다</td>
<td>□</td>
<td>그렇지 도움이 되지 못한다</td>
<td>□</td>
<td>보통이다</td>
<td>□</td>
<td>다소 도움이 된다</td>
</tr>
</tbody>
</table>
마지막으로 다음은 귀하에 대한 질문들입니다. 본 연구는 설문을 지방 자치단체별로 수집을 하므로, 자신의 소속 조직을 정확히 표기해주시는 것이 중요합니다. 아래의 각 항목들에 정확히 답변해 주시기 바랍니다. 귀하께서 응답해주시면 설문 답변과 개인 관련 정보는 최종 논문 어디에도 게재되지 않으며, 귀하께서 소속된 지방 자치단체나 과, 실의 이름 역시 논문에 공개되지 않습니다. 또한 수집된 모든 정보는 연구목적 이외에는 활용되지 않으며, 개개인을 구분할 수 있는 정보를 포함하지 않음을 다시 한번 알려드립니다.

1. 귀하가 근무하고 있는 지방자치단체명을 적어주시기 바랍니다.
   (       )
   귀하의 과/실의 명칭을 적어 주시기 바랍니다.
   (       )

2. 귀하의 직급 및 직책을 적어 주시기 바랍니다.
   (직급:                    직책:       )

3. 귀하의 교육수준에 대해 알려주시기 바랍니다.
   ① 고졸 또는 고졸 이하
   ② 학사(대학)나 학사에 해당하는 다른 학위소지
   ③ 석사(대학원)나 학사이상의 다른 학위소지
   ④ 박사나 석사이상의 다른 학위 소지

4. 귀하의 근속연수를 적어주시기 바랍니다.
   (조직을 옮겼을 경우 정부조직에서의 총 근속연수를 적어주시기 바랍니다.)
   ( 현재조직:         년;      총 근속연수               년  )

5. 귀하의 성별을 알려주시기 바랍니다.
   ① 여성        ② 남성

6. 귀하의 태어난 년도를 알려주시면 감사하겠습니다. (19___)

성실한 답변에 감사 드립니다.