Doctoral Thesis

Identification and Performance Management

An Analysis of Change-Oriented Behavior in Public Organizations

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To my wife Eunkyung and my daughter Reagan,
without whose love, sacrifice, and support
this undertaking would not have been possible.

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Abstract

Identity and identification are root constructs in organization studies. Identity provides an interpretive framework with which to evaluate the appropriateness of behavior, and as such, in organizations the construct has a fundamental relationship with employee performance. This study develops a theoretical framework linking identification to change-oriented behavior, a type of extra-role activity aimed at introducing micro-level organizational change in order to improve long-term performance and efficiency. Enhancing the performance of public organizations is a central theme of public administration theory and practice, and this study contributes to the literature by shedding light on a potentially important employee-level antecedent of organizational performance. Secondly, this study links identification and change-oriented behavior to a phenomenon that has grown increasingly prevalent in contemporary public organizations, namely, goal-oriented performance management. Over the past decades, public organizations around the world have implemented results-based reforms in order to increase accountability, efficiency, and performance. Due to the scope and complexity of these reforms, however, their full range of consequences is not yet known. This study aims to make a second contribution to the literature by linking performance management practices to both organizational identification and change-oriented behavior. Using survey data gathered from

employees of central government ministries in South Korea, where a wide range of results-based reforms have been introduced, mediation analysis utilizing bootstrap resampling is used to test a number of empirical hypotheses related to the constructs outlined above. The results of the analysis suggest that organizational identification is a strong predictor of change-oriented behavior. In addition, the effect of performance management on employee intentions to engage in change-oriented behavior is shown to operate primarily through its effect on organizational identification, which underscores the importance of identification for organizational performance. Following the presentation of the results of the analysis, the theoretical and practical implications of this study are discussed.

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1. Introduction

1.1. Background and motivation of this study

The concepts of identity and identification have cemented themselves as foundational constructs of organization studies (Ashforth, Harison, and Corley 2008; Albert, Ashforth, and Dutton 2000). Identity defines not only who one is, but also, in answering this question, who others are, as well as one's relationship to them. Identity situates the individual within the social landscape and provides a framework to evaluate the appropriateness of a range of behaviors, values, and goals. The adoption of an identity can serve as an interpretive lens with which to make sense of the world, reduce existential uncertainty, and satisfy basic human needs (Pratt 1998; Hogg 2000). Importantly for organization theory, identity frames the experience of the organization, making it a powerful determinant of organizational behavior and thus a construct highly relevant to the study of employee performance.

The embodiment of prosocial values and goals has long been understood to distinguish public sector organizations from their private sector counterparts (Perry and Wise 1990; Rainey 1982). At the same time, public administration scholars have said little about what role identity and identification in public organizations may play in relation to outcomes at the individual or organization level. Employees who identify strongly with their organizations consider the values, goals, and fate of the organization to be their own (Ashforth and Mael 1989), and this fusion of individual and organizational fate can serve as a strong motivation for the individual to apply themselves fully in service of their organization. The concept of identification is thus fundamentally linked with individual performance. At the same time, however, the theoretical

determinants of employee performance are by no means limited to identification, and an emphasis on performance is an evergreen theme of public administration theory and practice.

With the end of increasing performance, public sector reform movements have championed the transformation of government bureaucracy into a more competitive, businesslike enterprise. Both the New Public Management movement and its cousin, the Reinventing Government movement, have emphasized, among other things, flatter organizational structures, the reduction of red tape, mission-based managerial practices, as well as increased levels of discretion and empowerment for employees at all levels of the organizational hierarchy (Hood 1991; Osborne and Gaebler 1992). The magnitude of these reform efforts has led some scholars to characterize them as identity projects for the public sector (Du Gay 1996). And while these movements have been criticized (Kearney and Hays 1998), as well as spawned counter reform movements, such as the New Public Service (Denhardt and Denhardt 2000; 2011), nevertheless, the drive for organizational reform has left an indelible mark upon the public administration systems of both developed and developing countries (Pollitt and Bouckaert 2011; McCourt 2008). Moreover, the performance imperative continues to dominate scholarly and political discourse about the public sector.

The remedies prescribed to improve organizational performance have been numerous. However, one thread that has run throughout the reform program has been the promise of the use of performance information to improve public organization performance (Behn 2002). Performance management is understood as the utilization by management of performance information in the process of strategic decision making in order to improve performance (Moynihan 2008). At the employee level, performance management involves defining goals, setting performance targets, and appropriately incentivizing workers to meet them. While the realities of public organizations

and their environments may undermine the full potential of performance management techniques in the public sector (Meier and O'Toole 2011), nevertheless "the language of results [has become] a rare public currency that citizens view as legitimate," and thus performance management is likely to continue to be a prominent theme in public organization reform programs (Moynihan 2008, 4). Achieving a fundamental understanding of the consequences of the embrace performance management techniques is thus an essential task for public administration scholarship.

While studies have examined the organizational and environmental factors that enhance or constrain the effect of performance management techniques on organizational performance, much less work has examined the micro-level foundations of this relationship, or in other words, the relationship between performance management and employee performance. The promise of performance management is grounded in the idea that clear, measurable goals, coupled with reward accountability, will make less efficient systems of organizational control unnecessary. Operating within a horizon of clear, measurable, and properly incentivized goals, employees should act in the interests of the organization under their own volition, without the need for persistent behavioral surveillance. Such a system eliminates the inefficiencies that can arise from a formal and direct system of managerial control, and should result in a net gain in overall performance.

The performance gains that performance management targets should be understood as continuous over time. In other words, performance management techniques should be applied in the service of the continuous and incremental improvement of organizational performance. In theory, performance information allows managers to make more efficient choices with regard to resource allocation within their organizations, thereby increasing returns from investment. This

process has parallels at the individual level. Freed from the bonds of a formal and direct system of organizational control, employees have more latitude in making decisions about how to achieve their objectives. In other words, like managers, employees also can make small adjustments to work processes based on their intimate knowledge of their work and its context in order to improve performance over the longer term, thereby maximizing their own resource allocation of time and energy.

While the potential performance gains resulting from the implementation of performance management systems accrue incrementally over time, micro-level performance improvements on the part of employees are difficult to quantify from the point of view of management. Because of this difficulty, innovative or change-oriented behavior in organizations has been conceptualized as a type of extra-role performance that is not fully captured by an employee's formal job description (Morrison and Phelps 1999; Bettencourt 2004). Unlike formal job performance, which involves the attainment of job goals mutually understood to exist between the employee and organizational superiors, change-oriented behaviors are at once more discretionary and harder to detect. As such, although such behaviors are fundamental to the continual incremental performance improvement of organizations over time, and may perhaps even be the primary source of long-term performance improvement, they are nevertheless also difficult to reward. Furthermore, even though performance management may facilitate change-oriented behavior in various ways, change-oriented behavior itself nevertheless lies outside of its formal scope.

This study aims to understand the relationship between identification, performance management, and change-oriented behavior in public sector organizations. Both identification and performance management have strong theoretical links to change-oriented behavior, however, little research focusing on these relationships currently exists. As improving organizational performance is a

central theme in public administration research, this study makes a contribution to the literature by clarifying the relationships between salient performance-based management techniques, identification, and change-oriented behavior.

1.2. The purpose of this research

Identification with the organization represents a cognitive fusion of the fate of the organization with the fate of the individual. This fusion of individual and organizational fate is understood to underlie individual performance, and has been consistently shown to have a strong relationship with extra-role behavior undertaken on behalf of the organization (Dukerich, Golden, and Shortell 2002; Riketta 2005). This behavior is fundamental to organizational performance (Katz 1964). Moreover, change-oriented behavior, a type of extra-role behavior aimed at introducing performance-enhancing change into the organization, may be crucial for continuous incremental performance improvement over time. On the other hand, the theory of performance management argues that clear, measurable, and appropriately incentivized goals represent a sufficient basis upon which to drive employee performance. Insofar as performance management techniques emphasize objectives over processes, however, such techniques may facilitate change-oriented behaviors in pursuit of organizational ends. Given the prominence of performance management theory in public administration research as well as its wide embrace by government organizations throughout the world, this study asks whether identification can still be seen as a legitimate platform for employee change-oriented behavior in public organizations.

Research question 1: What, if any, role does identification play in the production of change-oriented behavior in public organizations that have embraced performance management?

The performance-oriented reforms that have swept the public sector over the past decades have been of such a magnitude that the fundamental identity of the public sector as well as the relationship between employees and their organizations has potentially been transformed (Bourgault and Van Dorpe 2013). Given that performance-based reforms at the individual level are designed to unite the goals of the individual with that of the organization, performance management as a managerial technique has an intuitive relationship with organizational identification. Understanding the contours of this relationship thus forms the basis of the second research question of this study.

Research question 2: How does performance management relate to employee identification in public sector organizations?

The goal of this study is to address these questions empirically. In service of this end, a conceptual model is proposed which can guide the analysis.

Firstly, in the organizational behavior literature, psychological states, whether cognitive or affective, are largely theorized to stand in an antecedent, causal position with regard to behavior. Identity and identification have long served as a theoretical basis from which to explain a wide variety of organizational behavior (Ashforth et al. 2008), and while a level of feedback may occur in the process of enacting certain behaviors (Rousseau 1998), nevertheless identification is almost universally understood to stand in a causal relationship with regard to action. This study

does not challenge this tradition, and also theorizes identification as a potential antecedent to change-oriented behavior.

Secondly, the relationship between managerial policy and behavior stands in a similar relationship to employee behavior as does identification. While the best managers will constantly adjust their strategy in the face of changing circumstances and new challenges, nevertheless, if a relationship between managerial behavior and employee behavior exists, it is reasonable to consider the former as an antecedent to the latter, particularly as examining the antecedents to behavior is a central purpose of this research. This study is interested in the relationship between performance management and change-oriented behavior, and as such will assume that the former is the antecedent in this relationship.

Finally, while managerial practice may shape employee behavior, the mechanism through which this influence occurs should be conceived as the psychological state of the employee, and as such, performance management should be conceived as standing in an antecedent position with regard to identification.

These remarks lead to the proposed theoretical framework of this study, which can be viewed in figure 1. In order to answer the research questions posed in this section, this study treats both performance management and identification as antecedents to change-oriented behavior. Secondly, performance management is also conceptualized as an antecedent to identification.

Figure 1: Analytical framework
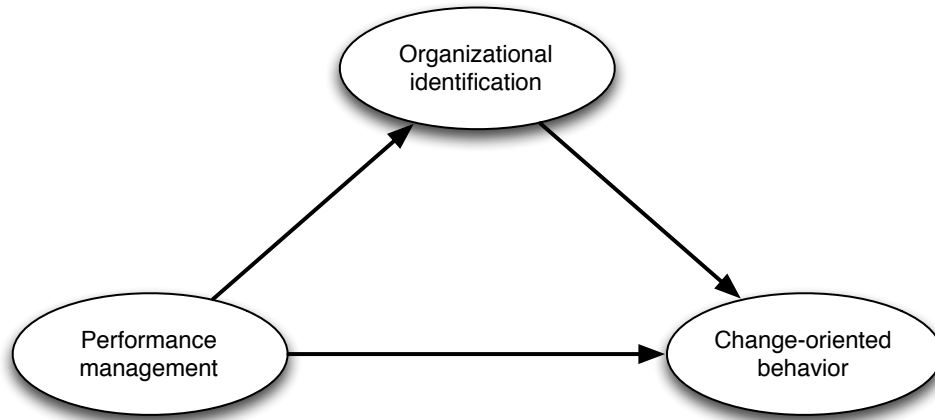
1.3. Empirical context: South Korean central government

The empirical context of this study is central government ministries in the Republic of Korea (hereafter referred to as South Korea, or, simply, Korea). Like most countries around the world, the Korean government has embraced wide reaching performance-based reforms across all government organizations. The introduction of performance management in the Korean central government accelerated following the 1997 national financial emergency, and currently an annual performance review of central government organizations occurs, with the results published for citizens to scrutinize. This evaluation takes into account a number of criteria including the effectiveness of core policy implementation. Employee level performance evaluations have also been implemented at all levels, and organizational rewards, remuneration, and, importantly, promotion, are increasingly linked to employee performance (Kim and Hong 2013). More generally, however, the Korean central government has long fostered a performance-oriented culture since the early days of the rapid economic development period

beginning in the 1960s. Given these relevant characteristics, the context of central government ministries is an appropriate venue in which to study the impact of performance management on employee behavior.

At the same time, the Korean context also has a number of interesting characteristics making it an interesting venue in which to study the relationship between organizational identification and change-oriented behavior. Confucian values and a strong group-based culture can underlie tendencies of identification in organizations, and Korean organizational culture generally facilitates a deep integration of the employee into the fabric of the group. Operating at both systematic and informal levels, the cultural atmosphere of government organizations in Korea encourages a high level of identification with the organization and raises the expectation for individuals to make significant individual sacrifices for the benefit of the group. At the same time, however, precisely because the culture of organizations discourages fine distinctions between the individual and the group, this highly integrated sense of organizational identity may militate against change-oriented behavior. Change-oriented behavior inherently involves an element of risk for the individual, and Korea's strong face-oriented culture raises the stakes in risk-taking and generally discourages individuals from operating outside of their formally defined roles. In other words, because individuals cannot fully disassociate themselves as individuals from their organizational identities, the ability to distance themselves from failure is reduced, and on-the-job failures can thus reflect negatively on the person as a whole.

While the general administrative trends of the Korean administrative situation make it an appropriate context in which to conduct this study, at the same time broader characteristics which distinguish the culture of East Asian public organizations from American or European contexts need also to be taken into account. While this study aims to draw general conclusions

about the relationship between identification, performance management, and change-oriented behavior, nevertheless the relevant characteristics of the context of this study will not be ignored.

1.4. Plan of this study

In addition to these introductory remarks, this study has five chapters. In the next chapter, a thorough review of the relevant literatures relating to identification, change-oriented behavior, and performance management are explored and a number of empirical hypotheses are proposed. In the chapter following the literature review, a description of the data and measurements used to test these hypotheses are described. This chapter also contains a detailed description of the statistical methodology utilized to test the hypotheses. The next chapter presents the results and interpretation of the statistical analysis, which represent the main findings of this study. These results are then discussed within the context of the existing literature and both the theoretical and practical significance of the findings are presented. In this chapter, this study's major and minor contributions are described. In the final, concluding chapter, a brief recapitulation of the main results of the study are presented, some limitations of the analysis are discussed, and, based on the findings of this study, questions relevant to future research are proposed.

2. Literature review

2.1. Identification in the organizational context

Identity is a fundamental concept. Consequently, literature treating the subject is vast and cuts across multiple disciplines, including philosophy, literature studies, and even mathematics and logic. In terms of organization studies, however, the stream of research that has had the greatest impact is that of social psychology. Originally developed as a tool to understand in-group favoritism and out-group hostility by focusing on the mechanisms by which an individual comes to identify with a given group, social identity theory (SIT) (Tajfel and Turner 1979; 1986) argues that group membership impacts how individuals define themselves, and directly contributes to self-identity. At the heart of SIT is the insight that individual identity is comprised of a set of characteristics or predicates that apply to the individual. This set, however, is divided into two subsets. The first set contains all of those attributes which serve to distinguish the individual from others, and as such can be thought of as the collection of an individual's idiosyncratic characteristics. These characteristics make an individual unique relative to others. The second subset, promulgation of the existence of which is perhaps SIT's most fundamental contribution to identity theory, is a set consisting of characteristics or attributes perceived to inhere in the groups of which the individual is a member. In other words, social identity can be understood as "that part of an individual's self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel 1978, 63).

Underlying social identity is a process of identification whereby one achieves an expanded sense of self based on perceived membership in a larger collective (Rousseau 1998). Group

membership functions for the individual as a mechanism by which an implicit answer to the question "Who am I?" may be provided, thereby furnishing a foundation for the self-concept (Ashforth et al. 2007). As a foundational theory, SIT has been applied across a number of disciplines in various ways. However, the ideas of SIT began to be applied specifically in organization research based on the insight that one's workplace, or one's organization, could function as a foundation of social identity. Based on this insight, organizational identification (OI) (Ashforth and Mael 1989; Dutton, Dukerich, and Harquail 1994; Pratt 1998), derived from SIT, limits its focus from groups *in general* to organizations, and has been applied to a wide variety of attitudinal and behavioral phenomena in the workplace (Riketta 2005; Ashforth et al. 2008). OI theory proposes that the work identities of employees are woven into their membership in the organization (Hogg and Abrams 1988; Hogg and Terry 2000). On a phenomenological level, employee levels of OI are understood to correspond to an individual sense of "oneness" with the organization (van Knippenberg 2000). To the extent that this oneness becomes a fundamental perception of the individual, they should be inclined to understand the organization's perspective and its goals as their own (van Dick 2006). Based on this, Mael and Ashforth (1992, 104) characterized the identified individual as being "psychologically intertwined with the fate of the group, as sharing a common destiny and experiencing its successes and failures."

OI has been theorized to have cognitive, evaluative, and affective dimensions (Ashforth et al. 2008), all of which may have antecedents relevant to this study. At the deepest level, identification is fundamentally a cognition based on a simple self categorization into a class, which essentially plays a self-defining function. This purely cognitive understanding of identification has been the basis of much OI research. For instance, Ashforth and Mael (1989)

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treat the cognitive level of identification as simply "the perception of oneness or belongingness to some human aggregate" (21). Similarly, Dutton et al. (1994, 239) write that identification is the recognition that "a person's self-concept contains the same attributes as those in the perceived organizational identity." Despite the minimal characteristics of this component of identification, simple categorization has been the basis of the majority of lab experiments investigating the effects of identification, and has been shown to have powerful effects (Jackson 2002). After group membership has been cognitively established, scholars claim that a judgment about the desirability of this membership is made. In relation to this evaluative dimension of OI, Albert and Whetten's (1985) concept of organizational identity is important. Organizational identity is defined as a belief about what is distinctive, central, and enduring about the organization, and Dutton et al. (1994) point out that the extent to which this image is positive should be directly related to identification insofar as individual employee identification is based on the need to enhance one's self-concept. Finally, OI is proposed to have an affective dimension, such that membership elicits some feeling about the organization and the individual. Ashforth et al. (2008), referring to existing research, point out that, however, this emotion need not be positive, and under certain circumstances, high levels of identification with the given group can lead to feelings of shame, guilt, or other emotions.

These factors are relevant to the current research as they define the central dimensions of OI and thereby help ground an understanding of identification's central antecedents and potential consequences. The next sections treat both of these in turn.

2.1.1. Foundations of identification

What factors influence an "individual's readiness to define him or herself as a member of a particular social group" (Hashlam 2001, 383)? Scholars have proposed a number of psychological antecedents of identification. For instance, the SIT literature suggests that the enhancement of self-esteem is a core motivation for human beings, and may be a powerful motivation for identifying with groups (Tajfel and Turner 1979). As such, groups that are perceived to be highly prestigious become identification targets for individuals in an attempt to produce a positive evaluation of self (Mael and Ashforth 1992; Smidts, Pruyn, van Riel 2001). This "self-esteem" hypothesis is in contrast to a more recent theory arguing that uncertainty reduction may also a fundamental motivation for identification (Hogg 2000). Subjective uncertainty is characterized as "aversive" for the individual, and self-categorization, which deemphasizes individual attributes in favor of prototypical group attributes, can act as a mechanism by which to reduce uncertainty by offering the individual access to prescribed behaviors and framing instruments (Hogg 2000; Reid and Hogg 2005). In general, then, identification with a given organization can serve the individual's underlying and deeply set motivations for belonging, safety, and self enhancement (Pratt 1998).

Self enhancement and uncertainty reduction may serve as deeply situated motivations for the identification of individuals with organizations. On the other hand, the adoption of a given identity at a given time also has important environmental antecedents. The theory of how contextual environmental factors drive identification is outlined by social categorization theory (SCT) (Turner, Hogg, Oakes, Reicher, and Wetherell 1987), a body of work which complements SIT's focus on deep psychological motivations. In contrast to SIT, SCT focuses on the contextual influences that drive identification in day-to-day life, and proposes that in social

situations, a given individual will understand themselves as belonging to a certain category, which will influence their evaluation of the appropriateness of various kinds of behaviors. Self-categorization is theorized to operate primarily through environmental phenomena which raise different categories to salience for the individual. Unlike the self enhancement and safety motivations for identification, these external drivers of categorization are highly contingent upon the individual's momentary perception of environmental phenomena. In addition to these drivers, however, an internal dimension of categorization is also theorized to exist, and relates to the familiarity of a category to the individual given the individual's unique history. In other words, it must be possible for an individual to categorize themselves according to a given category if categorization is to occur. If the given category that is salient is completely alien to the individual - for example, it should not be possible for a teacher to categorize themselves as a doctor no matter how strong the environmental stimulus - there is little chance that they will categorize themselves as such. Category salience driven by environmental stimuli, however, is highly dependent upon the accessibility of that category to cognition. As such, there should be both an external (environmental stimuli) and internal (within individual self-understanding) category fit in order for categorization to take place (Oakes, Turner and Haslam 1991).

A given identity may be activated only insofar as it is both salient and accessible to an individual. Identity salience in terms of the organization refers to the process by which environmental phenomenon encourage the individual to believe that the goals of the organization coincide to some degree with those of the individual, which Rousseau (1998) refers to as "situated identification" (218). Situated identification is tied to the organizational context where it emerges, and once the cues that give rise to it withdraw, the identity may be discarded. In contrast to situated identification, Rousseau (1998) also points to a non-context dependent form

of identification which she calls "deep structure identification." While SIT developed largely on the basis of experiments carried out in university laboratories using the minimal group paradigm (Ashforth et al. 2008), Turner (1978) pointed out that identification can have deeper roots. Unlike situated identity, which retreats with the removal of relevant environmental stimuli, other elements of identity are related fundamentally to the self-concept of the individual, and persist across time and situations. These deeply situated identities are highly accessible to the individual and may be activated based on minimal environmental stimuli, or no stimuli at all. At the same time, environmentally-dependent situated identity is logically a necessary and antecedent condition for deep structure identification (Rousseau 1998).

While these two forms of identification have significant feedback between them, this study primarily focuses on organizational characteristics that make organizational identity salient through situated identification, assuming that repeated and prolonged exposure to a given identity will increase the likelihood that it takes root at a deeper level. Before moving on to a discussion of identification of how OI affects employee behavior, and particularly employee performance, however, a few words must be said about the relationship between OI and a concept with a significant degree of conceptual and empirical overlap.

2.1.2. The path forward: Identification or commitment?

Despite its social identity-based theoretical roots, organizational identification overlaps with a number of other constructs in the organization sciences including loyalty, person organization fit, and organizational ownership (Ashforth et al. 2008). Nevertheless, while OI has a strong foundation in the literature in the private sector, almost no public administration literature

focuses on the concept. However, the same is not true for organizational commitment (OC), which overlaps conceptually and empirically with OI to some degree. Both OI and OC are frameworks for understanding the relationship between the individual and the organization. However, OI approaches this topic by focusing on the employee's self-concept, or, in other words, the impact of how organizational membership shapes self-identity, and the consequences of this, while researchers focusing on commitment take a different approach. OI can be distinguished from OC in a number of ways, including by its primary antecedents as well as its effects. Nevertheless, OC has a strong history in the organization studies literature, and while it has been pointed out that in general that OI and OC scholars proceed as if the other camp did not exist (Ashforth et al. 2008), addressing the relationship between the two is necessary for this study, particularly because OC is prevalent in the existent public administration literature.

From the 1980s, organizational commitment has been understood as a type of attitude towards the organization. In a definition that sounds very close to OI, Mowday, Steers, and Porter (1979) defined OC as "the relative strength of an individual's identification with and involvement in a particular organization" (226). This definition of OC has had a large impact on the field, however, and particularly at a measurement level, Mowday and colleagues' approach is notable for its broadness, which incorporates elements of organizational appraisal, willingness to exert effort on behalf of the organization, value congruence, and turnover intention. Meyer and Allen (1991), to some extent in response to this broadness and ambiguity, revisited the construct and distinguished three dimensions of commitment: continuance, normative, and affective commitment. The last component, affective commitment, is conceptually closest to OI. In the authors' definition, affective organizational commitment (AOC) is defined as "emotional attachment to, identification with, and involvement in the organization" (1).

It cannot be denied that there is indeed a good deal of conceptual overlap between identification and affective commitment so defined. At the same time, however, the two concepts can be distinguished both at the theoretical level as well as the empirical level, and this section provides a brief contrast between the two concepts, which also serves to motivate the use of OI rather than AOC in this study.

As previously discussed, OI is grounded in a sense of oneness with the organization such that the individual employee integrates attributes perceived to adhere in the organization into their own self-concept (Ashforth and Mael 1989). This process is grounded in social identity theory (Turner and Tajfel 1989) and is fundamentally a cognitive phenomenon, with the positive behaviors associated with identification thus driven by the notion that helping the organization is the same as helping oneself, the two being inseparably linked (Rousseau 1998). Identification can thus be understood as a type of "psychological merging of self and organization" (van Knippenberg and Sleebos 2006, 572), and the concept can be used as a framework for understanding the relationship between the individual and their organization. While AOC can also be utilized in this way, however, for AOC the individual and organization are not synthesized, and the organization remains at all times for the individual an entity distinct from the self. In other words, those with high levels of affective commitment maintain a fundamental distinction between self and other (the organization), and consequently the positive behaviors associated with commitment should be understood as being undertaken on behalf of the organization, rather than for the self (van Knippenberg and Sleebos 2006).

This subtle distinction is more than purely academic, and a main consequence is that primary antecedents of AOC in contrast to OI include perception of the exchange quality between the individual and the organization. In the process of exchange between the individual and the

organization, the individual gains knowledge about the ability and intention of the organization to provide benefits in exchange for the exertion of effort and loyalty. From the perspective of social exchange theory (Blau 1964; Levinson 1965), in other words, higher levels of commitment should result from positive appraisals of how the individual is treated by the organization, with the organization increasingly relied upon to provide pay, support, and recognition in exchange for exertions of effort and loyalty by the employee. While individuals are known to identify with their organizations to the extent that doing so enhances their own sense of self-worth and security, the exchange perspective also has a role to play in research on OI. However, this link is much less central, and OI is driven more by factors that encourage the employee to see their own fate as inextricably entwined with that of the organization. As such, factors such as the perceived desirability of the organizational identity, as well as external threats to this identity, are key drivers of identification that distinguish it from AOC.

These ideas have been largely confirmed in the empirical literature (Riketta 2005; van Knippenberg and Sleebos 2006). For example, Van Knippenberg and Sleebos (2006) found that not only are identification and AOC empirically distinct, phenomena such as perception of organizational support, job satisfaction, and turnover intention were correlated more strongly with the latter, and moreover their correlation with identification was not significant when controlling for AOC. On the other hand, OI was strongly related to the extent to which organizational membership was self-definitional for the employee, which had no relationship with AOC when controlling for OI. More generally, a meta-study undertaken by Riketta (2005) found similar results for job satisfaction, while additionally finding that OI was related more strongly to extra-role performance such as citizenship behaviors and self-sacrifice on behalf of the organization. Because of the causal orderings between these and related constructs, several

authors have suggested that identification may be an important antecedent of AOC, although it is likely that the two states have a mutually reinforcing character to some extent (Meyer, Becker, and Vandenberghe 2004; Ashforth et al. 2008).

In choosing between AOC and OI, the main thing to consider is which underlying theory is most appropriate for the research question at hand. This study intends to investigate both individual and organizational factors which facilitate extra-role, change-oriented behaviors, as well as the relationship between these antecedents. As will become clear the next sections, as an individual variable, OI is fundamentally related to behaviors that involve self-sacrifice as well as to extra-role behaviors that lie beyond formally defined performance. To anticipate, assuming that employees are rational actors, extra-role behaviors done in service of the organization but at cost to the individual pose a perhaps unresolvable problem for the point of view of the exchange relationship, as such behaviors have no extrinsic incentives attached to their performance. As such, it is not immediately apparent how the theoretical basis for a relationship between AOC and altruistic behaviors can be constructed. On the other hand, the social identity approach to organizations offers a compelling answer to this problem. Individuals who identify strongly have incorporated organizational membership into their core identity, and as such should no longer perceive acts done on behalf of the organization as done on behalf of another, but simply for themselves.

The next section begins to outline the relationship between organizational identification and extra-role behavior, with the intention of determining the extent to which highly identified employees may be more likely to engage in change-oriented behaviors. However, the question of the distinctness of OI and AOC will again be discussed in the methodology section of this essay, where the two concepts will further be distinguished on a measurement level.

2.2. Identification as the cognitive and affective foundation of performance

The previous section outlined the concept of organizational identification and described a number of classical antecedents to the construct, essentially attempting to answer the question of why individuals come to identify with their organizations. This section focuses on the relationship between OI and employee performance, particularly with respect to change-oriented organizationally supportive behavior. To this end, first the concept of extra-role behavior in general, which has a long and important history in organizational behavior studies, is examined. Extra-role behavior is understood as the set of actions that fall outside of the horizon of formal job performance but nevertheless contribute to organizational functioning and performance in beneficial ways. Next, the well-established theoretical and empirical link between OI and extra-role behavior is discussed. Essentially, as extra-role behavior by definition falls outside of the horizon of formal performance, and is therefore also outside the scope of formal organizational rewards, the question arises as to why rational employees might behave in such a manner. OI is then situated as a solution to this problem. Finally, the concept of change-oriented citizenship behavior (CO-OCB) is defined and distinguished from the more often studied types of citizenship behavior, and the case is made as to why such a concept may be highly important for performance-oriented public organizations. Theoretical evidence is next presented linking CO-OCB and OI, and objections are preemptively addressed. Finally, the concepts of OI and CO-OCB are discussed in relation to the Korean administrative context.

2.2.1. Organizational citizenship behavior

Members of organizations can contribute to the success of their organization's mission in different ways (Katz and Kahn 1978), and scholars of organizational behavior have generally divided behaviors that are beneficial to the organization into two broad types. On one hand, in-role behaviors are defined as all of those activities for which a given employee is responsible for performing as the basis of their employment (Borman and Motowildo 1993; Williams and Anderson 1991). These responsibilities are those for which the employee is formally accountable to their employer, and whose fulfillment is the basis of job performance conventionally understood. These behaviors also provide the basis upon which organizational rewards are distributed. However, scholars have long pointed out that organizational life consists of substantially more than formal job requirements and the behavior prescribed by these, and moreover that organizational performance depends not only on in-role job performance but also on the willingness of employees to adhere to the informal norms of an organization and act in its best interests even when these actions fall outside of their formal job requirements (Katz 1964). This class of organizational behavior has been referred to variously as extra-role or discretionary behavior (Van Dyne, Cummings, and Parks 1995), prosocial behavior (Brief and Motowidlo 1986), and contextual performance (Borman and Motowidlo 1993), the theory and operationalization of which all overlap considerably (Bergeron et al. 2013). However, the theory that has received most attention in the literature is organizational citizenship behavior, or simply OCB (Organ 1988).

The formal elaboration of OCB dates from the work of Dennis Organ and colleagues (Organ 1988; Smith, Organ, and Near 1983; Organ 1997). Building on the idea that the successful functioning of an organization is dependent on more than the formal and stable in-role job

requirements of employees (Katz 1964), Organ (1988) described a 'good soldier syndrome' in which employees take the initiative to pursue actions aimed at helping the organization but which fall outside of their formally defined work duties. As such, OCB aims to capture those behaviors that exceed normal role expectations and therefore fall outside of formal performance evaluations, but nevertheless contribute to the effectiveness of the overall organization. Organ defined OCB as "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" (1988, 4). After a decade of theoretical and empirical work, however, for Organ, the "extra role" nature of OCB was deemphasized and the concept was redefined as any behavior that contributes "to the maintenance and enhancement of the social and psychological context that supports task performance" (1997, 91). Nevertheless, this definition retains the distinction between formal task performance and OCB, regardless of whether or not the employee engaged in OCB considers it to be extra-role behavior or not. Moreover and importantly, in distinction from in-role or task performance, OCB does not necessarily translate immediately into higher levels of job productivity for the individual employee (MacKenzie, Podsakoff, and Fetter 1993) and may even damage their productivity over the short term by reducing time spent on primary tasks (Smith, Organ, and Near 1983). As such, from an organizational perspective, the value of OCB is understood to lie in its contribution to aggregate performance, particularly in the longer term, and OCB may be understood to have an indirect impact on formal job performance for both the employee and the organization as a whole. Following Organ's work, OCB has been defined variously by scholars (LePine, Erez, and Johnson 2002), however, the majority of studies that focus on OCB view it as a voluntary or self-initiated process that improves various aspects of the organizational context (Farh, Zhonh, and Organ 2004).

Several dimensions of OCB have been identified both by Organ and colleagues and others. Originally, an exploratory analysis of 16 items derived from interviews aimed at understanding typical types of OCB revealed two dimensions of the construct. The first dimension of OCB, altruism, was argued to capture citizenship behavior directed towards other organizational members, such as helping workers who had been absent or were suffering from heavy workloads. The second factor, generalized compliance, captured behavior "indirectly helpful to others involved in the system" (Smith, Organ, and Near 1983, 657). Some examples from this factor included giving advance notice if unable to come to work, being punctual, and not taking unnecessary time off. Organ (1988) suggested a new itemization consisting of altruism, courtesy, sportsmanship, civic virtue, and conscientiousness, variants of which have been used in many empirical studies (for example, Podsakoff et al. 1990). At the same time, however, other scholars have sought a simpler framework to facilitate the study of OCB. Williams and Anderson (1991) proposed two simplified types of OCB, building on the original 1983 scale. Firstly, OCB directed towards the organization, OCBO, includes all of those citizenship behaviors that enhance organizational functioning without being related to the formal duties of employees. This category of citizenship behavior includes actions such as punctuality, notifying superiors of absence with advance notice, and generally maintaining the informal norms of the organization. On the other hand, OCBI, or citizenship behaviors directed towards individuals, captures those behaviors which benefit specific organizational members, such as assisting others who are under heavy workloads or helping newcomers adjust to the organization. Generating support for the two dimensional concept, Coleman and Borman (2000) analyzed a wide array of citizenship research and found results supportive of the OCBO-OCBI distinction. In relation to the more complex scale, OCBO was found to include the original dimensions of civic virtue,

conscientiousness and sportsmanship, while OCBI was representative of the altruistic and courtesy dimensions. The two categories of citizenship have also been shown to be driven by different organizational factors (Lee and Allen 2002). In particular, OCBI, which involves judgments about the context of the behavior, is primarily related to cognitive rather than affective factors. OCBI, on the other hand, is related to the social dimension of work life, and may be grounded more in affect.

2.2.2. Change-oriented OCB

Both OCBO and OCBI are broadly understood as affiliative in that they are supportive of existing organizational norms and enhance existing processes rather than improve or disrupt them. While scholars have argued that employee OCB enhances organizational performance, Choi (2007) argues that, under certain circumstances, affiliative OCB may in fact work to reinforce non-ideal processes and group behaviors, and as such, affiliative OCBO-OCBI cannot alone function as sufficient conditions for increasing levels of organizational performance over the long run. Moreover, affiliative OCB may actually harm organizational performance in the event that jobs are ill designed or work processes faulty. In line with this notion, Straw and Boettgre (1990, 536, quoted in Choi 2007) suggest that, "a worker who goes beyond the call of duty to accomplish a misconceived job may actually be more dangerous to an organization than a more mundane performer." Choi (2007) goes further and conjectures that, since the drivers of affiliative OCB and other types of extra-role behavior that aim to improve organizational processes may be quite different, and overemphasis of affiliative OCB in a given organization

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may militate against extra-role behaviors that may benefit organizational functioning by attempting to improve rather than merely support existing organizational processes.

Just as organizational performance may be conceptualized as the aggregate performance of all individual organizational members, incremental improvements to organizational performance over time may be the result of many small performance improvements across the organization adopted by frontline employees. The adoption of these micro-level performance enhancing behaviors fall outside of the bounds of formal job performance, however, and as such may be considered to be a type of OCB. Focusing on the retail context, Bettencourt (2004) coined the term "change-oriented OCB" (CO-OCB) in order to capture these types of extra-role behaviors which are carried out on behalf of the organization, but are directed at change rather than stability. Bettencourt describes change-oriented OCB as the "constructive, extra-role efforts by individual retail boundary-spanning employees to identify and implement organizationally functional changes with respect to work methods, policies, and procedures within the context of their jobs, stores, or organizations" (165). Such actions "entail voluntary and constructive efforts, by individual employees, to affect organizationally functional change with respect to how work is executed within the contexts of their jobs, work units, or organizations" (Morrison and Phelps (1999, 403). These and other definitions highlight both the extent to which CO-OCB is undertaken with the benefit of the organization in mind, as well as the potentially disruptive outcomes associated with such behavior. Based on this conceptualization, a number of further remarks can be made about the relationship between CO-OCB and extra-role behavior traditionally understood.

CO-OCB essentially involves attempts to change the manner in which a particular job is executed in order to improve its effectiveness, or proactively correcting a defective work

process. Employees that engage in change-oriented OCB are not simply attempting to cooperate with other organizational members or directly support the organization's mission through adherence to organizational norms. Rather, in the pursuit of functional change, such behaviors by their nature upset the status quo in regard to work processes and even disrupt established interpersonal relationships.

CO-OCB differs considerably in this regard from Organ's (1988, 6) "modest, some would say even trivial" formulation of citizenship behavior, whose primary examples include not taking extra breaks, attending organizational functions, and helping newcomers. In other words, while CO-OCB falls within the purview of the concept of extra-role behavior (Van Dyne and Lepine 1998), it differs fundamentally in its intention to challenge the status quo "rather than passively adapting to present circumstances" (Crant 2000, 436). This fundamental difference between CO-OCB and its affiliative relatives is illustrated by Van Dyne, Cummings, and Park's (1995) conceptualization of two continuums of extra-role behavior: affiliative-challenging and promoting-prohibitive. Conventional OCB is both affiliative in the sense of reinforcing existing practices and relationships and promoting insofar as it is undertaken with the interests of the organization in mind. Change-oriented OCB is also promoting in that it is targeted at beneficial organizational change. However, rather than being affiliative, CO-OCB essentially challenges the status quo. (A third type of extra-role behavior, distinct from both affiliative and change-oriented OCB, is both challenging and prohibitive, and captures those behaviors in which the individual takes a stand against the organization, such as whistle blowing behaviors or principled dissent.) To evaluate the distinctness of the construct at the empirical level, both Morrison and Phelps (1999) and Bettencourt (2004) used exploratory factor analysis and found that change-oriented OCB was distinct from both OCBO and OCBI. Chiaburu and Baker (2006) employed a

confirmatory factor approach and found support for significant differences between OCBO, OCBI, change-oriented OCB, as well as formal job performance.

Like most constructs used in organizational research, CO-OCB overlaps to some extent with other established concepts, which include proactive personality (Bateman and Crant 1993), personal initiative (Frese et al. 1996), and voice (Hirschman 1970), as well as Van de Ven's (1986) model of innovative behavior. At the same time, however, each of these has traits which subtly distinguish them from CO-OCB. For instance, proactive personality denotes the relatively stable disposition of employees to attempt to control situations and incite change within their work environment (Bateman and Crant 1993). As such, while this personality level construct may be related to a number of change-oriented behaviors, it nevertheless is distinct from them. Personal initiative is a similarly conceived concept, where individuals have the intention to behave in ways consistent with the organization's mission and be persistent in the face of setbacks (Frese et al. 1996). The concept of voice is closely related to CO-OCB insofar as it represents a willingness to discuss change-oriented ideas with a view to improving organizational functioning. However, the motivation behind voice-type behaviors primarily relates to enhancing the individual's well-being within the organization rather than the well-being of the organization itself. This intention distinguishes voice from CO-OCB. Innovative behavior, finally, as conceptualized by Van de Ven, is a somewhat broader, multi-stage process covering a range of behaviors, including the creation and adoption of new ideas and processes beneficial to the organization, as well as attempts to do so. While there is much overlap here, nevertheless, innovative behavior so defined captures a good deal more than change-oriented OCB.

CO-OCB is characterized as the willingness of employees to challenge existing organizational processes in order to implement organizationally beneficial change. However, as such behavior is fundamentally disruptive to the status quo of organizational life, it entails an element of risk for employees. As such, and unlike the affiliative types of OCB, such behavior may face resistance in organizations. What drives employees to engage in CO-OCB? Scholars have suggested a number of antecedents. Morrison and Phelps (1999) found that top management openness, general self-efficacy, and felt responsibility were significantly related to taking charge behavior. Bettencourt (2004) used structural equation modeling to test a number of hypotheses and found that leader-member exchange (LMX) and learning goal orientation were significant predictors of change-oriented OCB. It was also found that both transactional and transformational leadership were indirectly related to change-oriented OCB through their impact on leader-member exchange. The link between LMX and change-oriented OCB was also confirmed in a study by Vigoda-Gadot and Beeri (2012), who focused on public sector organizations in Israel. In particular, the authors found that LMX was of greater importance to the extent that employees perceived higher levels of organizational politics.

However, while a number of antecedents of CO-OCB have been explored in the organization literature, few studies have examined the psychological mechanisms that potentially underpin CO-OCB (Choi 2007). In particular, the concept of organizational identification, which has strong theoretical and empirical links with traditional types of OCB, may be an important factor in encouraging employees to engage in constructive change-oriented behavior. On the other hand, while OI has been strongly linked to extra-role behaviors in support of the organization, the fundamentally disruptive character of CO-OCB may discourage highly identified employees from engaging in it. The next section examines this relationship in more detail, and attempts to

make the case for why OI may make a particularly attractive explanatory mechanism for change-oriented behaviors.

2.2.3. Identification and citizenship behavior: Overcoming the personal utility problem

Citizenship behaviors are widely perceived to be necessary for the overall functioning of the organization and represent a distinct way in which employees may contribute to organizational performance over and above the execution of the tasks associated with their primary organizational roles. However, from a motivational point of view, OCB presents a theoretical problem. Beginning from the assumption that employees are rational actors who seek to maximize their own benefits and advantages within the organization, the organizational benefits tied to extra-role behavior have associated with them little material incentive. By definition, extra-role behavior falls outside of the realm of formal task performance and as such their enactment is not likely to be directly compensated. Moreover, such behavior has associated with it an opportunity cost that may even decrease individual performance over the short term. Extra-role behaviors require a significant investment of resources for the employee, and because extra-role behavior is by definition discretionary, there is a lack of both formal organizational as well as social pressure to engage in it (Blader and Tyler 2009). Conceptualized from the point of view of exchange with the organization, OCB is essentially an altruistic behavior on the part of the employee, and unless compelled to do so, employees have little incentive to sacrifice themselves for the good of their organizations beyond what is necessary to fulfill formally defined performance expectations.

The problem raised above rests on the assumption that the motivation to act in organizationally beneficial ways will be determined by an evaluation of the potential benefits expected to accrue to the individual based on the choice to pursue a given behavior. However, this framing of the problem itself assumes that the goals of the employee and the organization are perceived by the former to be distinct. If these goals are perceived to converge, however, the employee may act for the benefit of the organization as doing so is perceived to be in their own best interests as well. Acting in one's own interests is its own reward, and when the interests of the individual and organization are perceived to coincide, the utility calculation is altered.

Understood in this way, organizational identification theory provides a mechanism by which to understand why an employee may engage in extra-role behavior for the apparent benefit of the organization. Individuals who identify highly with their organization perceive that the fate of their organization is their own, and based on this, organizationally beneficial extra-role behavior can be understood to be the result of self-interest in the same way as behavior that is undertaken based on the expectancy of reward. For highly identified employees, the success of the organization are interpreted to be the success of the employee (Ashforth and Mael, 1989; Dukerich, Golden, and Shortell 2002), and, based on the amalgamation of organizational and self identity, identified individuals have an inherent concern with serving the higher ideals as well as practical needs of the group. In other words, a strong identification with the organization is at its basis a fusion of individual and organizational good, and as such OI theory provides a compelling answer to the utility problem of citizenship behavior. Again, this is in contrast to commitment-based citizenship behaviors, which are theorized to result from the perception of positive exchange between the individual and organization. Put simply, identity-based citizenship behaviors are not done for another, but rather for the self (Ashforth et al. 2008).

Empirical work has largely confirmed the link between OI and extra-role behavior (Riketta 2005; Van Dick et al. 2006; Dukerich, Golden, and Shortell 2002). Change-oriented OCB, the specific category of behavior of interest in this study, is a type of organizationally beneficial, extra-role behavior and, based on this, identification may also function as a mechanism driving change-oriented behavior. Like traditional OCB, CO-OCB comprises a class of behaviors that fall outside of the scope of formal organizational rewards, and as such, employees should have little extrinsically grounded motivation to engage in them. Insofar as highly identified employees perceive the fate of the organization as their own, however, they may thus act for the benefit of the organization and engage in change-oriented behaviors out of self-interest.

At the same time, there are a number of important ways in which CO-OCB differs from traditional affiliative OCB, and of particular importantance is the tendency of CO-OCB to disrupt the status quo within organizations. As such, a more careful treatment of the subject is necessary. While the arguments above provide a compelling link between OI and affiliative types of OCB, the next section deals with the theoretical difficulties in extending this link to CO-OCB.

2.2.4. OI and CO-OCB: Addressing the arguments

Theoretical and empirical links between OI and OCB are strong. However, due to the status challenging nature of change-oriented OCB, there is reason to question whether OI will have an equally strong relationship with CO-OCB, or any relationship at all. This section addresses three arguments which complicate the relationship between CO and OCB.

The first argument which must be addressed in establishing a theoretical link between CO-OCB and OI is the potentially disruptive relationship that the former may have in relation to

organizational identity. Albert and Whetten (1985) defined organizational identity as that set of stable and distinctive characteristics perceived to inhere in an organization by its employees. As Dutton et al. (1994) have argued, such a perception can form the basis of OI insofar as organizational identity is perceived to be attractive to employees, and identifying with it thereby enhances their self-esteem. However, Bouchikhi and Kimberly (2003) also suggest that high levels of commitment to existing organizational identity can be a source of organizational inertia and even resistance to change. Organizational identity sets boundaries on processes of organizational change to the extent that employees are be unwilling to undergo the work and sacrifice necessary to bring about constructive organizational transformation. Insofar as CO-OCB represents a fundamental challenge to the status quo, such behavior may also work to undermine organizational identity by destabilizing established processes and norms. In this case, high levels of identification may act as a barrier to change, as employees cling to established rituals and practices which underlie their positive evaluation of organizational identity.

This challenge to the positive link between OI and CO-OCB can be answered in two ways. First, while research has not confirmed this, it seems plausible to suggest that employees relate not to micro-level processes as the primary content of organizational identity, but rather to organizational ideas grounded in the organization's mission and macro-level performance, as well as its external prestige. In this case, resistance to change on the part of highly identified employees may relate more to large-scale changes rather than to the type of micro-level innovations that typify CO-OCB. CO-OCB is not aimed at, in other words, reconstituting organizational identity as such, but rather is undertaken in the pursuit of process level incremental change in order to improve organizational functioning. Moreover, organizational performance has been understood as a driver of OI (Carmeli, Gilat, and Waldman 2007). As

such, to the extent that CO-OCB leads to a heightened perception of organizational performance, it may actually accent evaluations of self-worth based on organizational membership. In short, as CO-OCB targets micro-level performance improvements, it should not necessarily pose a threat to deeply held organizational identities.

While change-oriented OCB does not necessarily bring about fundamental changes in organizational-level identity (at least in the short term), and thereby should not present a threat to individual identity, on the other hand, it may be the case that identification manifests itself as a form of automatic trust in other members of the organization, as well as organizational processes (Dukerich, Kramer, and McLean Parks 1998). Dukerich et al. (1998) suggested that "over identification," where this type of trust may cause a problem, can lead to lower levels of organizational learning and adaptation and an inability to question work processes or even objectively assess the ethical behavior of the organization. In terms of process improvements, such highly identified individuals may be less creative based on an unqualified positive assessment of existing work practices, as well as an unquestioning trust in their origins. Given this, it may be the case that identification has a negative relationship with change-oriented OCB, or in any case, its effect may be lower than previous research on affiliative OCB suggests.

This is a significant objection, however, it can be answered by recognizing that trust itself, insofar as CO-OCB entails a level of risk for individual employees, may also be a facilitator of change-oriented behavior. Identification is linked with trust in the organization (Rousseau et al. 1998; Campbell and Im (forthcoming)), which is instrumental in allowing employees to confidently operate outside of their prescribed boundaries and engage in innovative behavior (Tan and Tan 2000). Moreover, Dukerich et al.'s (1998) conceptualization of over identification suggests that identification of this type occurs only as an edge case. As such, if the relationship

between extremely high levels of identification and change-oriented behavior is negative, this will not necessarily be the case for moderate to strong levels of OI. In other words, if the above argument holds, it implies that the relationship between OI and CO-OCB may be non-linear. However, this exception should not necessarily be reason to doubt that a positive relationship exists in normal circumstances.

Finally, a third potential complication in the relationship between OI and CO-OCB is implied by Blader and Tyler (2009), who suggest that high levels of identification involve a high level of affinity with coworkers. Highly identified workers do not make a conceptual distinction between self and organization (and thereby, between self and other organization members), and tend to act in ways that enhance working relationships. While this suggests that a strong link may be found between OI and affiliative types of OCB, and particularly those types directed at other individuals, the function of change-oriented behavior is essentially that of disruption. In other words, while CO-OCB in the long run should enhance organizational functioning by improving work processes, nevertheless in the short term, change-oriented behaviors may result in interpersonal conflict (Morrison and Phelps 1999; Bettencourt 2004). Behaviors that cause conflict at work may potentially undermine OI by eroding the interpersonal dimension of its foundations, and as such strongly identified employees may be hesitant to engage in behavior that upsets work relationships.

This objection can be met in much the same way as the preceding two. Firstly, while identification has been shown to be related to positive interpersonal relationships with coworkers, nevertheless the classical drivers of identification are those organizational characteristics that allow the employee to make a positive evaluation of self based on their organizational membership. As such, again insofar as CO-OCB results in a perceptual increase in

organizational performance, such a gain may result in a positive evaluation of self, which moreover can be shared among organizational members. At the same time, moreover, the positive interpersonal relationships that OI fosters may themselves be antecedents to change-oriented behavior, as these relationships may promote the trust necessary to propose and implement change. In other words, highly identified employees may anticipate more readily the understanding of their coworkers if their behavior is perceived to be disruptive, and the more so to the extent that the behavior is undertaken in the name of the organization. As such, again in this case, OI and its consequences may be theorized as a driver of CO-OCB, rather than as an impediment to it.

CO-OCB contributes to the functioning of the organization, and as such highly identified employees should be motivated to pursue it based on a blurring of the boundaries of personal and organizational success. Highly identified employees may strive to improve organizational processes based on their intrinsic desire to see their organizations as successful. Moreover, the high-quality interpersonal relationships that OI engenders may lead to increased trust in the organization, which is a necessary antecedent to any type of behavior that entails risk. Due to the strong relationship between OI and traditional affiliative OCB in the literature, as well as the above remarks, the following hypothesis is proposed.

> Hypothesis: Organizational identification is positively associated with change-oriented organizational citizenship behavior.

2.2.5. Change-oriented behavior in public organizations and in the Korean context

While OCB has been linked to improved organizational functioning (LePine, Erez, and Johnson 2002; Organ 1988), as well as higher levels of productivity from the individual up to the organizational level (Podsakoff et al. 2009), to date few studies in the public administration literature have drawn a link between OCB and organizational factors unique to public organizations (the one exception being Vigoda-Gadot and Beeri 2012). Moreover, few studies focusing on the public sector have looked at factors unique to public organizations and employee initiative to bring about constructive organizational change. Vigoda-Gadot and Beeri (2011) make the case that the concept of change-oriented OCB is well suited for research on the behavior of public employees. Firstly, while the authors note that change-oriented OCB is related to motivation more generally, unlike concepts such as public service motivation (PSM) (Perry and Wise 1990), change-oriented OCB has an important innovative dimension, and thus may "serve as an extension of the concept of motivation in public administration" (576). Moreover, improving work processes can lead to increased efficiency and productivity, as well as a number of other phenomena beneficial for public organizations, and as such encouraging change-oriented OCB in public organizations may ultimately improve government relations with citizens as well as work to address negative images of government as inefficient and unresponsive (Vigoda-Gadot and Beeri 2011). Secondly, while the public administration literature has examined the effects of NPM on innovation adoption and performance among high-level public administrators (for example, Damanpour and Schneider 2009) other research has shown that front-line employees can also have a substantial impact on overall organizational performance through the proposal and introduction of innovations at lower organizational levels (Kamensky 1996; Altshuler and Zegans 1997). Setting organizational policy and priorities is generally not within

the scope of the tasks assigned to lower ranking officials, who nevertheless make up the vast majority of public sector employees. Change-oriented OCB targets the micro-level processes within organizations that lower-level civil servants engage with on a day-to-day basis. As such, engaging in these types of behaviors may be one of the primary ways which the majority of public servants can affect organizational change. Given these considerations, an examination of CO-OCB and its antecedents is particularly relevant for public administration. Moreover, this study answers the call of Morrison and Phelps (1999) to investigate whether change-oriented citizenship can be generalized to other populations.

Secondly, in addition to establishing a link between OI and CO-OCB, this study attempts to build on previous public administration research by examining the link between the adoption of performance management reforms and CO-OCB. Performance management reforms have been an important dimension of nearly all organizational reforms that have taken place over the past decades around the world. Fundamentally, these reforms have been aimed at unleashing the potential and creativity of public administrators in order to better serve their constituents, and while many studies have reported disappointing or inconsistent results as to the relationship between results-based reforms and performance, public administration scholarship has had less to say about the relationship between performance management and employee level outcomes, such as CO-OCB. The next section gives an overview of results-based management theory in public administration, and examines the relationship between performance management and change-oriented OCB.

Before moving on, however, a few words are necessary about how the administrative and cultural context of the Korean central government are relevant to the dependent variable of this study. Firstly, change-oriented OCB in general may face a number of challenges in Korean

public organizations that may not operate, or operate as strongly, in public organizations in the United States or Europe. There are also dimensions of the Korean public sector which may encourage change-oriented behavior more strongly than in the West. From the positive side, at the macro level, the Korean bureaucracy was instrumental in driving the country's rapid development (Minns 2001; Chibber 2002) and it continues to play an important role today in terms of the policymaking and agenda shaping (Park and Joo 2010). Korea developed from one of the poorest countries in the world to one of its richest in a very short period of time and without a doubt, this remarkable development would not have been possible had the national bureaucracy not been incredibly competent, but also flexible in the face of setbacks and able to embrace process and policy innovation when the need presented itself. In general, Koreans assume that the government will play a substantial role in shaping the broad outlines of Korean society, and generally civil servants, professional and politically neutral by law, are accorded a level of respect by the public not often paralleled in Western countries (Im 2003; Im, Campbell, Cha 2013).

Nevertheless, there are significant cultural aspects of Korean public organizations that may militate against change-oriented behavior on the part of employees. For one, Korea has faced several challenges in the implementation of its NPM reforms, particularly as they relate to the extension of discretion to civil servants (Im 2013; Kim and Hong 2013). Unlike in the Weberian model, where authority is vested structurally within the formal organizational position rather than in the unique individual, in Korean public organizations it is more difficult to separate the individual from their organizational role. The fusion of public and private life is generally understood to be a consequence of the country's Confucian culture, which has traditionally amalgamated the concepts of 'publicness' and 'ethics' into a single construct (Frederickson 2002;

Im et al. 2013). This difficulty in separating public from private responsibilities plays itself out in a number of ways in public organizations and Korean politics more generally (for instance, public figures face scrutiny based on their private lives far more often in Korea than in Canada or the United States), and it has distinct consequences for organizational behavior. In particular, the relationship between the need to "save face" in public, particularly through avoiding exposure to the risks inherent in extra-role, discretionary behavior, may be a problem. For example, while numerous reforms have been passed in order to extend Korean civil servants greater autonomy and discretion in their everyday tasks, it has been suggested that, paradoxically, organizations with high levels of discretion can become more rigid and burdened with procedural rules (i.e., red tape) as administrators more tenuously cling to formal processes in order to buffer themselves against potential negative feedback in case discretion is perceived to be misused (Im 2013). More generally, Hofstede (1983) found that Confucian societies such as Korea have more risk adverse cultures, which also may affect intentions to engage in risky extra-role behavior.

At the same time, however, based on this very same Confucian culture, which fuses the public individual with their private ethical character, the "problem" of discretion in the civil service is less vexing in the Korean context. Based on both the massive role that the bureaucracy played during the country's rapid development as well as the Confucian outlook that those in public life are essentially ethical individuals, generally the public has less negativity towards the greater extension of discretion to bureaucrats (Frederickson 2002; Im et al. 2013). Discretion is only problematic in a context where the goals of the principle are assumed to diverge significantly from the agent (Eisenhardt 1989). In Confucian, Korean society, this is not necessarily understood to be the case.

These remarks are relevant to the concept of change-oriented OCB. To summarize, while extending a greater level of discretion to public employees is neither theoretically nor politically problematic in the Korean context, in general, many employees may be reluctant to embrace their discretionary powers based on a fear of losing face in the event that doing so has negative consequences. On the other hand, change-oriented behavior is not identical with employee discretion, as it is not the result of managerial reform but rather employee initiative, and the possibility of engaging in change-oriented behavior is available to all employees. While the next sections turn to performance management as a managerial practice and its relation to change-oriented OCB, the topic of the potentially unique influence of the Korean context on the dependent variable will be returned to throughout the text.

2.3. Performance management and the question of employee performance

At the heart of the Reinventing Government and New Public Management reform paradigms is the call for public organizations to become more flexible and business-like in their operations (Osborne and Gaebler 1992; Hood 1991; Hood 1995). This transformation is meant to take place place through a de-emphasis of formal and rule-based process controls in favor of increasing the autonomy and empowerment of individual employees, as well as allowing them to proactively improve processes in their organizations in order to serve their constituents. To affect change in public organizations, public employees should be encouraged to take greater ownership over their workplace and actively contribute to organizational effectiveness and performance. While formal and politically driven initiatives without doubt have a place in reforming public organizations, nevertheless without a continued commitment to and support for change within

organizations by individual employees, such initiatives may have a limited impact on organizational performance. And while top-down reform efforts may serve to alter the structure of public organizations and shape public sector processes at a macro-level, organizational performance is a product of the aggregate performance of individual public servants, and as such understanding how the implementation of performance management initiatives shape employee behavior is an important task. As this study has argued, moreover, incremental but continuous performance improvement in public organizations is not simply the result of employees exerting ever greater amounts of effort. Rather, performance improvement involves working smarter, streamlining work processes, and producing public goods with increased efficiency. In other words, this study understands the accumulation of long-term performance gains in public organizations to result from the change-oriented behavior of public employees, and seeks an answer to the question of whether and in what manner performance-oriented reforms facilitate positive organizational change at the employee level.

Public sector discourse from the late 20th century has been dominated by the demand for higher performance from government organizations (Radin 2000). One result of this narrative has been a greater emphasis on performance management as well as a broad results-based orientation for public organizations (Kettl 2000). Performance management in the public sector has been used to describe a broad array of practices and generally encompasses any management process which involves utilizing performance information for performance improvement whether at the organizational or employee level (Behn, 2002; Poister, 2003; Pollitt, 2001). For example, Behn (2002) suggests that performance management applied at the organization level involves the formulation of measurable organizational goals. In this case, performance management refers to "the collection of organizational, managerial, and leadership strategies that are designed to get

people within a public agency – and their essential collaborators – to achieve specific public purposes" (20). An important dimension of organization-level performance management is the clarification and operationalization of the organization's mission, with the goal of enabling managers to track progress as well as make adjustments in strategy for performance improvements. As such, performance management at the organization level is fundamentally goal oriented. At the individual level, on the other hand, performance management refers to any "efforts to improve the performance of individual employees through personal performance plans, performance appraisals, and the usual collection of carrots and sticks" (Behn 2002, 20). Cho and Lee (2012) define performance management as a human resource management tool as "a process of managing employee performance by planning, monitoring, evaluating, and rewarding individual contributions" (240). Performance management as an HRM tool thus targets micro-level processes and behaviors in organizations, and utilizes a number of tools including personal performance plans, appraisals, and appropriately conceived individual or group level incentives (Behn 2002).

In line with existing literature, this study treats performance management as operating at two distinct levels within the organization, the organization level and the individual level. At the organization level, performance management is a continuous process that focuses on the clarification of objectives, measurement of the progress made towards them, and, based upon the information produced through this measurement, a continuous adjustment of the various dimensions of organizational strategy in order to more effectively reach objectives. At the individual level, performance management operates in much of the same fashion. However, while at the organization level performance management functions as a framework within which managers may make more efficient allocative decisions with regards to organizational resources,

performance management that the individual level provides a framework within which individual employees may choose how to best allocate their own time and effort on the job. As an HRM tool, performance management sets expectations for employees and, crucially, provides performance-differentiated incentives to employees. Ideally, the objectives relevant at the organization level should be in harmony with those of the individual level. However, this will not necessarily be the case, and may not be the case in many organizations. As such, while performance management at the organization level and performance management at the individual level are highly related, they are also distinct concepts, and this study treats them as such.

Throughout the following sections the distinctive features of performance management at the organization and individual level are discussed. At the same time, the conceptualization of performance management that this study relies upon is restricted to those dimensions of the construct which are most likely to have an impact upon employees of public organizations. Particularly at the organization level, performance management is a broad concept that involves not only the behavior of managers but also the relationship between managers and the various stakeholders of public organizations, including the public and various political principles. As such, numerous concepts are related to performance management, such as external communication, legitimacy, and trust in government (Moynihan 2008). However, as this study focuses on public employees rather than stakeholders in general, organizational processes such as the clarification and operationalization of organizational goals, their measurement, and their incentivization are highly relevant. As such, this study restricts itself to the goal-oriented dimensions of performance management rather than attempting to incorporate all dimensions of performance management. Generally, however, limiting the scope of the concept of performance

management is consistent with a number of studies focusing on performance management (Walker, Damanpour, and Devece 2011; Cho and Lee 2012).

Linking performance management to change-oriented behavior in public organizations is a challenge insofar as a central notion for performance management is to improve performance through measuring the extent to which the allocation of organizational resources, including employee effort, is efficiently applied in the pursuit of well-defined organizational goals. In other words, what performance management seeks to measure is formal task performance, whether at the organization or individual level, and as such change-oriented behavior by definition falls outside of the scope of such phenomena. At the same time, performance management can also be understood as a system of organizational control (Oliver and Anderson 1995), and from this perspective, performance management has a fundamental relationship with employee motivation. As we have also seen, however, employee identification is closely linked with employee motivation to act in ways beneficial to the organization, and one of the research questions of this study is to understand more fully not only how this notion is relevant in organizations that have embraced performance management as a system of organizational control, but also what consequences performance management has for identification itself. The next section reviews the results-based and performance management literature with a view to answering these questions.

2.3.1. Performance management in relation to employee motivation

Fundamental to the performance management paradigm is the notion that objective organizational goals are critical for achieving higher levels of organizational performance (Taylor 2013). As a managerial practice, the promulgation of clearly defined, measurable goals

and organizational priorities and their periodic review, potentially provides a framework within which decisions related to organizational strategy and resource allocation can be made in a rational way. Theoretically, by functioning as a rational framework for decision making in organizations, performance-based organizational goals allow managers to make optimal decisions as well as to justify their behavior to stakeholders, thereby enhancing accountability in addition to performance (Moynihan 2008).

Setting clearly defined performance-oriented organizational goals and measuring progress towards them is a type of managerial behavior that potentially enhances decision-making and performance at the organizational level (Baum, Locke, and Kirkpatrick 1998). However, in what ways might an awareness of objective organizational goals and performance management practices on the part of leaders affect the motivation of frontline employees? One answer to this question can be found in the goal setting literature. According to Locke and Latham (2002), the existence of goals may perform a regulatory role with regard to employee performance by providing employees with clear direction and expectations such that their efforts can be focused in meaningful ways. In other words, clear and specific goals may act as standards against which individuals can measure their own performance and contextualize their work efforts (Wright, Moynihan, and Pandey 2012; Buchanan 1975). Moreover, the articulation of a clear organizational vision can lead to intellectual stimulation among employees and inspire creative actions (Kirkpatrick and Locke 1996). This argument is also consistent with the transformational leadership and affective organizational commitment literature, which emphasizes how setting a clear vision can inspire employees to higher levels of individual performance and commitment to organizational goals (Wright, Moynihan, and Pandey 2012; Jaskyte 2011; Srithongrung 2011; Dvir, Kass and Shamir 2004).

While literature on the nature of goal setting and its effects on both individual and organizational performance have a long history, these theories have not been applied extensively in the public administration literature (Taylor 2013). Goal setting theory argues that employees who have well-defined goals will generally show higher levels of performance than those who do not, regardless of whether those goals are self defined or are provided by organizational superiors, and goal clarity has long been theoretically linked to higher levels of motivation and formal job performance (Locke and Latham 2002; 2006). Moreover, Locke (1968) suggested that goals can differ in regard to their difficulty and specificity. Importantly for this study, goal specificity guides individuals and their understanding of minimum performance levels and as such helps define a framework within which specific behaviors can be evaluated as consistent with the formal expectations of management (Locke and Latham 1990; Katz and Kahn 1978).

Defining objective organizational goals and regularly reviewing progress towards them may affect employee motivation by offering employees a framework within which to evaluate behavioral choices in a meaningful way, as well as inspiring them to come up with interesting solutions to problems. However, as outlined earlier, the implementation of performance management in public organizations is not limited to the setting of organizational goals and measuring progress towards them, but also involves the operationalization of these goals at the individual level, and properly incentivizing employees. In other words, organization level goals must be disaggregated into individual level performance goals, with both levels closely connected (Pollitt 2005). As such, in addition to organization level performance-based goals, goal setting should also occur at an individual level such that each employee's performance can be measured against these goals.

The successful implementation of performance management at the individual level rests on a number of conditions. Schermerhorn, Hunt, and Osborn (2008) suggested four core processes of effective performance management as a human resource tool. Firstly, clear and measurable performance goals should be identified. Secondly, employee progress towards those goals should be monitored, and feedback should be provided to employees about their performance. Finally, performance appraisals should inform personnel decisions, including rewards and accountability. Generally, employee appraisal systems should establish a strong relationship between rewards and performance. Moreover, reward levels should be sufficiently high so as to act as a source of motivation (Taylor and Beh 2013).

The difficulties in implementing a performance-based HRM system in the public sector are well known (Stazyk 2013; Perry, Engbers, and Jun 2009). However, the underlying microeconomic assumptions driving a greater emphasis on pay-for-performance in the public sector are relatively compelling. The reasoning behind the goal of tying performance rewards to results is based in principal-agency theory, which holds that incentives can be used to address conflicts between organizational level and individual level interests, as well as potential information asymmetries between agent and principal (Eisenhardt 1989; Weibel, Rost, and Osterloh 2010). In other words, well-structured and developed pay-for-performance and other incentive schemes are designed to align the interests of the utility driven agent with those of the principal. Economically-based organizational control theories frame the question of control as one of shaping the exchange between employees and their organizations. For instance, agency theory is based on the assumption that the principal and agent have divergent goals and that constant monitoring of the agent by the principal is necessary in order to ensure that the former acts in the interests of the organization (Eisenhardt 1989). Ouchi (1980) argued that the interests of the employee and

organization, however, are not necessarily diametrically opposed but rather that levels of goal congruence vary across cases, and under certain circumstances will be relatively congruent. In such a case, the need for managers to vigorously control employee behavior through either bureaucratic mechanisms of direct control or outcome-based control declines.

The goal of results-based control systems is to enhance employee performance by defining clear goals and incentivizing their attainment. In addition to the alignment of individual and organizational incentives, other theories are relevant to how results-based management may increase individual level performance. Similar to the argument outlined above in relation to organizational goals, performance management at the employee level defines performance goals that may motivate employees by providing an objective criteria against which employees may assess their individual contributions as well as prioritize which tasks should be pursued. Moreover, insofar as the setting of clear performance-based goals is coupled with higher levels of autonomy for the individual, employees may experience a sense of ownership over their goals, which may also increase their acceptance of goals and their motivation to reach them. Finally, expectancy theory suggests that the extent to which the relationship between performance and rewards is strengthened can directly affect an employee's motivation to perform (Vroom 1964). In other words, the more formally defined and specific organizational goals, particularly if these goals are linked to organizational rewards, the more employees are likely to calibrate their behavior against them.

Performance management at the organization and individual level should enhance employee motivation by defining clear goals and reconciling the potentially divergent goals of individual employees and their organizations through carefully designed incentive systems. By enhancing motivation, in turn, performance management in public organizations can enhance employee

performance. At the same time, however, it is less clear whether performance management in public organizations may enhance employee motivation to engage in extra-role, change-oriented behavior, as such behavior lies outside of the bounds of performance appraisals and performance pay. In order to understand this relationship, the next two sections explore the potential link between performance management and extra-role behavior. First, the relationship between performance management and traditional types of affiliative OCB is discussed. Here, several theoretical difficulties are raised in relation to establishing a link between performance management and OCB. The subsequent section discusses why these issues may not be as relevant to change-oriented OCB, and makes an argument for why a positive relationship between the two phenomena may attain.

2.3.2. Performance management and extra-role behavior: What are the arguments?

This study has described the concept of performance management as a managerial process that involves the formulation of results-based organizational goals amenable to measurement as well as the use of performance appraisal and incentives at the employee level. In this section, the relationship between both of these dimensions of performance management and OCB are discussed. Several reasons as to why a relationship between performance management at both the organization and individual level and OCB may be weak or even negative are also discussed.

The setting of results-based goals is fundamental to performance management. Despite much work on the relationship between goal setting and job performance, until recently, researchers have largely overlooked the effect of goal setting on OCB (Vigoda-Gadot and Angert 2007). However, the existence of clear and measurable organizational goals itself is fundamentally

related to the distinction between formal job performance and extra-role behavior. For individual employees, the distinction between informal or voluntary actions and formal, in-role behavior is often blurred (Morrison 1994), and, other things being equal, the boundaries of formal job requirements will be based on the individual perception of employees. In the context of goal setting theory, this suggestion implies that the extent to which organizational goals are formally defined may help to clarify for employees the boundaries between formal and informal organizational behaviors (Vigoda-Gadot and Angert 2007). This clarification may result in reduced intentions to engage in extra-role behaviors for several reasons.

Firstly, scholars argue that the clearly defined performance goals may act as a type of delimiting mechanism whereby the boundary between formal and informal behavior is explicitly defined (Morrison 1996; Wright et al. 1993). Consequently, through emphasizing the formal aspects of formal task and organizational performance, results-based management may damage employee motivation to pursue extra-role behaviors by deemphasizing their importance. Conversely, the lack of clear, results-based organizational and individual goals leaves employees with few external sources against which to judge the appropriateness of a given behavior, and, the distinction between in-role and extra-role behavior being blurred, employees may pursue citizenship behaviors simply because they consider them to be part of their job rather than out of any individual motivation to improve organizational functioning. The danger of performance-based goals lies in their potential to over define appropriate organizational behavior. Goals regulate behavior in proportion to their specificity and explicitness, and as such, greater goal specificity may damage innovative behavior, adding additional definition to the boundaries of what should be considered formal job performance (Locke 1996). By promulgating clear, prioritized, and measurable goals, managers also to some extent also restrict the perceptual range

of appropriate behavior by which employees may contribute to their organization's success. Actions not perceived to be included in this class are deemphasized.

A second trouble in linking performance management to OCB relates more directly to motivation. Goal setting theory proposes that motivation has an important foundation in self-determination (Deci and Ryan 2008), and insofar as the goals imposed by performance management techniques are perceived to be externally imposed, they may damage intrinsic motivation by undermining autonomy (Taylor and Beh 2013). A number of empirical results add weight to this theory. For example, Taylor and Beh (2013) found that the relationship between goal specificity and OCBI was negative and not statistically significant. Vigoda-Gadot and Angert (2007) produced a similar result, reporting that goal setting was positively related to altruistic OCB, but had no relationship with compliance OCB, which can be understood to be a type of organizationally directed citizenship behavior. Wright, George, Farnswarth, and McMahon (1993) focused on the relationship between goal difficulty and extra-role performance. Basing their approach on resource allocation theory, they hypothesized that more difficult goals may lead to lower levels of altruistic OCB due to the fact that individuals have limited resources for fulfilling job duties. The more difficult the goals, therefore, the less resources left over for the pursuit of altruistic behaviors not formally specified by the goals. The results of their study added weight to this suggestion.

Insofar as performance management as an HRM tool involves the specification of individual level goals for employees, these considerations related to organization-level goals may also apply at the individual level. However, a number of additional remarks are relevant about the relationship between individual level performance management and OCB. Most importantly, a number of scholars have pointed out potential that pay-for-performance schemes may harm the

performance of OCB by discouraging behavior not officially sanctioned by performance goals (George and Jones 1997; Morrison 1996; Wright et al. 1993). Through the formal specification of behaviors that are worthy of organizational reward, for example, pay for performance and goal oriented performance management more generally may discourage employees from pursuing OCB by downgrading the value of all behaviors not formally endorsed by the performance contract (Deckop, Mangel, and Cirka 1999). As such, it might be expected that individual level performance management will have a negative relationship with OCB.

Secondly, scholars have suggested that performance management at the individual level may also strengthen the "exchange ideologies" (Eisenberger et al. 1986) of government workers. Employees with strong exchange ideologies understand the relationship with their organization in economic terms and come to expect systematic quid pro quo exchanges with their organization on the basis of their behavior (Chiaburu and Baker 2006). A purely economic exchange between the individual and the organization is based on the tangible aspects of the exchange and utility maximization. Consequently, a greater formalization of compensation schemes, where the employee is better able to evaluate exactly which types of behaviors are likely to result in a pay off, may reduce extra-role behavior to the extent that such behavior receives no reward, a hypothesis for which the authors offer empirical evidence. In relation to this, tying rewards to organizational performance has been criticized from the perspective of motivation "crowding theory" (Deci, Koestner, and Ryan 1999; Houston 2009). Crowding theory asserts that performance-based incentives may harm the intrinsic motivation of employees, resulting in a net loss of motivation if the extrinsic motivation provided by external rewards cannot surpass the quantity of intrinsic motivation displaced by their introduction (Houston 2009; Moynihan 2008). While evidence has not entirely supported this hypothesis (Stazyk 2013), nevertheless the

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arguments proposing that pay for performance, a key component of performance management at the level of the individual employee, may damage the intentions of employees to engage in extra-role behavior are compelling and must be met.

2.3.2.1. Performance management as a driver of change-oriented behavior

Encouraging change-oriented behaviors in public organizations is an important goal. At the same time, however, performance management emphasizes improving performance through its emphasis on results-based goals and performance-based rewards, both of which are aimed at enhancing formal task performance. This problem was recognized as central for the control and coordination of organizations long ago by Katz (1964). As organizational performance depends in a large degree on formal task performance, it is necessary for systems of organizational control to standardize behavior and reduce variability across employees. At the same time, however, spontaneous and innovative behaviors must still be encouraged in order for organizations to meet new challenges. As Deckop, Mangel, and Cirka (1999) point out, understanding how to mitigate these two opposing demands lies at the intersection of the theory of organizational control and extra-role behavior.

The theoretical and empirical evidence suggests that the link between performance management and traditional types of affiliative behavior may be weak or even negative. Clearly defined organizational goals may undermine organizationally beneficial extra-role behavior by undermining motivation, diminishing available resources, and strengthening the exchange ideologies of employees. On the other hand, there are a number of reasons to believe that such arguments will not affect employee intentions to engage in change-oriented behaviors in the

same way. This section answers the objections and makes the case for a positive relationship between performance management and change-oriented behavior.

Firstly, while scholars have argued that operationalizing organizational goals may damage intentions to engage in extra-role behaviors, a number of scholars have also suggested the opposite, namely, that organizational vision and goal setting may be positively related to employee extra-role performance, particularly with regard to change-oriented behaviors. Goal setting research has consistently argued that clearly defined goals motivate employees to draw not only on their pre-existing skills in service of attaining them, but also, in cases where such skills are not entirely matched to the task, to draw from a wider repertoire of skills and apply them in innovative ways in order to make progress (Locke and Latham 2002; Wook and Locke 1990). This insight is consistent across the creativity literature, where the design of clear and challenging goals by leaders has been shown to be related to employee initiatives to develop innovative ways of approaching their work (Amabile 1988; Oldham and Cummings 1996). In this sense, the promulgation of results-based goals opens a space for employees to innovate in service of their attainment.

Secondly, the setting and public review of objective and measurable organizational goals is a method by which organizational leaders communicate with employees. Based on this, studies that suggest that the quality of exchange between leaders and members can drive extra-role behavior are also relevant. Specifically related to change-oriented OCB, Morrison and Phelps (1999) found that the openness of top management was a significant predictor of taking charge behavior. Choi (2007) produced a similar result, demonstrating that strong vision as a component of organizational climate was both directly related to CO-OCB, as well as indirectly related through its effect on psychological empowerment and felt responsibility for change. Goal

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specificity may moreover impact employee intentions to engage in change-oriented behavior by focusing attention on salient tasks, providing a context for feedback, as well as motivating strategies to reach organizational goals (Taylor and Beh 2013).

Moreover, while externally imposed performance standards may sharpen the distinction between behaviors related to formal task performance and other types of extra-role behavior, this objection may not hold when applied to change-oriented behaviors specifically. This is the case as change-oriented behavior, much like formal task-oriented behavior, can be evaluated against organizational and individual goals such that employees may independently assess the appropriateness of such behavior in relation to sanctioned objectives. And while change-oriented behavior itself falls outside of the scope of performance measurement, unlike traditional OCB, the outcomes of change-oriented behavior are subject to performance measurement. In this sense, while performance management may militate against conventional OCB, it may also empower employees specifically to engage in change-oriented behaviors. Put differently, behavior that essentially challenges organizational processes and attempts to improve them may be contextualized by performance management systems and benefit from the same processes of individual evaluation that scholars have identified as drivers of the relationship between results-based goals and formal job performance. Based on these considerations, it is reasonable to believe that performance management is positively related to change-oriented OCB.

Importantly, engaging in extra-role behavior entails a level of risk for individual employees, and as such the intention to challenge work processes is related to each individual employee's understanding of the different consequences of such behavior as well as their beliefs about organizational support for engaging in it (Mumford and Gustafson 1988). Change-oriented behavior may be viewed moreover as particularly risky for employees, as this type of behavior

can disrupt existing organizational norms, processes, and relationships, and may even disrupt organizational functioning in the short term (Morrison and Phelps 1999; Van Dyne et al. 1995). At the same time, however, this risk may be compounded in organizations in which performance standards do not exist as employees have no framework against which to justify their extra-role behavior in the case that they are challenged. Under a performance management system, however, the same challenging behaviors may be justified by employees against the larger context of measurable organizational goals. In other words, clear, performance-based organizational goals and managerial commitment to them can serve as a source of authority for employees to take proactive, extra-role actions in order to improve organizational processes.

Both organization and individual level performance management may drive change-oriented OCB by allowing employees to contextualize and independently assess extra-role behavior. Secondly, performance management can provide employees with an organizationally sanctioned and hierarchy independent platform upon which to defend themselves from criticism related to the consequences of potentially disruptive behavior. At the same time, however, organization and individual level performance management may have distinct characteristics which affect employee change-oriented behaviors in different ways. In particular, performance-based HRM systems, which utilize extrinsic incentives in order to align the goals of the individual with those of the organization, may provide a second and independent motivation for engaging in change related behaviors to the extent that these behaviors will be beneficial directly to the employee in the pursuit of maximizing their organizational rewards through higher performance. Extrinsic rewards have been theorized to increase employee's exchange orientation towards the organization, and in this process, demotivate them from performing altruistic acts both towards the organization as well as to individual employees as these behaviors are not tied to the

expectation of extrinsic rewards (Deckop et al. 1999). However, a central component of change-oriented OCB is that of improving organizational processes and efficiency at the local level. As organizational performance is dependent on the aggregate performance of all organizational employees, all local improvements in efficiency should contribute to the overall functioning and performance of the organization as such. However, from the perspective of the individual employee, such local changes will also have direct and potentially immediate benefits in allowing them to more efficiently reach their own goals and thereby secure greater extrinsic payoffs. In other words, performance management at the individual level and particularly performance-based rewards may link the improvement of local processes with a higher probability of attaining rewards. As such, change-oriented citizenship may be pursued by individual employees not based on any intrinsic motivation, but rather by the motivation to maximize individual utility.

Performance management techniques at both the organizational and individual level are a good fit with change-oriented OCB due to the distinctiveness of this type of extra-role behavior. Performance management can help employees better understand their roles within the organization and thereby better contextualize their own work, provide them with a framework which lessens the risk of change-oriented behaviors, as well as provide employees with direct incentives for improving work processes. While the theoretical and empirical evidence against a link between performance management and extra-role behavior is compelling, nevertheless the theoretical link between performance management and change-oriented OCB is largely exempt from these considerations. Given this, the following hypotheses are proposed.

Hypothesis: Performance management at the organization level is positively associated with change-oriented organizational citizenship behavior.

Hypothesis: Performance management at the employee level is positively associated with change-oriented organizational citizenship behavior.

2.3.3. The question of performance management and identification

Based on a review of the literature, this study has proposed that both organizational identification and performance management will be positively related to change-oriented OCB. Employees who identify highly with their organization view the fate of their organization as their own, and thereby are motivated to act in ways which further the ends of the organization. Performance management, on the other hand, creates external incentives to pursue change-oriented behavior by bringing organizational goals into sharper relief and incentivizing behaviors that contribute to them. As both OI and performance management have been hypothesized to be antecedents of change-oriented behavior, the question remains as to the relationship between these two different antecedents. Clarifying this relationship is the objective of this section.

The SIT-based theory of identification predicts that individuals will be likely to identity with organizations that are perceived to have an attractive organizational identity (Dutton et al. 1994). However, this theory assumes that organizational identity itself can be discerned by employees. Performance management promulgates measurable goals at both the organizational and individual level, communicates these goals to employees, and measures individual and organizational progress towards them. Intuitively, these processes may function as a mechanism providing greater definition to organizational identity. This idea is in line with the theory of organizational identity proposed by Albert and Whetten (1985), who argued that leaders play an important role in determining organizational identity insofar as they articulate the distinctive,

central, and enduring characteristics of the organization as a whole. As such, performance management techniques, insofar as they are fundamentally related to goal setting, measurement, and prioritization, may function to bring an image of the organization into sharper relief for individual employees, and as such provide a foundation upon which organizational members can constitute their own organizational identity. The same process may also function at an individual level, and particularly insofar as individual goals are tied to organizational goals, as individual goals can also inform a sense of organizational mission. Fundamentally, human beings are seekers of meaning (Weick 1995), and while performance management may not necessarily say anything about the desirability of organizational identity itself, performance management techniques nevertheless make such an evaluation possible. Performance management techniques thus help to furnish a crucial precondition for organizational identification. In high performance organizations, moreover, performance management techniques, which communicate the successes of the organization to employees in an objective way, may also drive the evaluative component of identification.

A key driver of identification is the feeling of group cohesiveness with others in the same organization, such that all individuals of the collective share the same fate. At the organizational level, as performance management shares information related to the attainment of organizational goals, it may foster a sense of a sense of oneness with other organizational members. Ever since Sherif's social experiments at Robber's Cave (Sherif 1961; Sherif et al. 1961), a sense contributing to shared goals has been recognized as an important driver of identification. At the individual level, moreover, performance management techniques may enable employees to better understand how their own work uniquely contributes to organizational success, thereby further enhancing the feeling of shared fate among employees. In other words, performance

management may better allow employees to share in the successes of the organization, and thereby form a foundation upon which identification can grow.

An important component of performance management as an HRM tool is the harmonization of individual with organizational goals. Identification is fundamentally a cognitive process whereby the goals of the collective come to be understood as identical to those of the individual. Given this, performance management at the individual level is intuitively linked to identification. Moreover, the extent to which employees understand how their work contributes to overall organizational success, they may better appreciate how their own role is both unique but also prototypical. Member prototypicality has been shown to be an important driver of identification (Fielding and Hogg 1997), and as such, the extent to which employees understand that their work is related to a larger organizational mission, they may come to interpret their position within the organization as more of a team member rather than as a specialized and disconnected employee. At the same time, by defining how the individual contributes to organizational success, individuals may come to evaluate their contribution as unique and valuable, thereby strengthening their sense of group cohesiveness, and in turn identification.

One final unexplored link between performance management and identification relates particularly merit-based pay. Classical organization theory assumes that the goals of the organization and the individual diverge to some extent, and as such a system of organizational control is necessary in order to bring employee behavior in line with organizational goals (Eisenhardt 1989). Direct, process-based control, where a supervisor or other organizational superior continually monitors employee behavior and uses their authority to force the employee to behave in ways consistent with organizational goals can be contrasted with results-based systems like performance management, which lessen the emphasis on process controls and

instead focus on the results that an employee achieves (Oliver and Anderson 1995). In a results-based system, incentives take the place of direct, process-based controls as the primary means used to motivate employees to act in line with organizational goals. In other words, these extrinsic incentives are designed to appeal to the rational dimension of employee motivation with the objective of aligning individual and organizational goals. Merit-based pay has thus an intuitive link with identification insofar as both involve the harmonization of individual and organization goals. In other words, if merit-based rewards drive a convergence of individual and organizational goals, they may provide a rational basis upon which employees may identify.

Performance management at both the organization and individual level helps to clarify organizational identity and potentially increases the desirability of identification by helping employees understand how their organization makes concrete contributions to socially desirable goals. This may be particularly important for employees in public organizations. Moreover, employees with well defined goals may experience a greater sense that their own work contributes to organizational success, thereby encouraging identification based on positive evaluations of their own organizational values. These drivers of identification are related to the classical theory of SIT, and as such are well grounded in the existing literature. Moreover, insofar as extrinsic incentives promote the melding of individual and organizational goals through an appeal to the rational, utility-seeking dimension of motivation, they may also provide an incentive to identify.

This section set out to clarify the relationship between performance management and organizational identification, and the theory that has emerged from this exercise implies the following hypotheses.

Hypothesis: Performance management at the organization level is positively associated with organizational identification.

Hypothesis: Performance management at the employee level is positively associated with organizational identification.

2.3.4. Results-based reform and the Korean public sector[1]

While the principles that underlie the drive for performance management are assumed to be universal, nevertheless scholars have shown that the cultural environment of a given public sector as well as its historical features can affect the success with which performance management reforms are introduced (Ohemeng 2009; Pollitt 2005; Ho and Im 2013). Moreover, with regard to South Korea, the implementation of reforms based on the NPM ideology is particularly notable, as it was long assumed that the relatively unique developmental model of Korea and other East Asian countries had produced an administrative environment incompatible with the underlying principles of NPM style reform (Park and Joo 2010). Nevertheless, beginning in the late 1990s, substantial reforms began to be implemented widely across the Korean public sector, including reforms related broadly and specifically to the performance of public organizations. This section discusses these reforms and their effect on the Korean administrative context, serving to both contextualize and justify the choice of Korean central government organizations as the basis of this study.

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[1] The author wishes to express thanks to Dr. Hyunkuk Lee for suggesting several Korean language sources used in this section.

2.3.4.1. Context and goals of Korea's results-based reforms

The Asian Financial Crisis (AFC) of 1997 provided an opportunity to introduce long-resisted changes to the public bureaucracy and beyond. While a highly centralized, internally cohesive, and rational bureaucracy had been crucial in the development of the country, particularly in the 1960s and 1970s (Chibber 2002), nevertheless criticisms of the inefficiencies of the Korean state amplified following the AFC. For example, the bureaucracy was criticized for its highly collectivist tendencies, as well as excessive levels of formalism, which resulted in a civil service unduly focused on bureaucratic procedures and administrative criteria rather than the substance and results of administrative activities. Career level civil servants were expected to accept unquestioningly the authority of those at higher levels of the hierarchical strata, thereby allegedly leading to abuses of power and low external accountability (Park and Joo 2010). Moreover, while entry into the civil service at the lower levels was largely governed through open competitive examinations, nevertheless, once successful candidates were distributed to public agencies, organizational life was largely governed by hierarchical and formal rules as well as a strong, norm-based organizational culture that could discourage individual initiative. Park and Joo (2010) characterize organizational life in the Korean public bureaucracy at this time as being crippled by a "chronic ritualism" (pp. 194), which suggests that a high level ceremonialism and a decoupling of authority and responsibility in some cases adversely affected motivation and performance. Again, while the importance of the bureaucracy for Korea's economic development cannot be underestimated, over time a number of warning signs began to appear. For example, the government was criticized for high levels of inefficiency and rigidity, as well as a complete lack of transparency. On the eve of the reforms in 1998, Korea ranked below the Philippines, Mexico, and Brazil in terms of overall country-level competitiveness rankings according to the

International Institute for Management Development's (IMD) influential index, while government administration in particular ranked a dismal 42 out of 48 countries (Lee 2004).

Prosperity tends to blur problematic features of power systems (Gourevitch 1986), and the AFC focused the attention of citizens on the shortcomings of the public service. Following the financial crisis, the Dae-jung Kim administration pursued a number of NPM style reforms with an emphasis on competition and results-based management. These reforms had numerous objectives, including strengthening the competitiveness of the public sector, overcoming the difficulties related to a much tighter budget caused by the crisis, increasing civilian control over the bureaucracy, as well as addressing issues of public trust in government (Park and Joo 2010). Like most NPM style reforms, the initiatives undertaken by the Kim administration were designed to make the national administration more business-like (Im 2003), and the reforms were based on a number of key principles including a greater emphasis on market, performance, and customer orientation, as well as reducing administrative overlap and redundancy across the bureaucracy (Kim 2000). The reforms were led by the government's central personnel agency, the newly empowered Civil Service Commission, and the overall character of the reforms can be attributed to the vision of this organization (Park and Joo 2010). A number of important reforms and initiatives are discussed here.

2.3.4.2. Creation of the Senior Civil Service

For most of its modern history, Korea lacked a systematic strategy for governing senior level civil servants, and in 2006 the Senior Civil Service (SES) system was introduced in order to fill this gap. Prior to the introduction of the SES system, which is similar to the Senior Executive

Service in the United States, senior-level civil servants were largely secretary generals or director generals of the central government ministries and the positions were filled based mostly on seniority and hierarchical rank, and thus positions were filled from a small pool of several hundred candidates. Generally speaking, a merit system did not operate effectively at this level, and promotion and pay increases were based largely on seniority rather than performance (Civil Service Commission 2005, in Park and Joo 2010). The system was criticized as being incapable of supplying the highest quality of talent to the most important positions in government (Park and Joo 2010).

With the introduction of the SES, grades one through three, the highest grades, were abolished (Moon and Hwang 2013), and half of each ministry's senior civil servant positions were to be filled based on a competitive process, with the remaining 50% were filled based on ministerial discretion. Of the positions opened to competition, 20% were opened to the general public, while the remaining 30% were opened to government officials across all ministries. For open positions, anyone meeting the requisite qualifications set by the ministry were eligible to apply, with the final selection made by a board, and advertising openings was made mandatory (Kim 2000). Compensation for senior executives was changed to a performance model based on a 3-year contract, and those with poor performance evaluations or other serious problems could be dismissed (Park and Joo 2010).

In general, the introduction of the SES was intended to increase the competitiveness of the administration by attracting highly qualified individuals regardless of their status as civil servants or their organizational tenure. Initially, however, the system met with limited success. At first, few nongovernment employees such as experts from private corporations applied to high level positions, and only about 15% of the open positions were filled by non-civil servants (Namkoong

2003, 57, in Park and Joo 2010). However, over time this ratio has increased to roughly half (Civil Service Commission 2007). Other problems, such as lax performance evaluations and charges of unfair competition from those outside of government or from other departments, have also been made (Park and Joo 2010). Relatively low levels of salary compared to equivalent private sector positions have also potentially deterred high-quality candidates from applying. However, it should be noted that the system is still evolving, and the contract period has recently been extended to five years from the initial three and open positions have slowly begun to be opened for lower-level middle managers (Park and Joo 2010). Moreover, while the percentage of open positions has changed, the total number of open positions has continued to grow, rising from 129 in 2000 to 286 by 2012 (Ministry of Public Administration and Security, 2012, cited in Park and Cho 2013).

Like most substantial reforms, the effects of the introduction of the SCS system will take time to properly evaluate, particularly with regard to whether its has indeed succeeded in increasing the performance of performance of public organizations through attracting higher quality talent. Nevertheless, the introduction of stronger objective criteria for promotion to the highest levels of the civil service as well as the de-emphasis of seniority has made the categories of competence and performance more salient for government bureaucrats in general (Park 2008), and the Senior Executive System in Korea thus represents an important component of recent Korea's results-based reforms.

2.3.4.3. Performance management reforms

Performance management systems have been introduced extensively throughout the Korean bureaucracy. Like the introduction of the SES, these systems began to be implemented following the Asian Financial Crisis, and the programs have continued to be refined throughout the 2000s (Kim and Hong 2013). In particular, during the Roh Moo-hyun administration (2003–2008), a number of US based programs were benchmarked such as the Government Performance and Results Act (GPRA), and other tools, such as balance scorecard (BSC), the Performance Assessment Rating Tool (PART), management by objectives (MBO) and other performance type agreements were explored (Kim and Hong 2013).

Organization-based performance management, focuses on managing the progress of an organization towards explicit goals, and is applied at three levels: the organization level, the department level, and the individual level (Beardwell and Holden 2001). The embrace of performance management in the Korean Central government began at the individual level through the introduction of formal performance assessments into the public personnel management system. Following this, it was gradually rolled out organization and department levels (Kim and Hong 2013). Since the introduction, Korean government employees are evaluated on a yearly basis based on the Government Decree on Performance Evaluation of Civil Servants.

From 2001, organization level results management in South Korea has been based on the Basic Law on Government Performance Evaluation and takes the form of an organizational performance evaluation and assessment of management focused on the quality of public policy produced as well as citizen satisfaction (Park 2006 in Kim and Hong 2013). Organizational

evaluation is a function of the Prime Minister's office, which has a high level of involvement in the implementation and evaluation of performance schemes generally. Organization level performance is evaluated both through a self-evaluation by high-ranking civil servants and a specific evaluation focusing on reform, citizen satisfaction, as well as the particular policies of each organization. In December of each year, the Prime Minister's office publicly announces the results of the performance evaluation (Kim and Hong 2013), allowing citizens and other interested parties to evaluate the performance of their government. The system extends not only to the various ministries, but also to more than 200 quasi-governmental organizations and state-owned enterprises (SOEs).

Since the early 2000s, in general, all government employees are subject to an annual assessment of their performance, which can be categorized into two types depending on grade and position. Supervisors and managers above grade four are subject to yearly performance assessment based on performance agreements signed at earlier dates. Performance contracts are signed across hierarchical levels from vice ministers down to supervisors, and the annual cycle of performance agreement-evaluation goes through four stages: setting of a strategic plan, setting goals and objectives along with indicators, monitoring of performance, and final evaluations (Lee and Moon 2010). During the process of goal setting, individual objectives are linked to organization level objectives, and the founding of performance accountability in the performance contract is intended to reduce intervention from higher levels, thereby giving managers more discretion. At the same time, Hong and Moon (2010) point out that, like many aspects of performance management in Korea, an ongoing challenge for the performance agreement framework is paternalism between contractors, especially those who have previous experience working together. This can lead to lenient evaluations or non-ambitious performance goals that are easy to

achieve. Efforts to address these challenges have come in the form of more formal guidelines for evaluation and a stronger initial review of goals (Hong and Moon 2010).

Mid and lower-level civil servants are also subject to performance evaluation by their superiors. These employees are evaluated based on a checklist or scale approach focusing on general job performance as well as various other criteria such as cooperation with coworkers, innovativeness, and customer orientation (Kim and Hong 2013). In a number of agencies, the results of 360-degree evaluations (discussed below) are also taken into account. Service record appraisals for officials below grade 5 are conducted by supervisors based on detailed evaluations of performance, skills, as well as length of service, and such appraisals determine the level of bonus granted to officials below grade 5, which are paid out in yearly lump sums (Park and Joo 2010).

Two common performance management methodologies were introduced widely throughout the bureaucracy in the form of management by objectives (MBO) and 360-degree feedback systems. MBO was introduced in 1999 and was in widespread use for high level civil servants (grades 5 and above), until is was replaced in 2005 with a more general system based on the balance scorecard (BSC) methodology. The initial MBO system was criticized for its inability to accurately assess individual contributions to group-based outputs (Im 2003), ineffective goal setting and measurement techniques (Dollery and Lee 2004), as well as the gaming of ratings based on seniority and reputation. The current BSC system seeks to remedy these deficiencies by placing a greater emphasis on mission and strategic goals, as well as the use of more objective performance criteria (for instance, finance and customer-based indicators). And, while BSC-style systems are usually employed to measure organization-level performance, many government

organizations in Korea use it at the individual level due to its ability to measure individual performance by its contribution to organizational performance (Lee and Moon 2010).

In order to address the problems of leniency or bias as well as reduce subjectivism in the performance appraisal system, in the late 1990s the Civil Service Commission introduced the 360° feedback appraisal system which gathers observations about employees from "many layers within an organization" (Park and Joo 2010, 199). This system was designed as a supplement to the formal, supervisor/manager-based appraisal system and signal to employees at all levels the importance of individual performance (Kim 2001). Particularly problematic for the seniority-oriented Korean civil service was the tendency of supervisors to be more lenient towards those with longer tenure, and self, peer, and, in some cases, subordinate evaluation was introduced in order to attempt to provide a more objective and accurate picture of individual job performance (Kim 2001). Civil servants were generally positive about the introduction of the system, and some have asserted that it has improved internal communications as well as relationships with other members of the organization. On the other hand, like all appraisal systems, appraisals are likely at times distorted by personal linkages, a problem particularly relevant to the collectivist culture of the South Korean workplace, which favors strong personal ties (Park and Joo 2010). In evidence of this, based on an employee survey, about 70% of civil servants agreed that 360-degree evaluations may be influenced by nonperformance factors including seniority and tenure (Cho et al. 2003, 46, in Park and Joo 2010). In addition, while the 360-degree system was intended for general use across the bureaucracy, many managers resisted implementing additional forms of evaluation, likely due to their potential to undermine authority (Kim 2001). As such, by 2012, only 16 of 42 central government departments utilize 360-degree evaluations as important factors in promotion and pay decisions (Park 2012).

2.3.4.4. Merit pay system

In 1998, the Ministry of Government and Home Affairs (MOGAHA) and the Civil Service Commission implemented a performance-based pay system for all government employees that supplemented the fixed-pay system determined by seniority and rank. Under the new system, pay is differentiated within each pay grade depending on performance. The system also sought to systematically raise the wages of public sector workers to levels equivalent to private sector levels by 2004. In 1998, public servants were paid roughly 87% of those in the private sector (Kim 2000). This system was intended to foster greater levels of competition within public organizations (Park and Joo 2010). An annual performance salary applicable to high level civil servants impacts the total amount of salary every other year, while incentive pay for lower-level civil servants varies across four performance categories and affects yearly pay. While incentives do vary across ministries, generally, the top 20% of high-performing employees receive up to 1.8 times their pay as a performance incentive. Those in the lowest 10% receive zero performance bonus, and employees that fall into the middle category receive somewhere in between (Civil Service Commission 2007, in Lee and Moon 2012). In addition to pay, however, the significance of the performance evaluation has gradually become the most important criteria for promotion within public organizations (Kim and Hong 2013). As promotion and status are arguably the most important status-based criteria within public organizations (Im, Campbell, and Cha 2013), such a system serves to emphasize the importance of performance for employees.

From 2006, the performance evaluation system within the government was divided into a "performance contract evaluation" for public officials above grade 4 (i.e., senior civil service employees) and a "service record evaluation" for civil servants below grade 5. An "annual merit incremental program" applies to officials above grade 4 while the "performance bonus program"

applies to those below grade 5. At the highest levels, ministers and vice ministers discuss performance objectives and goals with high-level civil servants, who in turn sign contracts and are assessed based on the level of fulfillment of those objectives which are formally stated in the contracts (a process described above). Interviews and related data are recorded throughout the year, and the results of the performance evaluation are reflected in promotion and performance-based pay. Currently, employees are stack-ranked and performance-based pay schedules fall into 4 categories: S, excellent; A, outstanding; B, normal; and C, unsatisfactory. The S category corresponds to the top 20% of performers, while the A, B, and C categories to the next 30%, 40%, and 10%, respectively. Bonuses for the 4 categories are 7%, 5%, 3%, and 0%, respectively (Civil Service Commission 2007, in Park and Joo 2010). While these pay differentials have been criticized as too small to significantly affect motivation (OECD 2005), nevertheless the prestige attached to each category may still have an effect.

Prior to the introduction of the pay for performance system in Korea, critics argued that there was little incentive for public servants to increase their productivity (Kim 2000). At the same time, however, the reforms themselves have faced a number of criticisms, including inaccurately measuring levels of performance as well as unfairness (Choi 2007). Moreover, while pay for performance is intended to boost individual level motivation, nevertheless, the incentives provided have been charged with harming the positive effects of Korea's collective organizational culture as well (Im 2003). Additionally, interviews with civil servants have revealed that those who receive the highest performance grades and thereby the largest bonuses have often chosen to divide their rewards equally among their teammates in secret (Park and Joo 2010), particularly in the early stages of the introduction of performance pay. Kong, Cho, and Yoon (2009) found that among central government officials, more highly ranked, longer tenured,

and higher performing employees are the most likely to point to problems such as gaming the system and other issues in the performance management strategy of their organizations more generally. This suggests that, although formal performance evaluation has been implemented across the bureaucracy, still many organizations have adapted it to the traditional style of promotion and pay based on organizational tenure and rank. At the same time, performance-based pay is a fact of life for civil servants in Korea.

2.3.4.5. Summary

This section gave a brief sketch of the performance-oriented reforms introduced by the Korean government since 1998. The principles upon which these reforms were based were derived largely from the New Public Management movement, and as such have their origins in a Western administrative culture. However, scholars have suggested that the effectiveness of NPM-based reforms may be constrained by the unique culture of Korean public organizations and public administration more generally (Park and Joo 2010), and a collective culture largely distinguishes countries in East Asia from the individualist model of the West. Taylor and Beh (2013) have pointed out that national cultures may influence the success of pay for performance schemes, and that particularly in cultures that emphasize collectivity, performance pay that strongly emphasizes individual performance may be detrimental to organizational morale and employee motivation (Chiang and Birtch 2010). From a cultural perspective, recently Im, Campbell, and Cha (2013) detailed the way in which organizational culture, and particularly the collectively oriented civil service of South Korea, has undermined attempts to implement individualized pay-for-performance schemes.

Despite the limitations of the performance management and pay-for-performance systems in South Korea, nevertheless they are factors of organizational life that will not be rolled back in the near future. In other words, performance-based reforms in South Korea continue to undergoe a process of institutionalization, and the fundamental assumptions are no longer actively debated, but rather taken for granted. At the same time, however, for both the Lee Myung-bak government and the current Park Geun-hye government, performance-based reforms for public organizations have become less of a priority. As such, the timing of this study is very much favorable to testing hypotheses related to the effects of performance management systems on employee attitudes and behavior.

2.4. Public organizations and their environments

Organizational identification and extra-role behavior have a rich literature associated with them, and such in order to test the empirical hypotheses outlined in the previous sections, this study will also control for a number of important influences which may have an impact upon the mediator and dependent variable. The constructs outlined in this section generally fall into two categories. The first category relates to organization level characteristics which, like performance management, should vary across government organizations. The second category of influences relates to the perception of various forces in the organizational environment. By controlling for the various influences outlined in this section, the results of the analysis may be placed on a stronger footing.

2.4.1. Organizational influences

Performance management at the organization and individual level should be understood as one among many organizational characteristics or managerial strategies that may impact OI and change-oriented OCB. Among other important influences, the first important variable is that of the centralization of authority. Centralization of authority (Aiken and Hage 1966) seeks to measure the extent to which organizational decision-making is concentrated within the higher levels of the organization, which directly impacts how much discretion employees have in carrying out their work. In other words, the more centralized an organization, the more employee autonomy is restricted. Centralization can be conceived as a monitoring behavior in contrast with results-oriented management in the sense that it focuses on process rather than output control (Ouchi 1980; March and Simon 1958). A number of public administration scholars argue that highly centralized organizational decision-making systems are related to lower levels of goal clarity and higher levels of role ambiguity in employees (for example, Pandey and Wright (2006)). A reliance on hierarchical structures within groups constrains interaction both vertically and horizontally (Festinger 1954), and such, higher degrees of centralization may discourage acts of voice and extra-role behavior by limiting communication. Moreover, Chiaburu and Baker (2006) showed that, in line with theory, output control was positively related to taking charge behavior, while process control, which is similar to centralization, was negatively related. However, the authors also suggested that future research should examine more carefully the mechanisms through which this relationship operates. Centralization may also be related to organizational identification insofar as employees working in highly centralized organizational structures have less exposure to organizational goals and moreover less opportunity to exercise

their own discretion in pursuit of those goals. Given these considerations, this study will control for the degree of centralization of authority perceived by employees.

A second organization level influence to be accounted for is that of perceived levels of red tape. Red tape is defined as the "rules, regulations, [and] procedures that remain in force and entail a compliance burden for the organization but have no efficacy for the rules' functional object" (Bozeman 1993, 283). The concept of red tape has become particularly emphasized in public administration literature since the Report of the National Performance Review, From Red Tape to Results, during the Gore-Clinton administration (Gore 1993; Rainey, Pandey, and Bozeman 1995). Theoretically and empirically, red tape has been linked to a number of constructs of interest in the study including innovativeness (Moon and Bretschneiber 2002) and organizational performance (Brewer and Walker 2010). Red tape has also been shown to be an important factor in a number of employee level constructs, including alienation (DeHart-Davis and Pandey 2005), motivation (Baldwin 1990), and commitment (Stazky, Pandey, and Wright 2011), which are related to organizational identification. As previous literature has shown that the perception of red tape is an important construct for public employees and may potentially influence both the mediating and dependent variables of the study, the final model used to test the hypotheses proposed in the previous section will include a control for red tape.

Finally, scholars argue that the innovation climate of an organization provides a cognitive structure where in ideas related to potential work process change can be incubated. Organizational climate is understood as the relatively stable set of meanings that employees perceive to inhere in their work environment, which in turn drive employee behavior (Schnieder and Reichers 1983). Climate offers a framework in which the range of appropriate behavior can be situated, and innovation climate drives employee innovation through its impact on employee

beliefs that the organization supports new ideas and changes, and moreover can make the necessary resources available to implement them (Scott and Bruce 1994). A strong climate for innovation also promotes the acceptance of change-oriented behavior among employees (Mumford and Gustafson 1988). Moreover, as extra-role behavior entails a level of risk, innovative climate, insofar as it represents the sanctioning of extra-role behavior, can mitigate this risk. Choi (2007) linked change-oriented OCB directly to the innovation climate of an organization based on this reasoning, and provided empirical evidence of this relationship. Secondly, López-Domínguez et al. (2013) show how innovation climate can increase change-oriented OCB by increasing an employee's felt responsibility for change as well as their role breadth self-efficacy. Again, as perceived innovation climate may be related to both the mediator and dependent variables used in this study, this factor will be controlled for.

2.4.2. Environmental influences

Public administration scholars have stressed the importance of the organizational environment in predicting organizational behavior and performance. With the implementation of organizational performance management in South Korea, once a year, central government organizations are ranked in terms of performance and the results are open to the public for scrutiny. This practice falls in line with the general orientation of the Korean government to increase the competitiveness of government organizations. In general, government organizations do not directly compete with their private sector counterparts, and moreover budgets tend to be largely stable. On the other hand, a central tenant of the New Public Management reform theory is that introducing more market mechanisms into government can increase performance (Hood 1991).

Publicizing the results of performance evaluations in Korea is one way in which the government has sought to raise the importance of performance for civil servants. As such, perceived competition between government ministries may function as a motivation to improve performance by the implementation of enhanced work processes independently of the implementation of performance management techniques within government organizations. At the same time, moreover, perceived competition between groups is a fundamental concept for organizational identification. Basing their reasoning on social identity theory, Mael and Ashforth (1992) first suggested that perceived inter-organizational competition would be a strong predictor of organizational identification as competition both raises the salience of identity for individual employees as well as brings that identity under threat. Little work has been done, however, on inter-organizational competition in the public sector, but based on the strong link between intergroup competition and identification in both the social psychology and private sector literature, the model developed in this study controls for perceived competition between government organizations.

Government organizations operate within complex environments and are accountable to multiple stakeholder groups. These groups can have both direct and indirect effects on organizational performance, behavior and employee dispositions (Stazyk and Goerdel 2011; Pandey and Wright 2006). For example, higher levels of political control of government organizations can lead to high levels of goal and role ambiguity for government employees, which may result in lower levels of commitment (Stazyk, Pandey, and Wright 2011). At the same time, however, particularly in the Korean context, it may be the case that higher levels of political involvement in the everyday affairs of the organization may signal to employees higher levels of organizational importance, and thereby enhance identification. In South Korea, moreover, the

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Prime Minister's office is intimately involved in the performance process, and as such the level of involvement of this office may also provide some motivation to improve performance over and above that provided by performance management techniques. This study thus controls for the perceived organizational influence of the president and prime minister's office.

A central feature of the reforms introduced following the AFC was a greater emphasis on opening up government processes to the participation of citizens, strengthening civil society groups (NGOs), and generally increasing citizen control over the bureaucracy. For much of Korea's modern development, the policy process was almost entirely closed to citizens, however, the rise of civil society has continued to have an increasing influence on government policy. The inclusion of citizen groups and external experts is now considered to be of central importance for increasing government legitimacy, and civil society groups have played an active role in the countries democratization (Kim 2000a; Kim 2000b). Citizen involvement in the policy process can increase government performance in a number of ways, though under other circumstances, it may introduce greater complexity into the policy making process and harm outcomes (Yang and Pandey 2011; Im et al. 2013). Similarly, the influence of the public on public organizations may impact organizational identification positively to the extent that it raises the salience and importance of organizational mission for employees, or negatively in so far as it reduces levels of public trust. Little research has been done on this phenomenon. Nevertheless, based on the importance of public control of the bureaucracy in general, and in Korea in particular, the study controls for the perceived organizational influence of citizens and civil society.

This chapter described the concepts of organizational identification, change-oriented OCB, and performance management, and based on a review of the relevant literature, proposed a number of

empirical hypotheses detailing the relationships between them. The next section lays out the data

and methodology that will be used to test these relationships.

3. Data, measurements, and methodology

3.1. Data

3.1.1. Central government survey: Sampling frame and representativeness

To test the hypotheses proposed by this research, a custom survey instrument was designed and administered to civil servants across ministries of the central government of the Republic of Korea. The sampling frame was constructed at the ministerial level. South Korea has a total of 17 central government ministries, and all ministries except for the Ministry of Defence were targeted. Population characteristics of the various ministries were obtained from the Ministry of Security and Public Administration based on December 2012 estimates. Characteristics differ to some extent across ministries with regard to total population, sex differences, and the proportion of high level to entry level bureaucrats employed. Two ministries, the Ministry of Science, ICT and Future Planning and the Ministry of Maritime Affairs and Fisheries, were created in 2013, however, and complete population characteristics for these two new ministries were not available at the time the sampling frame was being constructed. As such, population characteristics were estimated for these organizations based on the average of the fourteen ministries for which population characteristics were available. These calculations produced a population estimate of approximately 70,420 civil servants.

In order to ensure the validity of statistical analysis, a sample size should be sufficiently large as to be representative of the population. In addition to total population size, calculation of the minimal sample size necessary to test empirical hypotheses based on survey data involves the selection of an appropriate sampling error and confidence interval, as well as an estimate of the degree of variance for relevant variables across the population (Miaoulis and Michener 1976).

Conventional values in the social sciences are usually set at 5% for the sampling error and 95% for confidence intervals. In cases where a researcher does not know the variance of the key variables across the population (which is the case for this research), a value of 50% can be selected, as this represents maximum variability, and as such is a conservative estimate. Based on these values, the minimally appropriate sample size can be calculated using the following formula proposed by Yamane (1967):

$$n = \frac{N}{1 + N(e)^2}$$

where n is the desired sample size, N is the population size, and e is the sampling error. For this equation, 95% confidence intervals and a population variance level of 50% are assumed. Based on an estimated population size of 70,420, the minimum sample size necessary for this research should be equal to approximately 398. A data set of this size could be obtained by collecting roughly 25 responses from each ministry. However, as a sample size of 398 represents the minimum threshold for the appropriate level of statistical power, a ministerial quota of 30 responses was set, resulting in a dataset consisting of 480 responses.

The survey was administered by Gallup Korea, who randomly selected 30 survey respondents from lists of employees across the 16 ministries. Sample parameters for female respondents were largely in proportion to the population (roughly 36% of central government employees are female, while about 31.9% of survey respondents are female). High level civil servants are also slightly overrepresented with 47.6% of the sample, which compares to an estimated population parameter of 37.1%. Roughly 23% of respondents claimed to have a graduate degree. Average organizational tenure was 12.2 years, while the average age of respondents was 39.

The survey was administered over a 3-week period in June, 2013, and, as mentioned, all central government ministries except for the Ministry of Defense participated in the survey. Surveys were administered through face-to-face interviews. The surveys were conducted with the full support of ministry heads, and, in order to encourage unbiased responses, participants were ensured that there were no right or wrong answers to questions, and moreover that answers would remain entirely confidential and anonymous. In the event that a given employee was not able to participate, another employee was randomly selected with until the quota was met.

The next section provides details about the development of the survey instrument that was used.

3.1.2. Creation of the survey instrument

The questions that make up the survey were drawn almost entirely from the existing literature, and construct items that had been validated in previous work were given priority. However, because the majority of this work was conducted in English, the questions were also in English, and as such it was necessary to follow a formal process in order to produce Korean questions that balanced the literal meaning of the original English questions with common elements of Korean speech. While the relationship between the original English and their translation into Korean are discussed in the measurement section in some detail, in general, the following procedure was followed in order to produce a high quality Korean language survey.

Firstly, after the primary constructs for this study were finalized, questions were chosen from existing English language research as measurements. Next, all of these items received a literal translation from English into Korean by individuals fluent in both languages. Following this, each question was subject to an evaluation by a focus group of scholars both knowledgeable of

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public administration theory as well as sufficiently skilled in both English and Korean. During this process, a number of questions that were translated literally were determined to be unclear or unnatural for a number of reasons. These items were then subject to a second revision aimed at transforming the literal translation into a more natural form while at the same time attempting to capture the core meaning of the original English language question. Additionally, a number of questions were deemed to be redundant in Korean and were either removed or replaced with new questions that attempted to capture the relevant dimension of the deleted question. In general, questions were both shortened and simplified. Finally, items were translated back into English for comparison (Brislin 1980) and, while the meanings of the English translation of the final version of the Korean questions was naturally somewhat divergent from the original English language questions due to the significant but necessary editing process, in general the meanings were agreed to be similar enough that the intended constructs could be measured with confidence.

In order to test the quality of the survey questions, as well as various other statistical prerequisites for empirically testing the relationships hypothesized to exist between the different constructs used in this study, a pilot survey containing most of the questions that eventually appeared on the final survey was conducted. This pilot survey was conducted online, and responses from 63 employees from three different private firms in South Korea were collected. While ideally a pilot survey should be administered to a sample from the same general population that the formal research targets, nevertheless at this stage question clarity and reliability was the most important goal, and a survey of private sector employees was decided to be sufficient for this purpose. Respondents were given a chance not only to provide answers to individual questions, but also were given space to suggest alternative translations or to raise

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questions about the meaning of the survey items. In general, the items in the pilot survey performed well and few questions were raised about their meaning. Moreover, a number of statistical tests were performed in order to determine whether or not the individual items measured their proposed underlying constructs, and again the pilot survey items performed sufficiently well. In the measurements section below, a number of particular findings related to the pilot survey are discussed in the context of explaining the survey questions which appeared on the final central government survey.

3.2. Measurements

This section explains the measures used for the dependent, independent, mediator, and control variables used in this study. A univariate analysis of the characteristics of items used for key variables, as well as scale dimensionality and internal consistency, is also presented in the analysis section of this research.

3.2.1. Dependent variable: Change-oriented citizenship behavior

Change-oriented organizational citizenship behavior is a relatively new concept in organization studies. The scale used by both Bettencourt (2004) and Vigoda-Gadot and Beeri (2012) was originally developed by Morrison and Phelps (1999), who proposed a 10 item scale based on what they believed to be prototypical change-oriented organizational behaviors. The development of the scale was based on an open-ended survey submitted to 148 part-time MBA students who were asked to think about an individual within their organization who actively tried

to bring about positive organizational change and then list particular behaviors relevant to this effort. The authors received a total of 445 suggestions, ranging from 1 to 5 for each respondent. The 445 behaviors were reduced to 180 through the elimination of redundant items, items related to tendencies rather than behaviors, or items that were too vague. The remaining 180 behaviors were sorted into groups, each of which was next represented by a general statement that attempted to capture the meaning of the group as a whole. 19 general behavioral statements were further reduced to 10 through process of discussion, focusing on the theoretical understanding of taking charge behaviors. After a small pilot survey, a third instrument was developed and distributed to 152 part-time MBA students who had full-time jobs at the time. Based on this pretest, it was found that the scale was unidimensional, reliable, and internally consistent, with an internal consistency coefficient of .92. Finally, the authors tested the discriminant validity of the scale using confirmatory factor analysis which included items for the established scales of civic virtue and altruism, dimensions of the existing organizational citizenship inventory, as well as items used to measure in-role behavior. The 4 factor model provided sufficient evidence that the taking charge measure was distinct from both in-role behavior as well as the two popular forms of organizational citizenship behavior, OCBO and OCBI (Morrison and Phelps 1999).

Due to restrictions on survey length, it was necessary to use a subset of the inventory developed by Morrison and Phelps and used by Bettencourt (2004) and Vigoda-Gadot and Beeri (2012). In order to select the most appropriate and representative subset of items from the full inventory, the 9 items used by Vigoda-Gadot and Beeri (2012), who had focused on public sector organizations, were translated into Korean by individuals fluent in both Korean and English. Next, a discussion involving a number of individuals with both a good understanding of public administration theory as well as English led to a consensus that a number of the items were

redundant in Korean, and the scale was narrowed down to 4 items. The selected items were then translated back into English by different individuals, and the translations were similar to the original, English statements. The 4 items are as follows:

I try to change work processes in order to increase efficiency.

I try to make suggestions in order to improve the operations of the organization.

I try to fix unnecessary or faulty procedures.

I try to introduce new processes in order to increase organizational effectiveness.

These 4 items were included in the pilot survey. An exploratory factor analysis on the data obtained from the pilot study confirmed that the scale was unidimensional, and also had an acceptable level of internal consistency (alpha > .7). After obtaining the data from the formal central government survey, a number of tests were performed in order to ensure the acceptability of the scale. First, scale dimensionality was assessed using an exploratory factor analysis that revealed a single factor with an eigenvalue of 2.83. All items loaded onto the single factor at acceptably high levels, with loadings ranging from .77 to .87. Finally, the internal consistency of the scale was accepted based on a .86 Cronbach's alpha coefficient.

3.2.2. Independent variables

3.2.2.1. Organizational identification

A number of different scales are used to measure organizational identification, although the two most popular are Cheney's (1983) 25-item Organizational Identification Questionnaire and Mael and Ashforth's (1992) six item measure of organizational identification. This study measures

employee OI using a number items drawn from the latter as well as 1 custom item developed particularly for the study. This choice was made based on a number of reasons.

Firstly, Mael and Ashforth's (1992) scale, developed based on their seminal conceptual study of OI in 1989 (Ashforth and Mael 1989), is grounded in social identity theory, which is the main theoretical driver of this study. Moreover, Cheney's scale overlaps considerably with the Affective Commitment Scale of Allen and Meyer (1990) and the Organizational Commitment Questionnaire of Mowday, Steers, and Porter (1979). Numerous authors have argued that affective organizational commitment is broader than OI on several dimensions (Pratt 1998; Van Dick 2004), and as such, a scale that targets this concept precisely is more desirable. Secondly, although Ashforth and Mael (1989) argued that OI is a "perceptual cognitive construct that is not necessarily associated with any specific behaviors or affective states" (21), Riketta's (2005) meta-analysis of the organizational identification literature suggests that among the various scales used, the Mael-Ashforth scale is the preferred instrument for predicting organizational behavior, which fits this study's goal of determining the relationship between OI and change-oriented OCB. Mael and Ashforth's (1992) scale is comprised of the following 6 items.

When I talk about my organization, I usually say "we" rather than "they."

When someone criticizes my organization, it feels like a personal insult.

I'm very interested in what others think about my organization.

My organization's successes are my successes.

When somebody praises my organization, it feels like a personal compliment.

If a story in the media criticized my organization, I would feel embarrassed.

In order to develop a Korean scale to measure OI, the procedure outlined in the data section was followed. However, unlike in measurements related to the dependent and independent variables, a number of problems with the literal translation of Mael and Ashforth's scale immediately emerged at the outset of this process. Firstly, it is not nearly as common in Korean as it is in English to use first person pronouns in regular speech, and moreover there is a much higher propensity to use the word "we" in everyday discussion, including in relation to groups for which it is unlikely that the individual has high level of identification. As such, the first item was dropped from the Korean scale. Secondly, item 6 was dropped. The main reason for was the apparent similarity between this question and question 2, and the further difficulty of finding an appropriate adjective distinct enough from question 2 while at the same time natural sounding in Korean. As such, discussants concluded that "to feel a personal insult" on the one hand and "to feel embarrassed" on the other were relatively redundant. The literal translation of the item 2, moreover, which contains the phrase, "it feels like a personal insult," was also criticized as sounding unnatural when literally translated into Korean. As such, the phrase was simplified to "I feel bad," which better reflects the reality of average Korean speech.

At the same time, item 1 of Mael and Ashforth's scale emphasizes the cognitive dimension of organizational identification, and the item was thus replaced with a custom question that both reflects the self-referential dimension of organizational membership but which also reflects the realities of the Korean language. The final scale includes the following five items:

When somebody criticizes my department, I feel bad.

I am very interested in what others think of this department.

My department's successes are my successes.

When someone praises our department, it is as if they are praising me.

Working in my department helps me understand who I am.

Just as the concept of OI overlaps to some extent with the concept of AOC, so too do scales used to measure the two constructs. For example, Allen and Meyer's (1990, 6) AOC scale, variations of which are used widely in the public administration literature, contains items such as "I really feel as if this organization's problems are my own," which seems to emphasize a sense of shared fate, as well as "I enjoy discussing my organization with people outside it," which is perhaps related to a positive evaluation of the identity of the organization, both of which are important dimensions of OI. However, the scale also contains items such as "I would be very happy to spend the rest of my career with this organization," "I do not feel 'emotionally attached' to this organization (R)," and "I do not feel like I'm 'part of the family' at my organization (R)." Unlike OI, which is grounded primarily and minimally in the idea that organizational membership functions a mechanism of self-definition, these items relate to having positive feelings about the organization, it's members, and perhaps also to employee turnover intention and job satisfaction. In other words, Allen and Meyer's AOC scale places a strong emphasis on positive emotions felt towards the organization, which the theory of OI understands as potential though by no means necessary outcomes of identification. Moreover, numerous studies have found the OI and AOC scales to be empirically distinct (Riketta 2005; van Knippenberg and Sleebos 2006). In short, OI emphasizes primarily a sense of shared fate with the organization, while AOC is considerably broader, and encompasses a range of feelings about the workplace, which is at all times kept conceptually distinct from the employee's understanding of their identity.

Empirically, the five items chosen to measure OI were found to be acceptable. A factor analysis revealed that all items loaded onto a single factor with loadings ranging from 0.66 to 0.87, and the scale showed a high level of internal consistency with a Cronbach's alpha coefficient of .84.

3.2.2.2. Performance management

This study conceptualizes performance management in public organizations as functioning at both the organizational level as well as the employee level in terms of human resource management. As such, two independent scales are used to capture these two dimensions of the construct.

3.2.2.2.1. Organization-level performance management

Performance management at the organizational level involves the promulgation of prioritized organizational goals, and the subsequent use of performance information in order to review organizational processes and measure progress towards goals attainment (Walker, Damanpour, and Devece 2010). Performance management at the organizational level is moreover a cyclical process whereby managers utilize performance information to continually adjust objectives and make decisions for achieving organizational goals (Andersen 2008; Moynihan 2008) with the express goal of improving program outcomes and other relevant goals (Heinrich 2002; Radin 2000). Performance management is firmly rooted in the tradition of rational approaches to an organization's performance (Boyne 2010, quoted in Walker et al. 2011), and is a relatively broad topic that incorporates elements of internal and external communication, financial management, decentralization, and other concepts. This study focuses on three processes of performance management that are important internal processes of performance management as a management technique. As all of these processes relate to the goals and objectives of the organization, as well as their measurement, it is best to conceptualize this variable as goal-oriented organization level performance management.

Firstly, goal-oriented performance management aims at the clarification and prioritization of organizational goals. Organizations in the private sector are generally guided by profit and related metrics (such as market share and growth). This guiding principle is almost entirely absent from market-insulated public organizations. Additionally, public organizations tend to have multiple goals, both internal to the organization as well as externally imposed, due to a diversity of professional staff, evolving mandates from elected officials, and competing demands among stakeholders (Daft 2004; Chun and Rainey 2005; Walker et al. 2011). Goal ambiguity has been understood to be one of the most important impediments to the performance of public organizations (Rainy and Steinbaur 1999), and clarifying and prioritizing diverse organizational goals is a fundamental objective of performance management in the public sector. Secondly, performance management seeks to operationalize organizational goals through a process of target setting such that progress towards objectives is amenable to objective measurement. In addition to potentially improved performance, this process has the additional benefits of reducing information asymmetries between bureaucrats and their political principles and other stakeholders (Walker et al. 2011; Chun and Rainey 2005). Objective measurement is thus a fundamental goal of performance management, and is the most important source of performance information available to managers. Finally, performance management is intended to embrace a perpetual cycle of performance improvement based upon the utilization of performance information provided by performance measurement. In other words, performance management uses performance information to continually update plans, objectives, and review organizational processes with the end of enhancing performance (Moynihan 2008), which utilizes the information produced in performance measurement.

This study uses 3 items to capture the goal prioritization, operationalization, and review processes of performance management. The items are as follows:

Priorities between our department's goals are clear.

The achievements of our department over the past year can be measured objectively.

In our department, goals and work processes have been well reviewed.

The 3 items were found to load onto a single factor with an eigenvalue of 2.2. Factor loadings ranged from .84 to .87. The internal consistency of the construct also surpassed the conventionally minimally accepted value of .7 with a Cronbach's alpha of.82.

These measurements all relate to the goal-orientation of the given organization and attempt to capture the core of goal-oriented performance management. At the same time, however, only one of the items, item 3, asks explicitly about managerial behavior, while the other two do not mention behavior. In fact, these items were developed Professor Chun Young-han[2] based on the *priority* and *evaluative* dimensions of goal ambiguity proposed in Chun and Rainey (2005). As conceived by the authors, priority goal ambiguity "refers to the level of interpretive leeway in deciding on priorities among multiple goals," while evaluative goal ambiguity refers to "the level of interpretive leeway that an organizational mission allows in evaluating the progress toward the achievement of the mission" (4). As such, low levels of agreement for these questions may be the result of financial publicness, competing demands from different constituencies, regulatory responsibilities, or policy complexity (Chun and Rainey 2005), factors which are not entirely under the control of public managers.

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[2] The author would like to express his gratitude to Professor Chun for his helpful critique of the measurements used in this study, particularly those related to performance management.

These remarks must be taken into consideration in the interpretation of the results of this study. At the same time, however, they should not undermine confidence in the validity of the scale as a measure of goal-oriented performance management at the organization level. For example, the Korean government's implementation of the BSC system stresses that each ministry and agency is responsible for the promulgation of its own strategic mission and goals, along with the establishment of performance indicators used to measure progress (Lee and Moon 2010). Because of this, while high levels of priority and evaluative goal ambiguity may be the result of environmental and other factors unique to the organization, it is likely the case that managerial behavior grounded in the performance management strategy of the organization is an important factor in their reduction. Moreover, evaluative goal ambiguity particularly is proposed to be linked to the extent to which organizational mission and goals are amenable to performance measurement (Chun and Rainey 2005). While levels of evaluative goal ambiguity may indeed be related to the inherent characteristics of the organization and its environment, nevertheless the construct should not be entirely independent of managerial efforts to operationalize objectives. Furthermore, Chun and Rainey also suggest that high levels of evaluative goal ambiguity are linked closely with the use of workload or output indicators in place of results in performance evaluation (4). While there is a question of causality here, the intimate relationship between evaluative goal ambiguity and the evaluative dimension of performance management is clear, perhaps best being characterized as two sides of the same coin. Finally, the high level of internal consistency between the three measures suggests that the two items in question are indeed measuring the same underlying construct, which item 1 makes clear is linked to managerial behavior.

3.2.2.2.2. Individual-level performance management

Like performance management at the organization level, performance management at the individual level may incorporate a number of diverse processes including performance communication, celebration, discretionary reform, as well as strategies to ensure that the results of performance evaluation are perceived as fair and objective by employees (Lee and Jimenez 2011; Walker et al. 2010). These concepts overlap to some extent with a number of other constructs used in public organization studies, including leader-member exchange, decentralization, and procedural justice. As conceived in this study, however, the core of performance management at the individual level fundamentally involves two techniques: the setting of performance objectives for individual employees, and the close coupling of achievement of those objectives to extrinsic incentives. To capture these two dimensions, the following 5 items were used:

In our department, I am responsible for achieving results.

In our department, job performance is important.

In our department, rewards are given based on employee results.

In our department, promotion depends on employee results.

In our department, pay depends on employee results.

The first 2 questions of the scale attempt to measure the extent to which employees feel accountable for their performance. Placing an emphasis on results is central to performance management at the individual level, and these two questions capture this dimension. Secondly, questions 3 through 5 single out different types of incentives offered to employees who perform highly. In particular, promotions have been suggested by scholars to be the most important

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motivator for Korean civil servants due to a status-conscious culture that recognizes rank as a fundamental metric of success (Im, Campbell, and Cha 2013). Recognizing this fact, increasingly in the Korean public sector, promotion is being tied to performance (Kim and Hong 2013).

The 5 questions loaded onto a single factor with an eigenvalue of 2.9. Factor loadings were generally high, ranging from .62 for question 5 (results-based pay) to .84 for question 3 (results-based rewards). Cronbach's alpha for the construct was an acceptable .82.

3.2.3. Control variables

In this section the control variables to be included in the various models proposed in this study are described and their theoretical motivation explained. Based on a review of the literature, two categories of variables were suggested as necessary to control for in testing the relationship between the dependent, independent, and mediating variables. These two categories relate to characteristics internal to the organization, such as the degree of centralization and perceived support for innovative behavior, on the one hand, and characteristics peculiar to the organizational environment of central government organizations. This section also describes the demographic control variables used in this study.

3.2.3.1. Organizational factors

A number of variables related to the culture of a given public organization may influence both organizational identification and change-oriented behavior. To measure centralization of

authority, this study uses four indicators developed originally by Aiken and Hage (1966), which have been used extensively in public administration literature. The items are as follows:

In my department, decisions about even small issues need to be made by senior staff.

In my department, employees cannot take any action until cleared by senior staff.

I do not have a wide range of discretion in my work.

All of my decisions must be made with permission from senior staff.

A principle components factor analysis showed that the 4 measures made up a unidimensional scale with an eigenvalue of 2.55. The internal consistency of the scale was also acceptable, with Cronbach's alpha coefficient of 0.81.

A second key organizational structure variable controlled for in this research is red tape. In this study, perceived red tape is measured by a single item:

Our organization has many complex and tedious regulations and procedures.

Other studies have examined antecedents to and effects of a number of different dimensions of red tape, including red tape in human resource management, procurement, information systems, and others (Pandey, Coursey, and Moynihan 2007). However, many of these dimensions of red tape may not be directly experienced by frontline workers and are more relevant to managers. Moreover, while a multi-item measure may be superior in many research contexts, as the construct is here employed as a control variable, the single item measurement is not inherently problematic.

This study measures innovation climate using four items adopted from Scott and Bruce (1994). The authors developed a 2 dimensional model of innovation climate consisting of *support for*

innovation and *resource supply*. The first dimension seeks to capture the extent to which employees view the organization as open to change as well as tolerant of new ideas and diversity. The second dimension measures the extent to which resources were perceived to be available for the pursuit of innovative projects. This factor is related to resource slack, which has been linked with innovation at both the individual (Scott and Bruce 1994) and organizational (Damanpour 1991) level. Due to this study's emphasis on cognitive processes as a driver of change-oriented behavior, 3 measures drawn from the support for innovation dimension of the construct are used and 1 question is used to capture resource supply. The 4 questions are as follows:

> My organization's leadership encourages creative solutions to problems.
>
> Members at all levels are encouraged to contribute new ideas to improve the organization.
>
> My organization is open and responsive to change.
>
> Resources are available to implement new initiatives.

The 4 items loaded onto a single factor with an eigenvalue of 2.7. Factor loadings ranged from .80 to .86. Cronbach's alpha for the construct was a high .85.

3.2.3.2. External environment

This study includes 3 different controls related to different parts of the organizational environment. Firstly, a measurement for perceived inter-organizational competition is included. Perceived inter-organizational competition was measured by the following 3 items drawn from Mael and Ashforth (1992):

The relationship between our ministry and other ministries is competitive.

Each government ministry stresses its superiority to others.

Each government ministry must explain why it is the best.

Items loaded onto a single factor and had an acceptably high internal consistency coefficient of .65.

This study controls for both the external influence of the president and prime minister's office as well as civil society groups and external experts using two variables with two indicators each. Respondents were asked to indicate the degree of influence a number of external organizations had in the process of producing their organizational plan. Responses relating to the office of the president and the prime minister were combined into the variable 'central government influence' and responses relating to civil society groups (the Korean term for non-government organizations, or NGOs) and independent experts were combined into a second variable, 'civic influence.'

The relationship between the four items was examined using factor analysis, and two distinct factors were found. Both items were also found to be internally consistent, with alpha coefficients of .87 for central government influence and .80 for civil society influence.

3.2.4. Demographic variables

As explained above, a number of demographic variables were collected from survey respondents who were asked to indicate their sex, age, as well as their level of education. Also, respondents were asked to indicate the length of their tenure in the public sector. Finally, the Korean civil

service is divided into nine grades, with grade 9 being the lowest, entry-level grade, and grade 1 the highest level. As such, respondents were asked to indicate their service level, and a variable with 7 values (no responses were collected from employees at grades 1 and 2) was created. These variables are included in all models. Finally, in order to control for unobserved differences between ministries, this study includes indicator variables for 16 government ministries.

3.3. Data integrity

This section provides an analysis of the integrity of the data, including an assessment of the extent to which common method variance is an issue with the dataset, as well as how missing data was dealt with.

3.3.1. Common method variance

As this study is based on survey data, there is a danger that responses suffer from common method variance (CMV), a type of measurement error that can produce a serious confounding influence of the results of an analysis and thereby produce unjustified conclusions (Podsakoff, MacKenzie, Lee, and Podsakoff 2003). CMV can result from a variety of causes related to survey-based research, including attempts to maintain an image of self-consistency, leniency biases towards a favored person or object, social desirability biases, as well as survey design-based issues such as common scale formats or scale length (Podsakoff et al. 2003). While the seriousness of this issue should be noted, however, it does not necessarily make the results of survey-based research invalid in every case. In order to minimize the impact of CMV,

researchers are advised to take a number of precautions in terms of survey design as well as administration. After a survey is completed, moreover, a number of statistical tests can be performed in order to determine the seriousness of CMV in a dataset. This section describes the steps that were taken to minimize common method bias, as well as the results of Harman's single-factor test, which can provide an estimate of the extent to which the dataset suffers from CMV.

Firstly, in creating the survey, scales were chosen largely from reliable previous research, and in their translation, care was taken to ensure that all items were clear and expressed in the most natural language possible. Non-complex items that are free from jargon are essential if respondents are to answer based on a full comprehension of the question (Podsakoff et al. 2003; Tourangeau et al. 2000). Moreover, scale trimming was also performed, and items that were determined to overlap conceptually were omitted from the final constructs.

Secondly, in the administration of the survey itself, survey respondents were assured of their anonymity and informed that there were no right or wrong answers to the questions, both techniques designed to reduce evaluation apprehension as well as lessen the likelihood that respondents will edit their responses for social desirability before answering (Podsakoff et al. 2003). One other technique that researchers have adopted as useful particularly for reducing bias relating to self-reported performance and OCB is obtaining evaluations of employees from their supervisors or managers, rather than relying on self-reports. This practice is common in research related to employee performance, where convergence of manager/supervisor ratings is often only modest (Scullen, Mount, and Goff 2000). However, while this strategy has been widely used, it was nevertheless rejected in this case for several reasons. First, obtaining measurements of employee behavior can potentially undermine a sense of anonymity for the respondent by

requiring personally identifiable information linking the evaluation provided to the respondent's identity (Podsakoff et al. 2003). Secondly, unlike formal job performance, change-oriented behavior is by definition extra-role behavior, and as such does not fall within the scope of performance rating systems. Moreover, change-oriented behavior is often disruptive of organizational processes, and as such it is likely the case that social desirability for these questions is less of a problem than for either purely affiliative types of OCB or formal job performance, which may have higher levels of normative transparency. Recently, it has also been suggested that privacy is an important element for innovative and creative behavior which can increase performance (Bernstein 2012), and as such, change-oriented behavior may be linked with less direct supervisor or manager oversight, and therefore less knowledge of CO-OCB on the part of organizational superiors. Finally, adopting a multiple-source research design would have significantly increased the complexity of the survey administration (and thereby also its cost). For these reasons, it was decided to rely on self-reported measures for the dependent variable. At the same time, however, this approach should be noted as a potential limitation of the study.

In order to determine the extent to which CMV is an issue with the dataset produced from the survey research, Harman's single factor test was performed. To perform this test, all raw independent variables are entered into a principle components exploratory factor model. In the event that a single factor emerges which accounts for a majority of the variance of the items of the study, it can be concluded that CMV is a significant problem for the data, and that additional measures need to be taken (Podsakoff and Organ 1986). The results of the unrotated analysis found a total of 9 factors with eigenvalues greater than 1 (the complete rotated factor analysis, which demonstrates a high level of discriminant validity between the different constructs, can be

found in the appendix to this study). The predominant factor accounted for only 24% of the variance of the data. While this result supplies confidence that the dataset does not suffer from unduly from CMV, this technique has limitations (Podaskoff et al. 2003), and as such the results of the analysis in the next section should be interpreted with these in mind.

3.3.2. Missing data

Missing data, where respondents fail to provide answers to survey questions, can bias analyses when systematic or extensive. In the sample used for this study, levels of missing data for all major variables of interest are negligible. However, two control variables, age and organizational tenure, have a higher number of missing values at around 4%. A number of tests were performed in order to determine the extent to which missing values had been systematically produced, including examining correlations between the existence of missing values and the values of other variables, as well as attempting to predict an instance of missing data using binary logistic regression. Both tests implied that the missing values were randomly distributed across respondents. On the other hand, such tests cannot determine whether missing data are dependent to some extent on the values of the variables themselves. For example, it may be the case that older respondents are less likely to report their age. Some circumstantial evidence is present for this possibility as respondents who failed to report their age overlap significantly with respondents who failed to report their organizational tenure, two highly correlated variables. Due to this possibility, the assumption is made that missing values for the two control variables are missing at random (MAR) (Rubin 1996).

The goal of this study is to examine the relationships between organizational identification, performance management, and change-oriented behavior. As such, all decisions about how to deal with missing data were made with the goal of maximizing the validity of results related to these variables. Several strategies are suggested in the methodological literature to deal with missing data. The first, known as *complete case analysis* or listwise deletion, simply drops all observations containing missing data from the analysis. While this strategy is perhaps the default in the public administration literature utilizing multivariate regression modeling, it nevertheless has the drawback of decreasing sample size, and thereby statistical power. Moreover, in the case were missing data are systematically related to the value of the dependent variable, this approach can bias estimates. Another approach, *mean imputation*, which involves substituting the mean of the variable across observations with complete data, has this same problem, while additionally inflating the number of mean values and thereby weakening correlations (Little and Rubin 2002). Due to these drawbacks, this approach has generally fallen out of favor in the methodological literature (Acock 2005). A second approach suggested by Cohen and Cohen (1983) (see also Cohen, Cohen, West, and Aiken 2003) is to replace missing values in the data with numerical values (zero or any arbitrary value) and add to the model an indicator variable controlling for the effect of the imputed value on the dependent variable. This approach is simple and has intuitive appeal. Researchers have cautioned, however, that this approach gives a false sense of statistical power by increasing sample size, while failing to reflect the uncertainty associated with the use of missing data (Acock 2005). A more modern method for dealing with missing data, *multiple imputation* (Little and Rubin 2002; Rubin 2009), introduces error variance into the imputation process by estimating values for missing data based on other variables in an iterative process using a Markov Chain Monte Carly technique, estimating model parameters an equal number of

times, and combining the results in order to produce a single set of estimates. This process is much more complex than the traditional methods mentioned above, and may be unnecessary in cases where missing data is not extensive, or when it occurs primarily in non-critical variables.

To anticipate, the primary analysis of this study was performed using the complete case, Cohen and Cohen (1983), and multiple imputation methodologies. The results showed no qualitative difference between models, and as such this study reports the results of the complete case analysis for the primary analysis, which has the weakest assumptions. After dropping the age demographic variable from the analysis due to multi-colleanarity with organizational tenure, the analysis is performed on a dataset consisting of 455 complete observations, which is well above the minimum threshold sample size necessary for population generalizability.

3.4. Methodology and hypotheses

3.4.1. Mediation analysis

A review of the literature relevant to the relationship between the central constructs of the study suggested that the relationship between organizational results orientation and change-oriented OCB may be mediated by organizational identification. Mediation analysis was therefore chosen as the most appropriate methodology to test this hypothesis. In this section, the theoretical and statistical characteristics of mediation analysis are described. Based on this, the statistical criteria to be used in determining the acceptance or rejection of hypotheses proposed in this study are described.

3.4.1.1. Approaches to mediation analysis

Statistical mediation analysis is one of the leading methodologies for testing psychological processes in the social sciences, and particularly in social psychology research (Rucker et al. 2011). A mediation hypothesis postulates that a given independent variable, *X,* affects an outcome variable, *Y,* primarily or partly through its influence on an intervening, or mediating, variable, *M.* Figure 2 shows this relationship graphically.

Figure 2: A simple model of statistical mediation
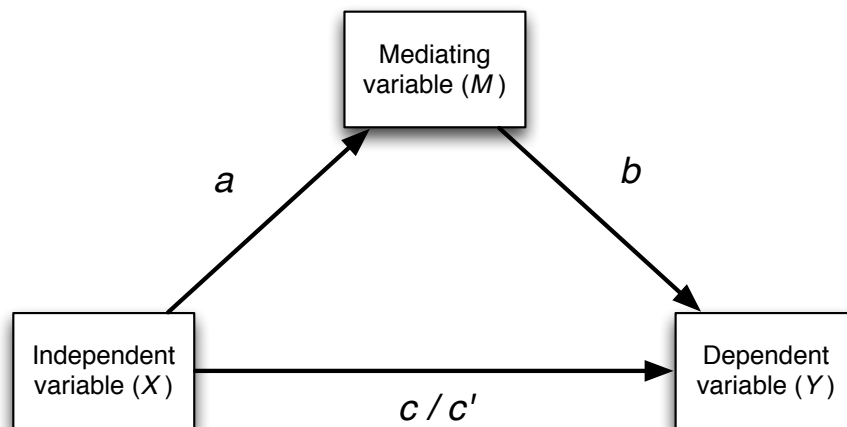
In the model, variables *X, M,* and *Y* in boxes represent independent, mediating, and dependent variable respectively. The arrows between the different variables represent the hypotheses to be tested. In the figure, lower cases letters *a, b,* and *c'* represent path coefficients. In an observed variable model, *c'* quantifies the direct effect of the independent variable *X* on the dependent variable *Y,* while the product of *a* and *b* quantifies the mediated effect of *X* on *Y* through *M.* The total effect of the variable *X* on *Y* is then represented by the following equation (Hayes 2009):

$$c = c' + ab$$

As such, the direct effect of variable *X* on *Y* is the portion of its influence that is independent of *M*. The indirect effect of *X* on *Y* is then:

$$ab = c - c'$$

There are a number of statistical procedures available for testing mediation hypotheses. However, the most popular method employed by researchers has been the so-called 'causal steps approach' developed by Baron and Kenny (1986) (Hayes 2009; MacKinnon, Warsi, and Dwyer 1995). Under this approach, a series of statistical criteria are applied after each of the hypotheses shown in the figure are formally tested. The methodology and statistical evaluation criteria of the causal steps approach can be summarized as follows (Baron and Kenny 1986). First, two successive analyses are preformed in order to establish whether a relationship exists between the independent variable and the dependent variable (path *c*), and the independent variable and the mediator (path *a*), respectively. In the first model, the proposed mediator is excluded from the analysis. If both relationships are significant, a third analysis is performed in order to assess the extent to which the presence of the mediating variable affects the relationship between the independent variable and the dependent variable. If the correlation coefficient between these two is reduced from levels determined in the first analysis (i.e., the path coefficient of *c*), it is said that a partial mediating effect exists. If *c* is reduced to such an extent that it is no longer distinguishable from zero at statistically significant levels, then it is said that *M* fully mediates the relationship between *X* and *Y*. In the case where the path coefficient of *c* is not changed, the mediation hypothesis is rejected.

Despite the popularity of the causal steps approach and its intuitive appeal, a number of weaknesses have been noted. Firstly, under this approach, the existence of an indirect effect is based on logical inference rather than statistical certainty (Hayes 2009; Preacher and Hayes

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2004). In other words, the statistical conditions outlined by Baron and Kenny to test mediation do not themselves contain any statistical conditions for testing the significance of the mediation itself. Preacher and Hayes (2004) offer a number of other criticisms, including the possibility of Type I error when the change in *c* in the presence of the mediator is of a small magnitude but has a lower level of statistical significance, or Type II error in the opposite case. Citing MacKinnon et al. (2002), the authors also point out that the causal steps method of Baron and Kenny (1986) can have low statistical power when working with small sample sizes, which can also increase the likelihood of Type II error.

A number of methods have emerged which better capture the quantitative size of the mediating effect of a given model and formally test the statistical significance of the proposed mediating effect. One method is to test the statistical significance of a *Z* statistic produced through first calculating the product of *a* and *b* and then dividing by the standard error of this cross product (Kenny, Kashy, and Bolger 1998; recommended by Frazier, Tix, and Barron 2004). The standard error used in the computation of the *Z* statistic can be calculated using the formula proposed by Sobel (1982):

$$\sqrt{a^2 sb^2 + b^2 sa^2}$$

In the equation, *a* and *b* are unstandardized regression coefficients based on multiple regression analyses. The other two terms, *sa* and *sb*, are their corresponding standard errors. Basing evidence for mediation on the significance of this *Z* statistic is popularly known as the Sobel test.

While the Sobel test is superior to the causal steps approach in terms of its quantitative certainty, it also has an important limitation in that the *Z* statistic used to test the statistical significance of the mediation effect is assumed to be normally distributed. However, researchers have shown the

product of two coefficients, each of which is normally distributed, will not itself be normally distributed, but rather have an asymmetric distribution with significant levels of kurtosis (MacKinnon, Warsi, and Dwyer 1995; MacKinnon et al. 2002). Based on this observation, MacKinnon (2002) pointed out that while the *Z* test performs better than the causal steps approach for detecting mediation effects, it has relatively less statistical power than tests that do not assume the distribution of *ab* to be normally distributed. In particular, a bias-corrected bootstrap approach suggested by a number of researchers (Shrout and Bolger 2002; Preacher and Hayes 2004) does not make this assumption and thereby has higher statistical power to detect true nonzero mediation effects. The bootstrap mediation test methodology is explained in the next section.

3.4.1.2. Bootstrapping

Bootstrapping is a nonparametric method for estimating effect sizes and testing hypotheses that does not make assumptions about the normality of the distributions of individual variables or of the sampling distribution of a given statistic (Efron and Tibshirani 1993; Preacher and Hayes 2004). The bootstrap approach treats a given sample of size *n* as a "population reservoir" from which a specified large number of random samples of size equal to *n* are drawn through a process of continuous replacement (Mallinckrodt et al. 2006, 373). When an item is drawn, its values are recorded, and then that item is placed back into the pool of observations. When a given observation is added to the sample, the probability of selection is not affected, and therefore on each subsequent draw, the probability of selecting that same observation again is $1/n$. As such, in a single bootstrap sample, some observations from the original data set will be

omitted, and others will appear multiple times (Mallinckrodt et al. 2006). Through this procedure, the variability of a parameter estimate across the totality of bootstrap samples should produce an accurate model of the variability of the parameter in the source sample to the extent that the source sample is an accurate representation of the population from which it is drawn. As Mallincrodt et al. (2006) points out, this type of analysis is particularly well-suited for estimating the confidence interval of a given parameter of the population.

When applied to mediation analysis, the bootstrap method does not rely on the assumption that the distribution of *ab* is normal (Bollen and Stine 1990), and secondly allows the possibility that bias corrected confidence intervals can be calculated for this term. As such, the method has received growing support as the most appropriate methodology to test for mediation (Hayes 2009). Secondly, the bootstrap method can also be applied to small samples with more confidence as, unlike the Sobel test, is not based on large sample theory (Preacher and Hayes 2004).

Bootstrapping generates an empirical estimation of the sampling distribution of the indirect effect by treating a given sample as a representation of the population as a whole and randomly constructing a large number of artificial samples with replacement. Each time a new sample is constructed, *a* and *b* are estimated, and the product of the two path coefficients are stored. When finishing the analysis, a number of estimates of the indirect effect are obtained equal to the number of sampling repetitions specified by the researcher (Preacher and Hayes 2004). An empirical approximation is then produced of the sampling distribution of the indirect effect, *ab*, and the size of the indirect effect itself can then be inferred from the ordered set of the *k* estimates at a specified confidence interval (Hayes 2009). Preacher and Hayes (2004) provide an example based on $k = 1000$. Simply, the low end of the 95% confidence interval will be defined

by the estimate in the 25th position, and the upper limit at the 976th position. In this example, if the product of *ab* at the lower end of the confidence interval is above zero, then a researcher can claim with 95% certainty that a statistically significant mediation effect is present. However, as already mentioned, the *ab* distribution will be skewed and as such the upper and lower bounds of the 95% confidence intervals will not be equidistant from the mean value of *ab*. This problem, however, can be addressed through the production of bias corrected confidence intervals that compensate for the asymmetry in the distribution of parameter estimates (Efron and Tibshirani 1993).

3.4.2. Hypotheses and analysis plan

Given the high level of support for the bootstrapping approach in the methodological literature, this study will investigate the extent to which organizational identification mediates the relationship between organization and individual level goal-oriented performance management and change-oriented OCB. While the hypotheses of this study emerged organically through a review of the relevant theory and previous empirical work, this study will follow the conventional steps outlined by the methodological literature, and as such the following table restates the hypothesis according to the logic of mediation.

Table 1: Hypotheses to be tested in this study

Hypothesis	Proposition
H1	Organization level performance management is positively related to change-oriented OCB.
H2	Individual level performance management is positively related to change-oriented OCB.
H3	Organization level performance management is positively related to organizational identification.
H4	Individual level performance management is positively related to organizational identification.
H5	Organizational identification is positively related to change-oriented OCB.
H6	Organizational identification mediates the relationship between organization level performance management and change-oriented OCB.
H7	Organizational identification mediates the relationship between individual level performance management and change-oriented OCB.

These hypotheses imply four analyses. The hypotheses and analysis plan corresponds to the analytical models displayed in figure 3.

Figure 3: Framework of analysis

Analysis 1

PM: Organization level → H1 (*c1*) → Change-oriented OCB

PM: Individual level → H2 (*c2*) → Change-oriented OCB

Analysis 2

PM: Organization level → H3 (*a1*) → Organizational identification

PM: Individual level → H4 (*a2*) → Organizational identification

Analysis 3

Organizational identification → H5 (*b*) → Change-oriented OCB

Analysis 4 / 5

PM: Organization level → H6 (*c1'*) → Change-oriented OCB

PM: Individual level → H7 (*c2'*) → Change-oriented OCB

(via Organizational identification)

The hypotheses detailed above will be accepted or rejected based on a number of criteria. Hypotheses H1 and H2 will be assessed using an ordinary least squares (OSL) regression analysis. Organization and individual level performance management and control variables will be regressed on change-oriented OCB. In addition to the independent and control variables, this model will also include 15 indicator variables representing organizational membership in order to control for factors potentially related to the different organizations but unaccounted for by the independent variables. In order for H1 to be accepted, $c1$ should be both positive and distinguishable from zero at the conventionally accepted significance level of $p < .05$. For H2 to be accepted, $c2$ should meet the same criteria. If either of these coefficients are negative or not

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distinguishable from zero at statistically significant levels, the corresponding hypothesis will be rejected. According to the causal steps mediation methodology, statistically significant coefficients for the two independent variables are understood to be the first statistical criteria necessary for proceeding with a mediation analysis (Baron and Kenny 1986). Based on this approach, if either of these coefficients are not statistically significant, this would also be the basis of a rejection of hypotheses H6 and H7, which propose that organizational identification mediates the relationship between both performance management at the organization and individual level and change-oriented OCB. However, as has been pointed out by numerous scholars (Preacher and Hayes 2004; Hayes 2009), this contention is based on inferential rather than statistical criteria, and analyses based solely on this criteria risk Type II errors. As such, even if either or both hypotheses H1 or H2 are rejected, analysis of potential indirect effects via organizational identification will still be performed if other statistical criteria are met.

Hypotheses H3 and H4 will be tested in a similar way to hypotheses H1 and H2, with the independent variables and control variables regressed on the dependent variables in a model containing indicator variables for the 16 government organizations. In this model, however, the dependent variable is OI rather than change-oriented OCB. Hypothesis H3 and H4 will be accepted if $a1$ and $a2$ show positive coefficients statistically significant at p < .05, respectively. Unlike for tests of hypotheses H1 and H2, however, if either $a1$ or $a2$ do not have a statistically significant relationship with the dependent variable, their corresponding mediation hypotheses (i.e., H6 and H7, respectively) will also be rejected, as a significant relationship between the independent variables and the mediating variable is necessary for the mediation hypotheses to be accepted regardless of whether the causal steps or bootstrap methodology is used.

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Hypotheses H5 will be tested using an OLS estimator with independent variables, control variables, organizational indicator variables, and the mediating variable, OI, regressed on change-oriented OCB. Hypothesis H5 will be accepted if a positive, statistically significant relationship at the conventional $p < .05$ level is found for coefficient b. Otherwise, H5 will be rejected. Moreover, this rejection will be the basis also for the automatic rejection of hypotheses H6 and H7, as a statistically significant relationship between the mediating variable and the dependent variable is a necessary condition for mediation, regardless of the mediation hypothesis methodology used.

Assuming the above conditions are met, Hypotheses H6 and H7 will be tested using the mediation bootstrap methodology outlined in the previous section. Two bootstrapped analyses consisting of 5000 iterations (a number recommended by Hayes (2009)) will be used to determine if the sampling distribution of coefficients $a1b$ and $a2b$ include zero at a confidence level of 95%. Percentile-based and bias corrected confidence intervals will be used to determine significance level. If the lower limit of the 95% confidence intervals produced from this analysis are not below 0 for either of the coefficients, then the null hypothesis that an indirect effect does not exist will be rejected. However, if one or both of the lower limits of the 95% confidence intervals is negative, the corresponding hypothesis will be rejected.

The hypotheses of this study, the proposed estimator that will be used to test them, and their threshold of acceptance are summarized below in the following two tables.

Table 2: Hypotheses: Direct effects

Hypotheses	Analysis	Predictor	Criterion	Coefficient	Relationship	Estimator	Threshold
H1	1	PM-ORG	CO-OCB	$c1$	+	OLS	p<.05
H2		PM-IND		$c2$			
H3	2	PM-ORG	OI	$a1$			
H4		PM-IND		$a2$			
H5	3	OI	CO-OCB	b			

Table 3: Hypotheses: Indirect effects

Hypotheses	Analysis	Predictor	Criterion	Mediator	Coefficient	Relationship	Estimator	Threshold
H6	4	PM-ORG	CO-OCB	OI	$a1b$	+	Bootstrapped OLS	Positive PB and BC CI
H7	5	PM-IND			$a2b$			

This chapter described the relevant characteristics of the dataset to be used in this study. It also described the measurements used for the dependent, independent, mediator, and control variables. Finally, a synopsis of the methodology that will be utilized to test the empirical hypotheses of this study was provided. The next section presents the formal analysis of the data, as well as a number of statistical tests used in order to assess the validity of the results.

4. Analysis

4.1. Summary statistics and normality assessment

Table 4 shows summary statistics and normality diagnostics for the dependent, independent, mediator, and control variables used in this study. The first numeric column of the table presents mean values of all the variables. The table shows that change-oriented OCB, organization and individual level performance management, as well as organizational identification, the key variables in this study, all have mean values above three, which is the midpoint of the scales. In terms of normality, none of the key variables show a statistically significant amount of skew in their distributions. Organization level performance management shows kurtosis at statistically significant levels ($p < .05$). However, in examining the histograms for the four key variables in the study, which can be viewed in figure 4 below, the level of kurtosis for organization level performance management is not excessive, and is comparable to levels in the other key variables.

Table 4: Descriptive statistics and normality assessment

	Mean	SD	Min	Max	Skewness	Kurtosis
Dependent variable						
Change-oriented OCB	3.7	0.6	1.5	5	0.0	3.1
Mediating variable						
Organizational identification	3.8	0.6	1.8	5	0.0	3.3
Performance management						
Organization level	3.5	0.7	1	5	-0.1	3.6*
Individual level	3.3	0.6	1.6	5	0.2	3.7
Organizational climate						
Centralization	2.8	0.7	1	5	0.2	2.9
Redtape	3.1	0.8	1	5	0.0	2.6
Innovation climate	3.4	0.7	1.3	5	-0.2	3.4
Organizational environment						
Inter-org. competition	3.4	0.6	1.7	5	0.0	2.9
Civil Society influence	5.1	1.4	1	7	-0.7***	3.0
Central gov. influence	3.9	1.2	1	7	-0.1	3.3

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Figure 4: Histograms for dependent, independent, and mediator variables
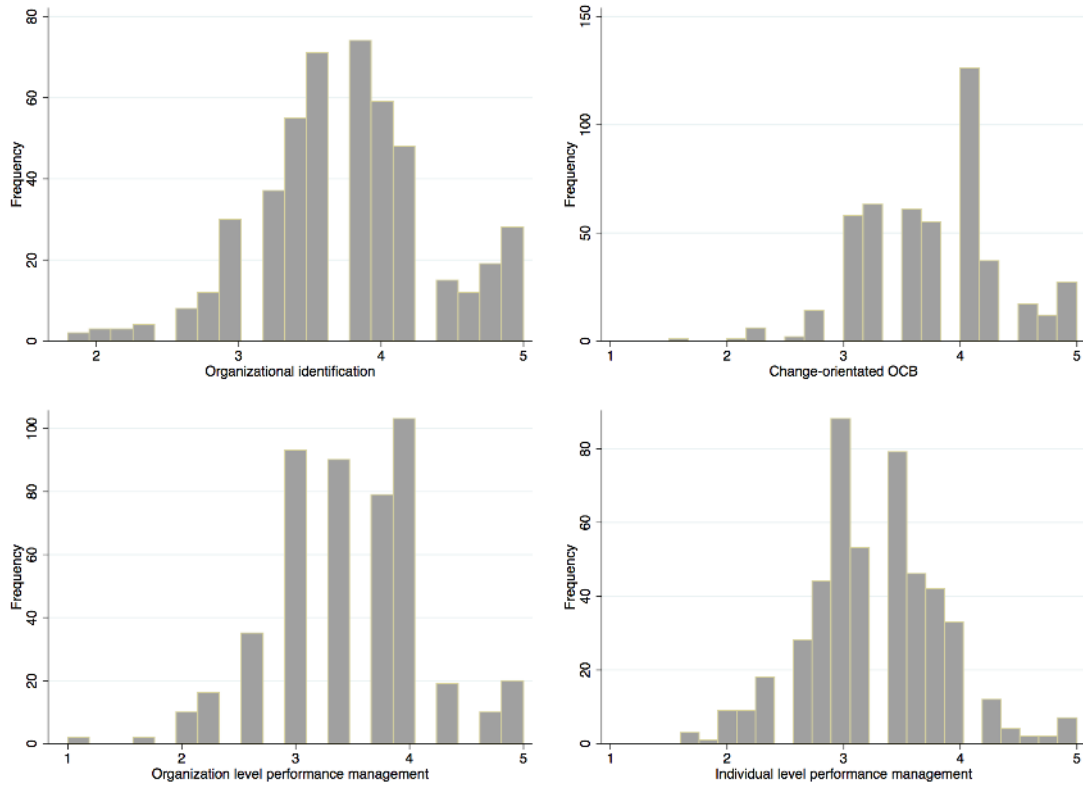
None of the control variables suggests an excessive cause for concern, though civil society influence does have statistically significant levels of negative skewness. However, as this variable is primarily intended as a control variable, it was decided that no additional measures were necessary in order to ensure unbiased results in the primary analysis.

Table 5 shows summary statistics for the demographic variables used in this study, as well as mean values for these variables across the 16 central government ministries. The statistics show that both employment grades and diverse durations of organizational tenure are represented in the sample. In terms of education, about 23% of respondents possess a graduate degree. In terms of ministries, the Ministry of Foreign Affairs and the Ministry of Unification have the highest percentages of graduate degree holding employees, with about 43 and 38% respectively. The

Ministry of Health and Welfare, Foreign Affairs, and Gender Equality and Family have the highest representation of women, while the Ministry of Public Administration and Security has only about 7%. The Ministry of Foreign Affairs was also comparatively the youngest Ministry, and also had the shortest mean period of organizational tenure at 6.5 years.

Table 5: Summary statistics of demographic sample characteristics

Summary statistics	Employment grade	Tenure	Graduate degree	Age	Sex (Female = 1)
Mean	5.7	12.2	0.23	39.1	0.32
Standard deviation	1.1	7.9	0.42	7.2	0.47
Minimum value	2	0.4	0	23	0
Maximum value	9	34	1	59	1
Mean values by ministry					
Strategy and Finance	5.4	11.9	0.20	37.2	0.38
Science, ICT and Future Planning*	5.6	11.7	0.33	38.4	0.30
Education	5.6	13.8	0.31	39.5	0.40
Foreign Affairs	5.8	6.5	0.43	34.3	0.50
Unification	5.2	13.1	0.38	41.1	0.28
Justice	6.2	13.5	0.13	39.6	0.40
Security and Public Administration	5.5	10.7	0.10	38.5	0.07
Culture, Sports and Tourism	5.6	15.7	0.24	42.4	0.27
Agriculture, Forestry, Livestock	6.0	9.3	0.13	36.6	0.33
Trade, Industry and Energy	5.6	9.2	0.17	36.5	0.38
Health and Welfare	5.8	8.3	0.10	35.1	0.53
Environment	5.6	13.5	0.33	40.6	0.10
Employment and Labor	5.6	14.0	0.21	42.3	0.17
Gender Equality and Family	5.8	13.8	0.20	40.3	0.47
Land, Infrastructure and Transportation	5.9	14.1	0.27	41.6	0.20
Maritime Affairs and Fisheries*	5.5	15.7	0.13	41.5	0.33

*Ministry created in last year

4.2. *Zero-order correlations*

Table 6 shows zero-order Pearson correlation coefficients for the variables. Both of the performance management independent variables, as well as the mediating variable,

organizational identification, show relatively strong, highly significant correlations with the dependent variable, change-oriented OCB. Organizational identification is also positively and significantly correlated with the two independent variables. Both of the performance management variables are also correlated strongly. All of these statistics are in line with the main hypotheses of this study.

Among the control variables, centralization shows a strong negative correlation with the dependent variable, but is not related to organizational identification at significant levels. Red tape, on the other hand, does have a strong negative relationship with identification. Both of these variables are negatively related to the two performance management variables. Innovation climate is related at significant levels to all of the primary variables in the study.

All organizational environment variables are positively related to the dependent and mediating variable, while central government influence is also strongly correlated with both the performance management variables, which is not surprising given the role of the prime minister's office in matters related to performance management in the central government.

Among demographic variables, tenure, education, and age are positively correlated with the dependent variable, while females appear to be less likely to engage in change-oriented behavior. Employment grade has a negative relationship with both identification and change-oriented behavior. Entry level grades in the Korean civil service range from grade 9 to grade 6, while the higher level civil service runs from grade 5 through 1. As such, this statistic can be interpreted to mean that higher level civil servants both identify with their organizations more highly than do their entry level counterparts, as well as pursue more change-oriented behavior.

Table 6: Zero-order correlations between variables

		1	2	3	4	5	6	7
1	Change-oriented OCB							
2	Organizational identification	.54***						
3	PM: Organization level	.36***	.38***					
4	PM: Individual level	.31***	.35***	.43***				
5	Centralization	-.14**	-.07	-.11*	-.20***			
6	Redtape	-.07	-.18***	-.15**	-.28***	.31***		
7	Innovation climate	.38***	.44***	.49***	.53***	-.29***	-.37***	
8	Inter-org. competition	.12**	.11*	-.09	-.04	.06	.14**	-.01
9	Civil Society influence	.13**	.11*	.10*	-.01	.03	.01	.05
10	Central gov. influence	.12**	.16***	.20***	.17***	-.06	-.11*	.18***
11	Employment grade	-.25***	-.20***	-.03	-.13**	.15**	.13**	-.10*
12	Tenure	.30***	.29***	.20***	.07	-.01	-.02	.18***
13	Graduate degree	.30***	.17***	.13**	.03	-.01	-.05	.08
14	Age	.34***	.30***	.20***	.09	-.01	-.03	.19***
15	Sex (Female = 1)	-.15**	-.12*	-.03	-.12*	.08	.04	-.09

		8	9	10	11	12	13	14
9	Civil Society influence	.09						
10	Central gov. influence	-.05	.39***					
11	Employment grade	-.16***	.02	-.04				
12	Tenure	.11*	-.05	.00	-.32***			
13	Graduate degree	.11*	.04	.10*	-.31***	.27***		
14	Age	.12*	-.06	.01	-.42***	.87***	.35***	
15	Sex (Female = 1)	-.01	.03	.06	.28***	-.22***	-.11*	-.35***

* p<0.05, ** p<0.01, *** p<0.001

4.3. Primary analysis

This section presents formal tests for the hypotheses outlined in the previous section of this study. Following the plan laid out there, three ordinary least squares regressions are conducted in order to test hypotheses H1 through H5. Following this, a mediation analysis utilizing the

bootstrapped resampling method is performed in order to test whether or not organizational identification acts as a mediating variable between organizational results orientation and change-oriented OCB.

4.3.1. Analysis 1: Performance management and change-oriented OCB

Table 7 below shows the results of an ordinary least squares regression with change-oriented OCB as the dependent variable. Included in this model are the two independent variables, organization and individual level performance management variables, the control variables, as well as 15 organizational indicator variables (these are not shown in the table). Both unstandardized and standardized coefficients are shown, as are 95% confidence intervals.

The model shows a high R-squared value of .337, with an adjusted R-squared value of .295. These figures are relatively high, and suggest that the model has been specified with a significant degree of accuracy. Moreover, the mean variance inflation factor for the model is 1.7, which is well below the conventional level of 10, or even the more conservative threshold of 4 (O'Brian 2007) (the highest value for an individual independent variable was 2.06 for innovation climate). A Breusch-Pagan / Cook-Weisberg test also found that heteroskedasticity was not a problem with the analysis.

Table 7: Performance management and change-oriented OCB

	Beta	Coefficient	SE	t statistic	95% CI Low	95% CI High
Performance management						
Organization level	.161**	.143	.044	3.227	.056	.231
Individual level	.109*	.113	.054	2.104	.007	.218
Organizational climate						
Centralization	-.089*	-.079	.040	-1.987	-.156	-.001
Red Tape	.118*	.090	.035	2.583	.022	.159
Inovation climate	.221***	.200	.050	3.997	.102	.298
Organizational environment						
Inter-org. competition	.091*	.086	.041	2.112	.006	.166
Central government influence	.094*	.040	.019	2.060	.002	.078
Civil society influence	-.003	-.002	.024	-.077	-.048	.045
Demographic controls						
Employment grade	-.093*	-.048	.024	-2.012	-.095	-.001
Tenure	.104*	.008	.004	2.215	.001	.015
Graduate degree	.182***	.256	.063	4.067	.132	.380
Sex (F=1)	-.050	-.064	.056	-1.126	-.174	.047
Constant		1.808	.336	5.390	1.149	2.468
R-squared	.337					
Adj. R-squared	.295					
Average VIF	1.7					
N	455					

* p<0.05, ** p<0.01, *** p<0.001

Hypothesis H1 stated that organization level performance management would be positively related to change-oriented OCB at p < .05 significance levels. The results of the analysis show that this variable has a positive standardized regression coefficient of .161 significant at p < .01, which is above the threshold for support outlined in the previous section. Based on this statistic, hypothesis H1 is accepted.

The results of analysis 1 also provide support for hypothesis H2, which stated that performance management at the individual level would be a statistically significant predictor of change-

oriented OCB. The results of the analysis show that this variable has a positive standardized regression coefficient of .109 significant at p<.05.

Although no formal hypotheses were made about the control variables in the study, a number of them show statistically significant correlations with the dependent variable. Firstly, centralization has a negative relationship with the dependent variable with a statistically significant (p < .05) standardized regression coefficient of −.089. This suggests that the greater extent to which employees view their superiors as exercising direct control over their everyday work and decision-making, the less likely they will be to challenge work processes with the intention of improving them. This result is not entirely surprising, as centralization has been found to be negatively related to a number of variables that have a theoretical link with change-oriented OCB (Chiaburu and Baker 2006). Moreover, it is in line with more recent work on the relationship between monitoring and individual performance (Bernstein 2012).

On the other hand, perception of organizational red tape was found to have a positive correlation (p < .05) with the dependent variable. While a number of studies have shown red tape to be negatively related with employee motivation (DeHart-Davis and Pandey 2005; Baldwin 1990), it may be the case that greater levels of perceived red tape encourage employees to step outside of their prescribed roles and attempt to expedite and improve work processes. This conjecture is not dissimilar from the assertion of Moon and Bretschneiber (2002) that red tape may be an organizational "push factor" in driving change and innovation.

Innovation climate is shown to have a strong positive relationship with the dependent variable. Innovation climate has been linked to a number of positive employee attitudes related to change-oriented behavior. As such, controlling for this facet of organizational climate was necessary in

order to produce non-biased results for the independent variables of interest. The strength of this association combined with a statistically significant result for the two performance management variables enhances confidence in one of this study's primary findings.

Government ministries operate within a complex organizational environment consisting of citizens, the chief executive offices, as well as other organizations. Given this, this study included three variables related to the organizational environment of government ministries. Of these, both inter-organizational competition between ministries and external control by the central government show statistically significant ($p < .05$), positive relationships with change-oriented OCB. While little research has been done on perceived inter-organizational competition in the public sector, one of the distinguishing features of public organizations is that they are largely sheltered from the competitive pressures of the market, and making government organizations more competitive is an important dimension of New Public Management theory (Peters and Pierre 1998). This result suggests that higher levels of perceived competition *between* government organizations may motivate employees to embark on organizational change. Secondly, the results of the analysis suggest that the influence of the central executive government offices may drive change-oriented OCB. Research has found that the organizational context for public organizations is an important factor in predicting employee level factors (Yang and Pandey 2008; Pandey and Wright 2006). This study is in line with these findings.

4.3.2. Analysis 2: Performance management and organizational identification

Table 8 below shows the results of the second analysis. In this analysis, the performance management variables, control variables, and organizational indicators were regressed on the

mediating variable, organizational identification, using an ordinary least squares estimator. The R-squared value for the model is .362, while the adjusted R-square is .322, which are substantial values. Again, a low variance inflation factor causes little concern regarding multicollinearity between variables, and a test for heteroskedasticity indicated that the error term had a constant variance.

Table 8: Performance management and organizational identification

	Beta	Coefficient	SE	t statistic	95% CI	
					Low	High
Performance management						
Organization level	.163***	.151	.045	3.347	.062	.240
Individual level	.113*	.122	.054	2.233	.015	.228
Organizational climate						
Centralization	.051	.046	.040	1.158	-.032	.125
Red Tape	-.025	-.020	.035	-.560	-.090	.050
Inovation climate	.252***	.236	.051	4.650	.136	.336
Organizational environment						
Inter-org. competition	.103*	.100	.041	2.421	.019	.182
Central government influence	.049	.021	.020	1.094	-.017	.060
Civil society influence	.024	.013	.024	.551	-.034	.060
Demographic controls						
Employment grade	-.078	-.042	.024	-1.719	-.090	.006
Tenure	.118*	.009	.004	2.554	.002	.016
Graduate degree	.042	.062	.064	.967	-.064	.187
Sex (F=1)	-.055	-.073	.057	-1.281	-.186	.039
Constant		1.391	.341	4.083	.721	2.061
R-squared	.362					
Adj. R-squared	.322					
Average VIF	1.9					
N	455					

* p<0.05, ** p<0.01, *** p<0.001

Hypothesis H3 and H4 stated that performance management at the organization and individual level respectively would be positively related to organizational identification at less than p = .05. The results provide support for both of these hypotheses. Organization level performance

management shows a statistically significant ($p < .001$) positive standardized regression coefficient of .163. The relationship between individual level performance management and identification is substantially weaker at .113 ($p < .05$). However, this result meets the minimum criteria outlined in the methodology section of this study. Based on these results, hypotheses H3 and H4 are accepted.

Like in analysis 1, a number of control variables show a statistically significant relationship with the dependent variable. Again, innovation climate has a strong relationship with organizational identification. To the author's knowledge, no study has previously tested whether such a relationship exists, however this result is intuitive and compelling. Innovation climate as well as similar constructs have been shown to be linked to a number of dispositions valuable from an organizational perspective (Im, Campbell, and Jeong 2013), and again the strength of the relationship uncovered here between innovation climate and the dependent variable raises confidence in the primary findings.

The analysis also shows that inter-organizational competition is positively related to organizational identification. Inter-organizational competition makes organizational identity salient for employees as well as brings that identity under threat (Mael and Ashforth 1992). As such, this result is fully in line with existing research on organizational identification.

As explained in the hypotheses section of this study, the acceptance of hypotheses H3 and H4 are necessary conditions for the proposed bootstrap mediation analysis. In the next analysis, the mediating variable as well as the independent and control variables will be regressed on the dependent variable, change-oriented OCB, and a statistically significant correlation between the

mediator and the dependent variable will provide evidence for the necessary conditions such that the mediation analysis may be conducted.

4.3.3. Analysis 3: Organizational identification and change-oriented OCB

The third analysis tests the hypothesis that organizational identification is positively related to change-oriented OCB at statistically significant levels. The model tested in this analysis is identical to model 1, though also contains the mediating variable, organizational identification. Both R-squared and adjusted R-squared values are substantially higher than were shown in the first model, which, when combined with the large and highly significant standardized regression coefficient for organizational identification (.345, p<.001), suggests that the mediating variable explains a substantial amount of variance in change-oriented OCB.

Of the two performance management variables, organization level performance management has a positive, statistically significant coefficient, though the relationship with the dependent variable has shrunk both in size and significance. Performance management at the individual level, however, is no longer significant. As explained in the methodology section of this study, this change in the coefficient and significance level of the independent variables forms the basis of the inferential method of detecting mediation. However, the inferential method cannot assess the mediation effect quantitatively. For the purposes of this study, it is possible to say that the formal conditions necessary for mediation have been satisfied. To reiterate, these conditions are that both independent variables are significantly related to the mediating variable, and second, that the mediating variable is significantly related to the dependent variable. The next section provides a statistical test of the mediation hypotheses based on the bootstrap methodology.

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Table 9: Full model

	Beta	Coefficient	SE	t statistic	95% CI	
					Low	High
Mediating variable						
Organizational identification	.345***	.334	.045	7.437	.246	.422
Performance management						
Organization level	.104*	.093	.042	2.193	.010	.176
Individual level	.070	.072	.051	1.422	-.028	.172
Organizational climate						
Centralization	-.106*	-.094	.037	-2.523	-.167	-.021
Red Tape	.127**	.097	.033	2.943	.032	.162
Inovation climate	.134*	.121	.048	2.507	.026	.216
Organizational environment						
Inter-org. competition	.056	.053	.039	1.362	-.023	.129
Central government influence	.077	.033	.018	1.791	-.003	.068
Civil society influence	-.012	-.006	.022	-.280	-.050	.037
Demographic controls						
Employment grade	-.066	-.034	.023	-1.512	-.079	.010
Tenure	.063	.005	.003	1.422	-.002	.012
Graduate degree	.167***	.235	.059	3.966	.119	.352
Sex (F=1)	-.030	-.039	.053	-.733	-.144	.066
Constant		1.344	.322	4.172	.711	1.977
R-squared	.414					
Adj. R-squared	.375					
Average VIF	1.4					
N	455					

* p<0.05, ** p<0.01, *** p<0.001

4.3.4. Analysis 4: Assessment of mediation effects

The table below shows the results of the first bootstrap analysis testing the hypothesis that organizational identification mediates the relationship between performance management at both the organization and individual level and change-oriented OCB (hypotheses H6 and H7). In the table, independent variables are listed in the first column, dependent variables in the second column, and their corresponding model coefficients in the third column. Next, a bootstrapped

unstandardized regression coefficient is presented in the forth column. This coefficient was produced by taking the mean value of 5000 regressions of the relevant independent variable on the dependent variable, while controlling for all other independent and control variables. As such, these coefficients should differ slightly from the unstandardized regression coefficients as found in the ordinary least squares regressions resulting from previous analyses. The next cell of the table presents a standard error of the parameter produced through the bootstrap analysis. The final two columns show the lower and upper bounds of the 95% confidence intervals. The top row presents the percentile based confidence interval, and the second row presents the bias corrected confidence interval. To reiterate, as all of the hypotheses in this study propose positive effects, the value of interest in these two columns is that of the lower bound of the confidence interval, which must be a positive value for the given hypotheses to be accepted.

Table 10: Bootstrap mediation analysis for hypothesis H6

Independent variable	Dependent variable	Model path	Observed Coef.	Bootstrap SE	95% Confidence Intervals		Confidence interval type
Organizational identification	Change-oriented OCB	b	.334	.044	.244	.420	Percentile based
					.243	.418	Bias corrected
PM: Organization level	Organizational identification	a1	.151	.044	.244	.420	Percentile based
					.243	.418	Bias corrected
-	Change-oriented OCB	a1b	.050	.019	.015	.091	Percentile based
					.016	.093	Bias corrected

Results based on 5000 bootstrap ordinary least squares regressions

The first column shows the bootstrap regression results for organizational identification as a predictor variable for change-oriented OCB. The observed coefficient is positive, and the lower bound of the confidence interval in both the percentile and bias corrected scales is comfortably above zero, with values of .244 and .243 respectively. This result should not be a surprise given

the strength of the relationship between organizational identification and change-oriented OCB uncovered in analysis three. The next row shows the observed coefficient for organization level performance management on the mediating variable, organizational identification. Here also, a positive coefficient with lower bounds of the 95% percentile based and bias corrected confidence intervals above zero indicates that the effect is significant under the proposed statistical criteria.

The final row of the table shows the statistical criteria necessary for either accepting or rejecting hypothesis H6, namely, that organizational identification mediates the relationship between organization level performance management and change-oriented OCB. Here, the observed coefficient, produced through taking the mean value of $a1b$ over 5000 ordinary least squares regressions, shows a positive value at .050. Secondly, both the percentile based and bias corrected confidence intervals for the term show positive lower interval values. These statistics provide evidence in support of hypotheses H6.

Table 11 shows the results of a second bootstrap analysis testing the hypothesis that organizational identification mediates the relationship between individual level performance management and change-oriented OCB (hypotheses H7). As in the first bootstrap analysis, organizational identification shows a positive mean regression coefficient with the lower bounds of both the percentile based and bias corrected confidence intervals well above zero. Individual level performance management also shows a positive mean coefficient when repeatedly regressed on organizational identification, with the lower bound values of both confidence intervals above zero, though only very slightly.

Table 11: Bootstrap mediation analysis for hypothesis H7

Independent variable	Dependent variable	Model path	Observed Coef.	Bootstrap SE	95% Confidence Intervals		Confidence interval type
Organizational identification	Change-oriented OCB	b	.334	.044	.248	.419	Percentile based
					.247	.418	Bias corrected
PM: Individual level	Organizational identification	$a2$	.122	.060	.002	.239	Percentile based
					.001	.237	Bias corrected
-	Change-oriented OCB	$a2b$	.041	.021	.001	.082	Percentile based
					.002	.084	Bias corrected

Results based on 5000 bootstrap ordinary least squares regressions

Finally, the product of organization level performance management and change-oriented OCB over 5000 iterations shows a positive coefficient of .041 with the lower bounds of the 95% percentile based and bias corrected confidence intervals as positive values. The statistic provides support for hypotheses H7, which stated that organizational identification mediates the relationship between individual level performance management and change-oriented OCB.

This chapter presented the results of the primary analysis of this study. In total, seven hypotheses were tested using ordinary least squares and bootstrap mediation estimators, and evidence produced by the analyses provides support for the hypotheses. In the next section, these results are discussed in greater detail, and the major and minor contributions of this study are outlined.

5. Discussion

This study sought to test a number of empirical hypotheses that were derived from a review of literature related to change-oriented OCB, organizational identification, and performance management. Over the past decades, public sector organizations over the world have been subject to an ongoing reform process designed to enhance competitiveness and responsiveness to constituents (Pollitt and Bouckaert 2011). While these reforms have brought significant changes to the ways in which public services are distributed, produced, and conceived, they have also altered the culture and identity of public organizations (Horton 2006; Bourgault and Van Dorpe 2013). Given how widespread these reforms have been, it is useful for scholars to examine carefully and empirically the resultant effects, not only for organizations, but also for the individuals who make their careers within them.

This study focused on change-oriented organizational citizenship behavior (OCB) based on the assumption that in order for public organizations to maintain high levels of performance in the long term, it is necessary for them to continually adapt to emergent conditions both within and outside of the bureaucracy. Organizational citizenship behavior has received little attention in the public administration literature (Vigoda-Gadot and Beeri 2012). However, such a concept is highly relevant for public organizations. Employees who engage in OCB support their organization indirectly through cooperating with their coworkers and upholding organizational rules and norms. However, the extent to which there are distinct drivers of OCB in the public sector remains still very much an open question, and one that future research may profitably examine.

While the benefits of OCB are many, traditional types of citizenship behaviors alone are unlikely to drive the adoption of change and innovation necessary to increase organizational performance in an increasingly demanding environment. Burns and Stalker (1961) argued that organizations which face high levels of environmental change increase their chances of survival to the extent that they become more dynamic and adapt rather than resist these forces. Currently, public organizations are subject to a number of these forces in the form of increased budget pressure, more demand from citizens for direct input into the policymaking process, as well as a rapid diffusion of internet and communication technologies throughout the bureaucracy, among others. Under these circumstances, the extent to which employees are open and oriented to change will play an important role in determining the ability of governments to successfully meet these challenges and adopt the changes necessary to improve performance.

Change-oriented OCB attempts to capture the extent to which individual employees are motivated to implement change within their organizations at the micro-level. Unlike affiliative OCB, these change-oriented behaviors essentially challenge existing processes and working relationships with the goal of introducing small-scale, systematic change that improves performance and efficiency over the long run. Conceptually, change-oriented OCB is closely linked to innovative behavior, and as such the concept is a good fit with the ideology of the NPM reform agenda which has stressed the adoption of innovation in public organizations as a tool to drive performance (Pollitt and Bouckaert 2004).

This study has argued that the extent to which a given employee identifies with their organization should be a strong predictor of their intent to engage in change-oriented behavior. Strongly identified employees integrate the attributes that they perceive in the organization into their own self-concept, a process which results in a cognitive fusion of the fate of the

organization with that of the individual (Ashforth and Mael 1989). Though under certain circumstances, highly identified individuals may resist organizational change (Bouchikhi and Kimberly 2003) or be more reluctant to disrupt positive relationships with coworkers (a defining characteristic of change-oriented OCB) (Tyler and Blader 2009), nevertheless, the case for a positive relationship between organizational identification and change-oriented behavior is theoretically compelling. Through a number of different analyses, this study confirmed this link empirically.

Secondly, this study sought to establish a connection between goal oriented performance management techniques and change-oriented behavior. Change-oriented behavior is concerned primarily with the results of actions and requires a willingness to sacrifice the comfort and familiarity of existing practice in order to achieve future gain, and as such the construct also has an intuitive connection with performance management as a managerial practice. Public organizations have long been criticized for having unclear goals and a general indifference to performance, and reformers have sought to remedy this apparent deficiency by remodeling public organizations in the image of private businesses. Nevertheless, despite the abundance of scholarship on performance management techniques, the actual effects of performance-oriented reforms for public organizations and their employees remains something of a controversy. For instance, performance management at the individual level is theorized to enhance employee performance by linking organizational goals with individual level objectives and making the achievement of those objectives desirable through the use of incentives. However, it is difficult for most public organizations to offer incentives sizeable enough to substantially increase motivation (Stazyak 2013), and worse, the introduction of such incentives may damage intrinsic motivation (Cho and Perry 2012), thereby resulting in a net loss of performance. As such, there

is a need for caution in the implementation of incentive schemes in the public sector. On the other hand, use of performance management techniques in public organizations has been linked to benefits at both the organization and individual level, including improved organizational performance (Cho and Lee 2012) as well as lower levels of turnover intention among employees (Lee and Jimenez 2011).

Goal-oriented performance management seeks to clarify, operationalize, and measure organizational goals and, at the individual level, incentivize employees to achieve them. This study examined the potential relationship between these processes and organizational identification. Fundamentally, performance management may be understood as a mechanism of organizational control, and as such is intuitively linked with organizational identification insofar as individuals who identify strongly act in ways that are beneficial to the organization without constant pressure and oversight from organizational authorities. In this sense, identification may be seen as the basis of Ouchi's (1980) clan-based mechanism of organizational control. On the other hand, some scholars have conceptualized identification as itself a mechanism of organizational control (Alvssson and Willmott 2002; Barker 1993), which may be utilized by managers in order to encourage desirable behavior by employees.

Results-based control is different from bureaucratic control in that it is salient goals and objectives as well as incentives which guide behavior rather than surveillance from organizational superiors. In this sense, results-based control is related to market-based forms of control insofar as the best performers are rewarded most highly. At the same time, however, unlike pure forms of market-based control (such as those described by Ouchi 1980), it is those higher up the organizational hierarchy that set objectives and goals. As such, results-based control differs from both bureaucratic as well as market-based systems, although it has features

in common with them both. Until now, scholars have looked at the relationship between traditional forms of organizational control and organizational identification (Ashforth, Saks, and Lee 1998), but the possibility that results-based control may influence employee levels of identification through a process of enhancing consciousness of organizational goals as well as aligning individual objectives with those goals through the use of incentives has not received attention. This study proposed that performance management techniques at both the organization and individual level would have a direct and positive relationship with employee levels of organizational identification. Due to the causal ordering of the hypotheses of this study, however, it was further proposed that identification would play an important mediating role in the relationship between performance management techniques and change-oriented behaviors. A number of empirical tests provided support for these various hypotheses.

The following sections discuss the different ways in which these results can be interpreted as well as their theoretical and practical implications for public managers seeking to improve organizational performance through the promotion of micro-level innovation adoption.

5.1. Identification as change-orientation

This study hypothesized that organizational identification would be positively related to change-oriented OCB. In past studies, the identification construct has consistently been found to have a strong relationship with traditional, affiliative types of OCB (Riketta 2005; Van Dick et al. 2006; Dukerich et al. 2002), and the findings of this study may represent an extension of this earlier theory to a new domain of organizationally relevant behaviors. Employees who identify with their organizations are said to act as "microcosms" of their organizations in the sense that they

sacrifice themselves to achieve organizational goals and serve organizational values without the expectation of formal reward (Ashforth et al. 2008). For highly identified employees, the potential success of the organization is a sufficient cause for action. Identification is at its core a cognitive fusion of the individual with the organization in the sense that identified employees integrate into their own self-concept the attributes, values, and goals they perceive to inhere in the organization as a whole. Given this, the theory of organizational identification provides a compelling solution to the puzzle of OCB in relation to the rational actor model of motivation. Insofar as engagement in extra-role behaviors have no incentives attached to them, theories of behavior which rest on the assumption that all action is aimed at maximizing utility face difficulties explaining OCB. However, insofar as individuals understand themselves to be acting not for another but for themselves, citizenship behavior is no longer a mystery.

The results of the analysis provide strong support for the hypothesis that identification is indeed related to change-oriented OCB. While these results are in line with scholarship focusing on the relationship between identification and traditional types of OCB, nevertheless the results run counter to another stream of research focusing on how identification impacts employee perception and behavior related to organizational change. Insofar as employees integrate the values and goals of the organization into their own self-concept, the same employees may resist attempts by management to bring change to the organization, perceiving it as a threat to their own identity. Moreover, in terms of self-motivated change behaviors, scholars also point out that employees who identify strongly may also place a good deal of trust in the organization, which can result in an inability to objectivity assess work processes and authority (Dukerich et al. 1998), behaviors that make up the core of change-oriented OCB. Indeed, resistance to change has been directly connected with the strength of employee identification (Jetten, O'Brien, and

Trindall 2002; Bouchikhi and Kimberly 2003). Moreover, research has also found that highly identified employees may focus more strongly on processes of change rather than outcomes (Van Knippenberg, Martin, and Tyler 2006), which, insofar as change-oriented behavior is outcome driven, further suggests that identification may have a negative relationship with change-oriented behavior.

This research is highly relevant to this study. On the other hand, change-oriented behavior is not synonymous with organizational change itself, particularly as it is an employee driven process. Moreover, such behavior can be understood as being in service of current organizational identity insofar as it aims to enhance work processes and relationships in order to better achieve organizational goals. Secondly, as this study measured identification at the organization rather than workgroup level, the extent to which relationships between employees are disrupted through change-oriented behavior should be understood within the context of the positive contribution that this disruption makes to higher-level organizational identity. In other words, because these concepts focus on different levels, the objections raised by scholars have less force when applied to the relationship between organizational identification and change-oriented OCB.

Indeed, it may be the case that some of the objections to the relationship proposed by other scholars may actually provide a clue as to why the relationship between identification and change-oriented behaviors may be a strong one, particularly as they imply the necessity of organizational trust. Change-oriented behaviors are inherently risky for the employee as they fall outside of established and sanctioned behavior roles as well as challenge organizational processes. Attempting to "do things differently" as such may bring employees under fire from their superiors, coworkers, or both. Moreover, imagining transformed and improve work processes takes time away from in-role behaviors, thereby further exposing employees engaged

in change-oriented behaviors to criticism. Given these considerations, it is likely that trust in the organization is a necessary antecedent to change-oriented behaviors.

The relationship between trust and organizational identification has not been explored thoroughly in the existing literature. However, a number of scholars have suggested that the link is both intuitive and meaningful. In an important piece, Rousseau et al. (1998) pointed out that identification can form an important basis of trust in certain types of interpersonal relations. In such relationships, parties will not necessarily calculate the advantages and risks of a given behavior, but rather may act on their own intuition, anticipating understanding from the organizational community. Trust has also been linked empirically to organizational identification in a forthcoming article by Campbell and Im, who argue that trust may be an important antecedent to identification insofar as it functions as a risk reduction mechanism. While trust itself may not be a sufficient condition for change-oriented behaviors, to some extent it will be a necessary one. As such, to the extent that identification is linked with trust in the organization, highly identified employees may be more likely to enact change-oriented behaviors.

From the perspective of public management, a number of implications related to the results of this study are immediately obvious. Public managers or others with authority within organizations may facilitate change performance through enhancing how employees perceive organizational identity and building trust. More fundamentally, however, while at base identification represents a cognitive fusion with the organization, the content of organizational identity, beyond simply being perceived as desirable, may also be an important factor influencing identity-based change-oriented behavior. Organizations that cultivate an identity that promotes innovation in addition to the various dimensions of performance relevant to public organizations (such as those detailed by Brewer and Selden 2000) may further enhance employee

intentions to engage in change-oriented behavior. In other words, managers may enhance identity-based change-oriented behaviors by promoting a change-oriented identity over time. This is not necessarily an easy task, however, as public organizations already have a number of competing identities thrust upon them in their affiliation with different constituent sets, such as central government and citizens.

Another relevant topic for identification in public organizations is that of citizen trust in government. In the wake of widespread disillusionment in the power of government to address problems of central importance to modern society (Pharr, Putnam, and Dalton 2000), as well as sustained attacks on the efficiency and effectiveness of government from the neo-liberal perspective, trust in government has generally been declining over the past decades. Even the NPM literature, which recommends greater empowerment for government employees in order to enhance performance, has as one of its foundations a deep distrust of the intentions of public servants (Kearney and Hays 1998). These trends are highly relevant to studies of identification in the public sector. A fundamental driver of organizational identification is the desire of individuals to enhance their self-esteem, and thus a good deal of literature points to perceived external prestige and reputation being important drivers of identification (Smidts et al. 2001; Fuller et al. 2006). To date, few studies have examined the relationship between declining trust in government and the behavior and dispositions of public servants. However, given the intuitive link between citizen trust in government and the potential for organizational membership to enhance self-esteem, exploring the relationship between trust and identification may be a fruitful path for future research.

5.2. Performance management and change-oriented OCB

Public administration theory over the past decades has embraced the notion of a results-based public sector. Central to this theoretical orientation has been a belief in the promise of performance management and other private sector techniques to enhance organizational performance, bring greater transparency and accountability to the public sector, and ultimately to produce greater trust in government (Moynihan 2008). Given the importance of the rise of performance management in the public sector in both theory and practice, this study examined the extent to which these managerial practices may contribute to employee intentions to engage in change-oriented behaviors, which were suggested to lie at the heart of continual performance improvement over time. While not as strong as the link between organizational identification and change-oriented behavior, the results of this study suggest that performance management techniques play an important role in driving employees to engage in organizationally beneficial change practices that lie outside of the boundaries of their formal job responsibilities.

Performance management was conceptualized in this study as having two dimensions. Firstly, at the organization level, performance management seeks to clarify, prioritize, operationalize, and measure organizational performance while also frequently reviewing organizational objectives and processes based on that performance information generated through performance measurement. Secondly, performance management was also conceptualized as an essential human resource management technique that involves the promulgation of results-based objectives for individual employees and the provision of material incentives linked to them. Fundamentally, both of these practices are goal oriented insofar as they attempt to sharpen employee understanding of organizational goals and produce behavior in service of their attainment. Based on a review of the literature, both of these dimensions of performance

management were hypothesized to have a direct relationship with change-oriented behavior. The results of the analysis largely confirmed these hypotheses. While the mechanisms linking performance management at both the organization and individual level were outlined in the literature review section of this study, nevertheless a number of additional comments may be made here highlighting both the theoretical and practical relevance of these results.

Firstly, research has illustrated the importance of managerial behavior in providing legitimacy for organizational reform (Cho and Lee 2012; Whitener et al. 1998). Performance management at the organizational level, through its communication of organizational goals to employees as well as its commitment to measurement and process adjustment, signals to employees the importance of performance to the organization as a whole. Moreover, the argument was made that, as change-oriented OCB inherently involves an element of risk, by demonstrating a commitment to performance, management may provide employees who challenge work processes in order to improve them with a platform upon which to justify their disruptive, extra-role behavior. While scholars have suggested that externally imposed goals may damage employee motivation by affecting their sense of self-determination (Locke 1996), the results of this study appear to suggest otherwise.

Secondly, unlike the relationship between organizational identification and traditional OCB, strong arguments can be found in both the theoretical and empirical literature that performance management techniques may discourage extra-role behavior by enhancing the distinction between formal job performance and extra-role behaviors, incentivizing only the former, and moreover, sharpening employee exchange ideologies, particularly with regard to performance pay, among other reasons (Locke 1996; Taylor and Beh 2013; George and Jones 1997; Morrison 1996; Eisenberger et al. 1986). However, and again, unlike organizational identification, change-

oriented behavior has a number of characteristics upon which a theoretical link with performance management techniques can be made. These include the possibility that clear and challenging goals incentivize creativity as a means by which to achieve them (Locke and Latham 2002; Wook and Locke 1990), providing both a performance-based context against which a range of extra-role behavior may be judged for its appropriateness as well as defended, as well as, in relation to performance-based incentives, encourage employees to adopt processes which make them more productive. In general, while it has been suggested that the imposition of challenging goals on employees may discourage extra-role behavior as it limits resources such that employees cannot afford to engage in it (Wright et al. 2003), performance-based goals may work to produce an atmosphere in which employees can't afford not to engage in change-oriented behavior.

From a theoretical perspective, these findings have interesting implications. Firstly, there is no shortage of studies that detail the problems related to the different dimensions of performance management described in this study as well as their implementation in the public sector (Stazky 2013; Perry, Engbers, and Jun 2009; Moynihan 2008). In general, public organizations are not subject to market-based competition and nor do they have any straightforward metric available by which organizational performance can be measured. Moreover, managerial and more generally other operating procedures drawn from the private sector that affect organizational decision-making and the allocation of public resources have been theorized to be largely incompatible with the public-oriented missions and values of public organizations (Frederickson, Smith, and Larimer 2003). Based on these and other considerations, some have argued for a reimagining of performance management in the public sector which better takes into account its

limitations and thus does not make the acceptance of the practice conditional upon unreasonable expectations (Moynihan 2008).

One of the primary theoretical contributions of this study thus becomes forging a theoretical and empirical link between performance management practice at both the organization and individual level and change-oriented, extra-role behavior. This study has assumed that performance gains over the long term are better understood as the result of an aggregate of micro-level performance optimizations throughout public organizations. While the introduction of performance management in public organizations has perhaps not brought with it the immediate performance gains suggested by some enthusiasts, nevertheless, whether performance-oriented managerial techniques may improve organizational functioning over the long term remains very much an open question (Jones and Kettl 2003). By linking performance management at both the organization and individual level to change-oriented behavior, this study helps to lay the theoretical foundation for such a claim.

A second important theoretical implication of this study is that scholars wishing to fully grasp the consequences of performance management techniques at the individual level may need to broaden the scope of behaviors relevant to the concept. Fundamentally, performance management systems are designed to increase formally defined performance, both at the organization and individual level. One of the primary mechanisms underlying the theoretical link between performance management techniques and performance is the idea that the criteria applied in the assessment of performance relates fundamentally to the attainment of pre-specified objectives rather than the extent to which organizations and employees follow precise operating procedures. However, while this shift of focus emphasizes results, it nevertheless also helps to undermine the tendency of public employees to cling to formal procedures and rules in the

execution of their jobs. In other words, performance management may open a space, so to speak, wherein employees feel more comfortable experimenting with novel strategies to reach their goals. In this sense, despite the negative relationship between performance management and OCB suggested by the theoretical and empirical literature, performance management may be fundamentally related to certain types of extra-role behavior on the part of public employees. This study found a link between performance management techniques at both the organization and individual level and change-oriented behavior. Future research may extend this relationship to other types of nontraditional extra-role behavior.

From a practical perspective, this study suggests that performance management indeed should improve performance over the long term by encouraging the adoption of a multitude of micro-level process enhancements by frontline employees. However, it must be admitted that the measures used to capture performance management techniques in this study were limited, and do not represent the range of possible meanings or uses of performance management. In other words, while this study attempted to maximize generalizability by employing generic measures of performance management based on a review of the literature, nevertheless the precise way in which performance management systems are implemented may lead to more or less change-oriented behavior. Particular performance management systems may damage change-oriented behaviors to the extent that they leave the employee no time to contemplate ways in which to improve performance, but rather simply force them to work harder. Moreover, while this study has suggested that results-based control and process-based control are distinct constructs, there is no guarantee that organizations which adopt performance management systems of organizational control do not also employ process-based controls. In this case, again, employees may be forced to work harder rather than smarter. This is a question this study leaves for future research.

A final practical implication of this study's findings can be summarized as follows. The link between performance management and change-oriented behavior is compelling theoretically and may have concrete performance-related benefits for public organizations. However, it cannot be overlooked that these performance gains may be attained at the expense of traditionally understood citizenship behaviors. Affiliative citizenship behaviors, whether directed at the organization or its members, have long been recognized as being fundamentally related to the functioning of organizations. If performance management does indeed discourage employees from engaging in traditional types of OCB, then this outcome cannot be ignored and must be considered an additional cost of performance management reforms. Unfortunately, from a practical perspective, the results of this study do not provide managers with any concrete strategy that may be used to offset the citizenship related costs of performance management. Again, this question remains for future study.

5.3. The mediating role of organizational identification

This study attempted to determine empirically the extent to which performance management as well as organizational identification can be understood as antecedents to change-oriented behavior in public organizations. However, based on the theoretical relationship between the various constructs investigated in this study, it was also proposed that organizational identification, as a primary psychological factor driving employee behavior, may act as a mediating mechanism in the relationship between performance management and change-oriented behavior. These hypotheses were supported by the analysis. Performance management at the organization level was found to be partially mediated by identification, while at the individual

level, the relationship between performance management and change-oriented behavior was fully mediated.

At the organization level, the theoretical mechanisms linking performance management to identification are related most importantly to the practice of clarifying and operationalizing organizational goals. As such, this study focused on goal-oriented dimensions of performance management at both the individual and organizational level. While the relationship between these constructs is intuitive as well as fully consistent with the social identity theoretical foundations of organizational identification, surprisingly, few studies have linked results-based management techniques with identification. Making this link thus represents one of the theoretical contributions of this study. Indeed, while goal clarity has been linked to higher levels of organizational commitment (Stazky, Pandey, and Wright 2011), nevertheless, this study proposed a distinct set of theoretical mechanisms linking organization level performance management and identification that have not been presented elsewhere in the literature. The existence of clear, prioritized, and operationalized organizational goals raises organization-level identity to salience for employees, helps employees understand how their role in the organization contributes fundamentally to these goals, and provides a platform upon which identification with the organization may form. Moreover, insofar as performance management is fundamentally a channel of communication between managers and employees and the operationalization of organizational goals provides a more complete narrative of organizational identity, goal-oriented performance management at the organization level may provide a context for sensemaking.

At the same time, however, it must be noted that performance management at the organization level maintained a statistically significant and positive relationship with the dependent variable even after the effects of identification were taken into account. This is an interesting finding,

about which two comments are immediately relevant. Firstly, this finding highlights the importance goal-oriented organization level performance management for change-oriented behaviors. As such, clearly defining organization level goals, consistently measuring progress towards them, and sharing this experience with all employees should be understood as a fundamental strategy for maximizing an organization's human capital. Moreover, like much previous public administration research, this finding highlights the value of competent leadership for public organizations (Vigoda-Gadot and Beeri 2012; Moynihan, Pandey, and Wright 2011).

On the other hand, that organization level performance management was not fully mediated by identification raises another question, namely, via which cognitive processes does this type of managerial behavior encourage change-oriented OCB? Answering this question in any satisfying way is beyond the scope of this study. Nevertheless, another theory of motivation popular in the public sector research may shed some light on this relationship in future studies. While identification is fundamentally a value independent construct in that it is possible to identify with any number of organizations no matter the content of organizational identity, the motivational theory of public service motivation (PSM) takes a different approach (Perry and Wise 1990; Perry 2000). PSM posits a particular type of identity for public organizations that can drive individuals predisposed to the components of this identity to higher levels of performance. Public employees motivated by PSM, like identified employees, are driven by altruism and other feelings of connectedness to exert effort and even sacrifice themselves on behalf of others and their organizations. What distinguishes the two concepts, however, is that whereas for identification, the set of individuals on whose behalf the employee will make sacrifices is coincidental with a set of organizational members, for employees driven by PSM, this set is essentially boundless. As such, the extent to which clear and measurable organizational goals

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creates the foundations upon which employees can view their organization as effectively serving the public may alter any presumed self-interested calculation on the part of employees, including those relevant in the pursuit of change-oriented OCB. While the antecedents of PSM have been theorized as largely extra-organizational and embedded in societal institutions (Perry 2000), on the other hand, some scholars have argued that organizational factors can impact PSM levels, and in particular, the behavior of leadership (Wright, Moynihan, and Pandey 2012). Moreover, PSM has long been theoretically linked to support for organizational change (Perry and Wise 1990), a link which has recently found some empirical support (Wright, Christensen, and Islett 2013). Again, while further consideration of this question is beyond the scope of this study, the suggestion nevertheless is significant insofar as it proposes a solution based on a construct understood to be particularly relevant for public organizations.

The results of this study found that the relationship between performance management at the individual level and change-oriented behavior was fully mediated by organizational identification. While this relationship was generally not as strong as that between organization level performance management and change-oriented behavior, nevertheless a certain level of confidence in the results is possible due to the high level of variance explained in both organizational identification and change-oriented behavior that may be attributed to a well specified model. Centralization, which can also be understood as the extent to which employees do not experience discretion in the course of meeting their objectives, is fundamentally related to results-based managerial strategies in that it involves an emphasis on behavior-based controls for front-line workers. As such, by controlling for centralization, the model accounts for a second relevant dimension of NPM-style organizational reform as it relates to employee discretion. Secondly, innovation climate was found to have a strong relationship with both identification and

change-oriented behavior. Again, emphasizing innovation and creativity on the part of frontline workers is fundamentally related to NPM-style reform, of which performance management is a critical component. These two covariates should be understood as being closely related to individual level performance management in that they are both strategies adopted to either control employees or encourage certain types of behavior at work. While the relationships uncovered between individual level performance management, organizational identification, and change-oriented behavior were admittedly weak, nevertheless, given the confidence that can be placed in the results as well as the fact that few studies have examined these relationships previously, findings related to performance management at the individual level constitute one of the major contributions of this study.

One possibility accounting for the weak relationship between individual level performance management and organizational identification is the possibility that the relationship is mediated by other confounding factors. For example, one of the goals of introducing performance-based pay in the public sector in South Korea was to increase individual competitiveness (Lee and Moon 2010). Intra-organizational competition has long been recognized as having a negative effect on identification (Mael and Ashforth 1092), however, and as such, higher levels of competition between employees may act as a confounding factor in the relationship between individual level performance management and identification. As such, future studies might test whether accounting for intra-organizational competition alters the relationship between performance management and organizational identification, either by controlling for the construct in a regression model, or testing for mediation effects.

At the same time, while the relationship between individual level performance management, and particularly material incentives, and organizational identification has not been examined

extensively in the existing literature, nevertheless, certain comments made by prominent scholars focusing on the concept of identification have suggested that such a relationship may exist. For instance, Rousseau (1998) argued that a particular relationship between identification and organizational rewards was likely to be self-reinforcing over time. Insofar as individual level performance management bases its fundamental motivational strategy on the provision of performance-based incentives, this theoretical linkage is relevant here. More relevant still is the suggestion made by Ashforth et al. (2008) that, while scholars have largely focused on antecedents to OI that generate identification at a precognitive level, nevertheless research may yet uncover rational motivations for identification. In particular, incentive-based organizational control systems may be particularly important foundations of identification insofar as they are founded on the concept of the intentional alignment of the goals of the organization with those of the individual. Organizational identification itself has been reimagined as a form of organizational control by a number of scholars, based on the assumption that highly identified employees will sacrifice themselves in the interests of the organization even when those interests conflict with their own (Alvesson and Willmott 2002; see also Ouchi 1980). As such, conceived as a system of organizational control, performance management at the individual level may be more fundamentally related to identification than the results of this study suggest.

5.4. Contextualizing the results: Identification and change-oriented behavior in Korean government

This study tested hypotheses related to performance management, organizational identification, and change-oriented OCB using a survey-based dataset whose employees were government

workers employed in central government ministries in South Korea. While the hypotheses tested in this study are assumed to rest on universal foundations rooted in organization theory and human psychology, nevertheless particular characteristics of the context of this study may play a role in shaping its results. As such, a few words should be said at this time about the relationship of Korean public organizational culture to the main constructs of interest in this study.

The cultural characteristics of the Korean public organizational context are relevant to the relationship between performance management and change-oriented behavior. Clear and measurable organizational goals should contribute to performance by making public managers more accountable to the public, while at the individual level encouraging performance by incentivizing employees. That individuals are driven by self-interest is a fundamental assumption related to the possibility that the goals of the individual can be brought into line with those of the organization through properly designed incentives. However, while these individual level assumptions are reasonable in isolation, they are somewhat more complicated when understood within the context of high-identification cultures, such as South Korea. Scholars have suggested that incentive-based systems may harm the social fabric of organizations with a strong propensity towards collective identity (Taylor and Beh 2013), such as is the case in East Asia. Reward systems that encourage individual performance essentially individuate employees and potentially isolate them from the group, which is relatively unproblematic theoretically in individualistic organizational cultures. However, this assumption does not necessarily hold for the case of Korean public organizational culture (Lee and Moon 2010). Moreover, while a results-based culture in the United States, for example, is attempting to replace a more procedurally oriented culture where salary and promotion are determined largely on the basis of rank and experience, in Korea these dimensions of an individual's organizational identity go

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beyond the organization itself and help to define the person as a human being (Frederickson 2002; Im et al. 2013). For example, organizational tenure will inevitably correlate highly with age, which has symbolic value in East Asian cultures. While such individual characteristics should not be considered in performance assessments, nevertheless the cultural context of public organizations makes them impossible to ignore. In other words, insofar as the characteristics which distinguish individuals within their organization extend beyond the boundaries of the formal organization, the more difficult as well as potentially destructive attempting to alter social relations within the organization will be.

Secondly, some scholars have criticized attempts to manage innovation in the public sector through performance management and benchmarking strategies. For instance, Frederickson (2003) argues that ranking systems are socially constructed (see also Moynihan 2008) and make use of incomplete information. The author also questions the possibility that managers can effectively utilize information gathered from benchmarking and ranking initiatives to positively affect organizational change. While these criticisms are valid, nevertheless they do not address the potential motivational impact of organizational ranking systems for employees, and thereby ignore an important individual level outcome. Korean society has a particularly strong tendency to rank institutions in terms of quality and performance, and this study suggests that such rankings may affect employee behavior and attitudes significantly. These remarks suggest an additional path by which performance management in the public sector may affect the performance of public organizations, particularly in rank-conscious societies.

Thirdly, highly collectivist cultures may facilitate affiliative types of OCB such as helping coworkers and upholding informal organizational norms. However, this may not be the case for change-oriented behaviors, despite this type of behavior falling generally into the category of

extra-role behavior. The reason why this is so is that change-oriented behavior essentially challenges organizational practices, and as such, engaging in this type of behavior, in spite of producing potential performance gains, may also upset interactional norms between coworkers. Korean public organizations, despite extensive results-based reforms over the past 15 years, have not abandoned entirely traditional approaches to organizing and continue to rely on hierarchy and formalism, while at the same time being subject to a wide variety of informal norms which are continuous with Korean culture more generally (Im et al. 2013). Again, in general it is more difficult to separate the person from the position in South Korea than it is in the Western context. Given this, those individuals who disturb the harmony of the organization, no matter the performance-related consequences, may face informal sanctions.

While it has been suggested by both theoretical and empirical evidence that performance management and particularly individual level incentives may undermine dimensions of the collectivist culture of public organizations, thereby disrupting functional norms and ultimately undermining performance, this study nevertheless demonstrated a positive link between performance management and identification. However, the consequences of identification are not limited to change-oriented behaviors, and this study has already suggested that other types of extra-role behavior, such as affiliative types of OCB, may also result from increased identification. However, scholars have also cautioned that highly identified employees may be more given to certain types of dysfunctional extra-role behaviors in addition to positive ones. One such behavior is that of 'pro-organizational workplace crime' (Vadera and Pratt 2013). Pro-organizational crime captures extra-role behavior that violates existing laws for the sake of the organization, rather than out of self-interest. In certain contexts, such behavior has many similarities with corruption, which is a central concept for scholars of public administration and

government. Unfortunately, South Korea suffers from a perceived level of corruption relatively higher than its level of economic development would predict (Lee and Jung 2010). However, while there are no shortage of studies detailing the causes and consequences of corruption in Korea and East Asia, few studies make a link between the strong identification-based culture of public organizations in Korea and the potentially corrupt behavior of government employees. As Vadera and Pratt (2013) hypothesize, highly identified employees (over-identified, in their terminology) may be motivated to commit crimes on behalf of the organization in order to protect their own identity from the release of negative information or other damaging phenomena. The motivation to engage in corrupt behavior on behalf of the organization is related to OCB in the sense that it cannot be explained easily by self-interested, rational motives alone. However, also like OCB, identification sheds light on the motivations for group-base corruption based on the psychological fusion of individual and organizational goals. While, as mentioned, few studies have used identification as a foundation for corruption studies, nevertheless such a path of research may be particularly relevant in East Asian contexts, including Korea.

While a number of NPM reforms, including the introduction of results-based management systems and public organizations, have not been perfectly successful in South Korea, nevertheless the reform drive continues and is unlikely to be reversed in the foreseeable future. Furthermore, these remarks about the relationship between the independent and dependent variables in this study are not intended to cast doubts upon the results but rather highlight the need for future research to validate them across different organizational contexts.

6. Conclusion

This section concludes this study. In the brief sections below, the principal findings of this study are summarized, and a number of limitations of the analysis are detailed. Also discussed are the conditions under which the results of this study may be used as an inferential foundation in other contexts, such as Western countries. Finally, several questions which this research implies but leaves unanswered are described.

6.1. Summary of principle findings

Identity and identification are first-order, foundational constructs in organization theory and the organizational behavior literature. Identity functions as an evaluative frame against which the appropriateness of individual behavior may be assessed independently by organizational members, and thus understanding how identity and identification affect employee action is an important task for scholars of public organizations. However, until now, little research dealing with public organizations has sought an understanding of identification, nor of potential antecedents which may be unique to public organizations. Such a study is highly relevant, and this study has demonstrated how identification may function as a platform for employee performance as well as play an important role in clarifying the relationship between managerial behavior and employee action.

This study makes several distinct contributions to the public administration literature, and to the field of organization studies more generally. Firstly, this study hypothesized that organizational identification would be a reliable predictor of employee change-oriented behavior.

Organizational identification has long been recognized as an important antecedent to traditional types of affiliative citizenship behaviors, and this research elaborates on this relationship and extends it to a distinct and important category of extra-role action within organizations. This extension of the consequences of organizational identification is nontrivial for two reasons. Firstly, the distinct characteristics of change-oriented behavior, such as the potential of such behavior to disrupt organizational functioning in the short term as well as create friction between coworkers, are counter to the central tendencies of highly identified employees, who tend to act in ways supportive of existing processes and relationships (Tyler and Blader 2009). As such, a process of theory building was undertaken in order to address these concerns and clarify the relationship between identification and change-oriented behavior, which represents an extension of the theory of organizational identification itself. Secondly, this study also detailed the importance of change-oriented behavior as a driver of organizational performance in the long term. By focusing on a key antecedent of such behavior, then, this study also makes a contribution to the literature on organizational performance in the public sector.

A study focusing on identification in public organizations is timely. Over the past several decades, public administration discourse and practice has increasingly emphasized the performance in public organizations, and reform programs which share this underlying goal have spread widely across the world. The theoretical significance of this shift as well as its practical consequences for public organizations is not yet fully understood, but nevertheless the magnitude of the change has led a number of scholars to characterize the reform program as altering the identity of public organizations and their employees (Du Gay 1996; Horton 2006). Common to nearly all reform programs has been a sense of optimism that managers can significantly impact the performance of their organizations and agencies by utilizing performance information

collected through a process of ongoing performance monitoring in key strategic and allocative decisions. Despite the wide deployment of performance management techniques, however, there is little consensus among public administration scholars as to their true effectiveness. This study approaches this question by focusing on the effects of performance management techniques at both the organization and individual level in relation to the behavior of front-line employees.

The results of the analysis indicate that performance management techniques at the organization and individual level are significant predictors of change-oriented behavior. While such a relationship may at first seem intuitive, nevertheless there are relatively strong arguments that such a relationship may not exist based on the fact that various performance management techniques have consistently found to be negatively related to traditional affiliative types of citizenship behavior (Deckop, Mangel, and Cirka 1999; Wright et al. 1993). Based on a thorough examination of the literature related to both performance management as well as change-oriented behavior, a theoretical argument was proposed which answered these challenges. As such, the findings of this study related to performance management and change-oriented behavior extends the theory of performance management by linking it with a significant but understudied type of behavior critical for organizational performance. At the same time, however, this study did not empirically address the question of the relationship between performance management and traditional types of OCB, and as such, whether higher levels of change-oriented behavior driven by performance management represents a net gain for public organizations remains an unanswered question.

Finally, based on the theorized causal ordering of the hypotheses of this study, the extent to which organizational identification functions as a psychological mechanism mediating the relationship between performance management techniques and change-oriented behavior was

also addressed empirically. The results of a bootstrap mediation analysis provide support for this hypothesis in relation to performance management at both the organization and individual level. This finding is significant firstly as it underscores the importance of identification as a platform for employee performance in public organizations. Secondly, by situating organizational identification as a mediating mechanism between performance management and change-oriented behavior, the study also extends the theory of performance management by clarifying its relationship to an important construct in organization studies.

6.2. Limitations and generalizability

The empirical contributions of the study as outlined in the previous section command a certain level of confidence based on a process of careful theory building, the use of well-established measurements, and the rigor of the analysis. However, this study also has limitations which necessitate a degree of caution when interpreting the results.

First of all, this study uses cross-sectional data for the primary analysis. While this study relied on both logic and theory in the ordering of the constructs of interest, due to the nature of the data, it is not possible to claim with certainty that the relationships uncovered are absolutely causal. Temporal, in addition to logical precedence, must form the foundations of causal certainty in the social sciences, and such certainty cannot be provided by cross-sectional data (Mathieu and Taylor 2006). While this limitation is widely shared by a great deal of studies, it is nevertheless significant.

As outlined in the methodology section of this study, a number of strategies were adopted in order to reduce common method variance (CMV), which is known to afflict single-source,

survey-based research. While a one factor test indicated that CMV was not a significant issue with the data, this test is limited (Podsakoff et al. 2003), and this limitation also tempers confidence in the results to a certain extent.

A related issue involves the source of this study's measurement of the dependent variable, change-oriented OCB, which was collected from employees rather than an independent data source, such as supervisor ratings. This study addressed this concern in the methodology section. While the use of independently sourced data for the dependent variable is not without its own limitations, it has nevertheless been recommended as a strategy to further reduce CMV in research based on survey data (Bettencourt 2004). As such, this measurement strategy also represents a limitation of this study.

This study used survey data collected from civil servants working in central government ministries in South Korea. As outlined in both the literature review and discussion section of the study, the Korean administrative and organizational context has a number of features which distinguish it from the American or European contexts, where the majority of organizational research has been conducted, as well as other contexts around the world. These features include a different understanding of authority and discretion, a weak separation of individual and organizational identity, as well as a unique context of historical development. These features are relevant to the interpretation of the results of this study. At the same time, however, the theoretical foundation of the hypotheses tested in this study were not derived from the distinct empirical context, but rather from organization and public administration literature more generally, and in a sense focus on a pre-cultural level. Because of this, the context of this study should not a priori limit its generalizability based on any theoretical grounds. At the same time, however, while the great majority of public administration scholarship continues to focus on the

Western context, this context itself is not necessarily representative of all organizational contexts. And while the Korean administrative and organizational context has a number of distinct characteristics, many of the fundamental traits of public administration in Korea are common across East Asia, and also relevant to other non-American contexts. Due to this, the results of this study are at a minimum generalizable beyond Korea itself.

6.3. Unanswered questions and concluding remarks

This study leads number of questions unanswered that may form the foundation of a research program going forward. Firstly, hypotheses outlined in the study proposed a number of underlying theoretical mechanisms that remain at the conjectural level. One salient concept that arose repeatedly throughout the literature review is that of organizational trust, and how this construct may be related to performance management, identification, and change-oriented behavior. Like identification, trust is a construct fundamental to organization studies, and may be significantly related to the variables of interest in this research. For instance, as one of the underlying mechanisms outlined in this study relates to the role of performance management in reducing the perception of risk on the part of individual employees, trust in management's commitment to performance may positively mediate the relationship between performance management and change-oriented behavior. Moreover, a recent study by Campbell and Im (forthcoming) has made the case that trust may be an important antecedent to identification in public organizations. Future research may attempt to uncover these trust-based mechanisms by focusing on the relationships between performance management, uncertainty, and the perception of risk.

Secondly, as mentioned previously, the question remains as to the relationship between performance management and traditional affiliative types of OCB. Theoretical and empirical research has found that many concepts related closely to performance management may discourage the enactment of citizenship behaviors by employees. At the same time, identification has long been recognized as an important driver of affiliative types of OCB. Because this study's results suggest that organizational identification mediates the relationship between performance management and change-oriented behavior, the possibility presents itself that, while performance management techniques may have a negative direct relationship with traditional types of OCB, they nevertheless may have a positive indirect relationship with the concept via their effect on organizational identification. This is an interesting question, and research that sheds light on this problem may provide an answer to the practical concern that the net gains from the implementation of performance management techniques may be negative when taking into account their impact on affiliative types of OCB.

Finally, the study adopted a quantitative strategy in order to answer the research questions presented in the introduction. One of the strengths of the quantitative approach to questions of organization theory is the generalizability of the results. But precisely because of this quality, quantitative research designs focus on average rather than outlying cases. Organization theorists have long suggested that an organization's most highly motivated and talented employees may have a disproportionate impact on their organizations, including organizational performance (Barnard 1938; March and Simon 1958). At the same time, a number of studies related to identification which focus on edge cases have produced interesting theory and results relevant to the conclusions of this research (Dutton et al. 1994; Bouchikhi and Kimberly 2003). As such, the topics addressed in this study may be further illuminated through the adoption of a mixed

methods approach that incorporates relevant qualitative data in order to better grasp potentially important edge cases related to identification and change-oriented behavior.

Identification may yet prove to be a critical phenomenon with consequences for the performance of public organizations. As this question has remained largely unexplored by public administration scholars, by raising it alone, this study helps to lay the foundation for a worthwhile and practical research agenda.

Appendix 1: Exploratory factor analysis

Table 12 shows the results of a rotated factor analysis on all independent variables used in this study. While exploratory factor analyses can capitalize on chance and are therefore not recommended as a tool to assess the discriminant validity of constructs (Conway and Huffcutt 2003), in this case all items except for red tape (likely due to its single item measurement) load onto their proposed underlying factors.

Table 12: Rotated factor solution for items used in this study

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
CO-OCB	.82	.15	.21	.14	.02	.10	-.02	-.01	.03
	.81	.06	.23	.09	-.02	.12	.02	-.03	.03
	.81	.10	.20	.13	-.09	.09	.02	.10	.07
	.73	.03	.12	.07	-.10	.13	.18	.11	.02
PM-IND	.07	.78	.10	.28	.00	.12	-.03	-.02	.10
	.15	.75	.12	.27	-.12	.16	.02	-.06	-.02
	.01	.70	.08	.10	.21	-.08	-.18	.05	.22
	.18	.65	.10	.04	-.30	.28	.07	.02	-.09
	.15	.63	.07	.14	-.18	.35	.09	-.01	.02
OI	.25	.10	.78	.08	.04	.18	.06	.01	.00
	.27	.16	.77	.18	.06	.17	.03	-.01	.06
	.11	.03	.70	.10	-.08	-.11	.01	.11	.13
	.15	-.03	.65	.17	-.11	.14	.16	.10	-.04
	.35	.22	.64	.12	.00	.20	-.04	.03	.04
INO-CL	.16	.21	.15	.77	-.10	.13	.04	.01	.03
	.17	.17	.16	.75	-.15	.20	-.01	.02	.07
	.12	.15	.13	.69	-.07	.35	.02	.01	-.04
	.15	.29	.15	.66	-.14	.13	.03	-.03	.08
REDTAPE	.07	-.17	-.15	-.46	.28	.10	.08	.23	-.14
CENT	-.08	.00	-.05	-.13	.84	-.03	.01	-.05	.07
	-.05	-.11	.02	-.17	.79	.00	.01	.10	.03
	-.02	.01	-.01	.11	.77	.00	.04	-.01	-.08
	-.02	-.12	.05	-.29	.69	-.05	.06	.07	-.15
PM-ORG	.12	.18	.17	.10	.01	.81	-.02	-.07	.04
	.12	.10	.11	.18	.01	.79	.04	-.11	.16
	.19	.15	.13	.30	-.08	.73	.05	.08	.06
INFL-GOV	.02	.00	.03	.00	.03	.00	.90	.03	.18
	.06	-.03	.06	.03	.03	.04	.90	.04	.19
IO-COMP	-.01	-.12	.00	-.09	.09	-.09	-.02	.79	.03
	.07	.06	.14	.06	-.02	-.01	.07	.74	.03
	.10	.07	.03	.05	-.01	-.02	.09	.73	-.14
INFL-CIV	.09	.08	.08	.04	-.04	.10	.21	.02	.85
	.02	.05	.01	.06	.00	.09	.25	-.06	.85
Eigenvalue	8.1	3.1	2.3	2.3	1.7	1.5	1.4	1.2	1.0
Proportion	.24	.09	.07	.07	.05	.04	.04	.04	.03
Cumulative	.24	.34	.41	.48	.53	.57	.62	.65	.68

Appendix 2: Structural equation modeling

This study utilized a series of bootstrap linear models in order to test the extent to which organizational identification could be considered a mediator in the relationship between performance management at the organization and individual level and change-oriented OCB. This methodology is well established and is one of the most popular approaches adopted in the social sciences to test mediation effects, both in social psychology and public administration. However, while a consensus has not been reached in the methodological literature, it has been suggested that structural equation modeling (SEM) performs better than sequential independent linear models in detecting mediation effects (Iacobucci, Saldanha, and Deng 2007). Moreover, several means are available by which to test for common method variance (CMV) that are not applicable when relying on independent linear models. This section provides an alternative analysis employing SEM. First, confirmatory factor analysis (CFA) is performed in order to determine whether the hypothesized measurement model fits the data well. Next, a series of structural equation models are estimated, testing the main hypotheses of this study. The figure below summarizes these hypotheses.

Figure 5: Summary of the hypotheses to be tested by SEM
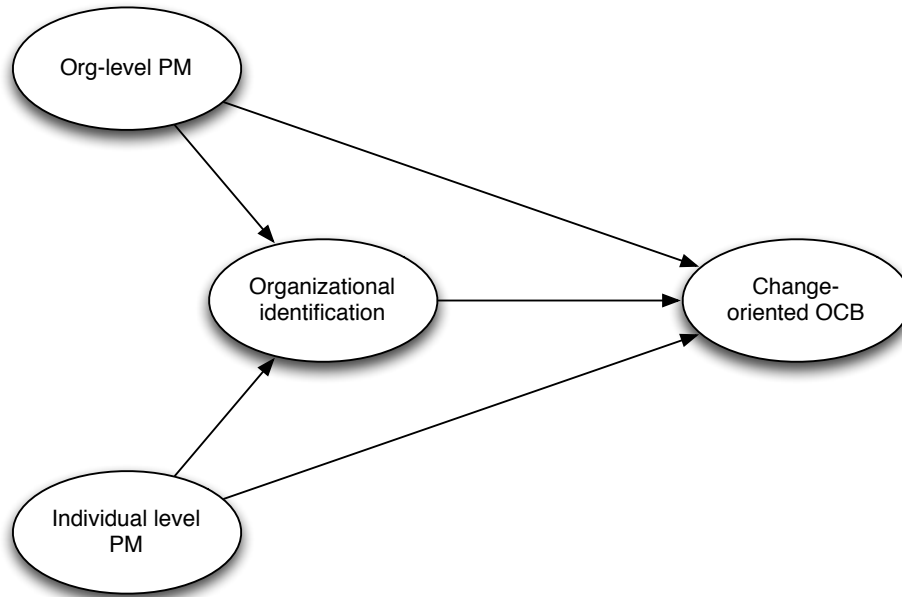
Confirmatory factor analysis

In order to assess the extent to which the proposed measurement and structural model is a good fit with the data, a number of goodness of fit indices are used. These are the chi square test, the Comparative Fit Index (CFI), Non-normed Fit Index (NNFI), the Standardized Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA). These fit indices are often employed in the social science literature and have been recommended by a number of methodology scholars (Sharma et al. 2005). The relevant values against which goodness of fit can be evaluated are summarized in the following table.

Table 13: Goodness of fit thresholds

Fit index	X2	CFI	NNFI	SRMR	RMSEA
Acceptable value	p>.05	>.90	>.90	<.08	<.08

The following table shows the results of five CFAs that evaluate the goodness of fit of the measurement model of this study.

Table 14: Confirmatory factor analysis

	X2	DF	CFI	NNFI	SRMR	RMSEA
1 Factor	1696.05	119	0.58	0.52	0.12	0.17
2 Factors	1113.22	118	0.74	0.70	0.08	0.13
3 Factors A	660.83	116	0.86	0.83	0.07	0.10
3 Factors B	779.28	116	0.83	0.79	0.07	0.11
4 Factors	326.35	113	0.94	0.93	0.05	0.06

2 Factors: Equating the two PM variables, and OI and CO-OCB

3 Factors A: Equating organizational identification and change-oriented OCB

3 Factors B: Equating Organization and individual level performance management

Note: All chi-square values statistically significant at p<.05

The first row of statistics in the table shows the goodness of fit indices for a single factor model. The results indicate that the single factor solution is not a good fit for the data, which provides additional evidence against CMV (Podsakoff et al. 2003). The second column presents the goodness of fit indices for a two factor solution, which treats individual and organization level performance management as a single factor and organizational identification and change-oriented OCB as a single factor. Again, fit indices for this two factor solution fall well below the established criteria for good model fit.

The third and fourth rows of the table, labeled 3 Factors A and 3 Factors B, equate organizational identification and change-oriented OCB is a single factor and organization and individual level performance management as a single factor, respectively. Again, goodness of fit indices indicate that both of these solutions are a poor fit with the data.

Finally, the final row of the table, labeled 4 Factors, presents goodness of fit indices for the proposed four factor model. All indices except for the chi square test indicate that a four factor solution fits the data well. Moreover, the statistically significant chi square should not be a serious cause for concern, as this statistic is highly conservative as well as sensitive to sample size, and therefore is used as the basis of model rejection only in special circumstances (Bentler and Bonnett 1980).

Structural model

Four structural equation models representing different sets of hypotheses were estimated and the same goodness of fit indices used in the previous CFAs are used in order to determine which model should be used as the basis of interpretation of the relationships between the latent variables. In these models, the number of demographic control variables are also included as antecedents to both organizational identification and change-oriented OCB. These control variables include civil service grade, education level, organizational tenure, and sex. Goodness of fit indices evaluating the performance of these four models are presented in table 15.

Model 4, which has all possible paths drawn between latent variables, is shown to fit the data slightly better than the alternative models according to the lower chi square value (this value is statistically significant, however). As this model also represents best the hypotheses tested in the primary analysis section of this study, this model was selected as the basis of further interpretation of the results.

Table 15: Goodness of fit indices for the 4 analyses

	X2	DF	CFI	NNFI	SRMR	RMSEA
Model 1	386.77	167	0.94	0.93	0.05	0.05
Model 2	375.42	166	0.94	0.93	0.04	0.05
Model 3	375.95	166	0.94	0.93	0.04	0.05
Model 4	372.05	165	0.94	0.93	0.04	0.05

Model 1: Full mediation (no direct paths) between PM variables and CO-OCB

Model 2: Full mediation of organization level PM; partial mediation of individual level PM

Model 3: Full mediation of individual level PM; partial mediation of organization level PM

Model 4: Partial mediation of both both organization and individual level PM

Note: All chi-square values statistically significant at p<.05

Figure 6 shows the results of the relationships between latent variables for model 4. Both organization and individual level performance management are shown to be positively related to organizational identification at statistically significant levels (.27 and .25, respectively; p < .001). Of the control variables, civil service as well as organizational tenure were found to be positively related to organizational identification (.03 (p<.05) and .01 (p<.001), respectively). Together, these antecedents account for approximately 33% of the variance of organizational identification.

Organizational identification was also found to have a strong relationship with change-oriented OCB (.42, p<.001), which is a similar result to that of the primary analysis of this study. Again similar to the primary analysis of this study, after accounting for organizational identification (and control variables), only organization level performance management has a statistically significant relationship with change-oriented OCB (.12, p<.05). Organizational tenure again had a positive, statistically significant relationship with change-oriented OCB (.01, p<.05), as did education level (.13, p<.001).

Figure 6: Parameters of final model
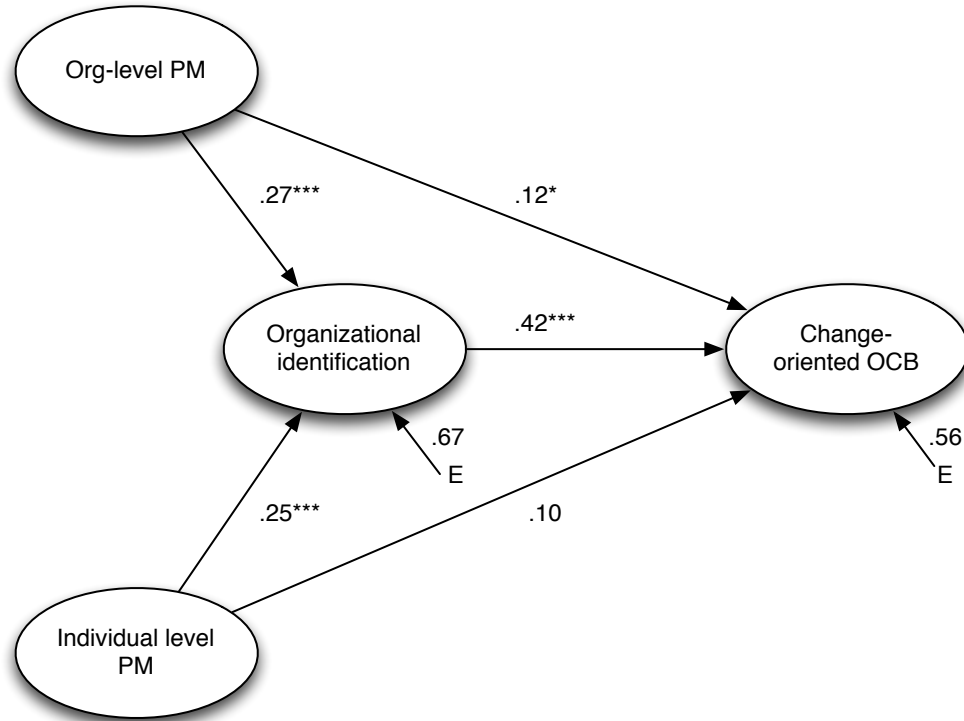
The following table summarizes the direct effects of all relationships, as well as the indirect effects of the two performance management latent constructs on change-oriented OCB. The indirect effect of organization level performance management on the dependent variable is .10 (p<.001), while the indirect effect of individual level performance management is .08 (p<.001). As these results are qualitatively similar to those produced in the primary analysis of this study, they provide an additional robustness check and compelling evidence of the veracity of the main results.

Table 16: Direct and indirect effects

	Coefficient	z	SE	z	95% CI	
Organizational identification: Direct effects						
Organization level PM	.20***	4.14	.05	4.14	.10	.29
Individual level PM	.16***	3.97	.04	3.97	.08	.24
Civil service grade	-.03*	-2.01	.02	-2.01	-.07	.00
Tenure	.01***	4.21	.00	4.21	.01	.02
Education	.03	0.78	.03	0.78	-.04	.09
Sex (Female = 1)	.01	0.35	.04	0.35	-.06	.09
Change-oriented OCB: Direct effects						
Organizational identification	.50***	6.43	.08	6.43	.35	.65
Organization level PM	.10*	1.97	.05	1.97	.00	.20
Individual level PM	.08	1.83	.04	1.83	-.01	.17
Civil service grade	-.02	-1.04	.02	-1.04	-.06	.02
Tenure	.01*	2.42	.00	2.42	.00	.01
Education	.13***	3.47	.04	3.47	.06	.20
Sex (Female = 1)	-.04	-0.93	.04	-0.93	-.12	.04
Change-oriented OCB: Indirect effects						
Organization level PM	.10***	3.73	.03	3.73	.05	.15
Individual level PM	.08***	3.57	.02	3.57	.04	.12
Civil service grade	-.02*	-1.96	.01	-1.96	-.03	.00
Tenure	.01***	3.75	.00	3.75	.00	.01
Education	.01	0.78	.02	0.78	-.02	.05
Sex (Female = 1)	.01	0.35	.02	0.35	-.03	.04
Change-oriented OCB: Total effects						
Organization level PM	.20***	3.67	.05	3.67	.09	.30
Individual level PM	.16***	3.44	.05	3.44	.07	.25
Civil service grade	-.04	-1.82	.02	-1.82	-.08	.00
Tenure	.01***	4.11	.00	4.11	.01	.02
Education	.14***	3.55	.04	3.55	.06	.22
Sex (Female = 1)	-.03	-0.71	.04	-0.71	-.12	.06

Bibliography

Abrams, Dominic, and Michael A Hogg. 2002. *Social Identifications: a Social Psychology of Intergroup Relations and Group Processes*. London: Routledge.

Abrams, Dominic, Kaori Ando, and Steve Hinkle. 1998. "Psychological Attachment to the Group: Cross-Cultural Differences in Organizational Identification and Subjective Norms as Predictors of Workers' Turnover Intentions." *Personality and Social Psychology Bulletin* 24 (10): 1027–1039.

Acock, Alan C. 2005. "Working with Missing Values." *Journal of Marriage and Family* 67 (4): 1012–1028.

Aiken, Michael, and Jerald Hage. 1966. "Organizational Alienation: a Comparative Analysis." *American Sociological Review* 13 (4): 497–507.

Albert, Stuart, and David A Whetten. 1985. "Organizational Identity." *Research in Organizational Behavior* 7: 263–295.

Altshuler, Alan A, and Marc D Zegans. 1997. *Innovation and Public Management: Notes From the State House and City Hall*. Washington: Brookings Institution.

Alvesson, Mats, and Hugh Willmott. 2002. "Identity Regulation as Organizational Control: Producing the Appropriate Individual." *Journal of Management Studies* 39 (5): 619–644.

Amabile, Teresa M. 1996. *Creativity and Innovation in Organizations*. Harvard Business School.

Andersen, Simon Calmar. 2008. "The Impact of Public Management Reforms on Student Performance in Danish Schools." *Public Administration* 86 (2): 541–558.

Ashforth, Blake E, Alan M Saks, and Raymond T Lee. 1998. "Socialization and Newcomer Adjustment: the Role of Organizational Context." *Human Relations* 51 (7): 897–926.

Ashforth, Blake E, and Fred Mael. 1989. "Social Identity Theory and the Organization." *Academy of Management Review*: 20–39.

Ashforth, Blake E, Spencer H Harrison, and Kevin G Corley. 2008. "Identification in Organizations: an Examination of Four Fundamental Questions." *Journal of Management* 34 (3): 325–374.

Baldwin, J Norman. 1990. "Perceptions of Public Versus Private Sector Personnel and Informal Red Tape: Their Impact on Motivation." *The American Review of Public Administration* 20 (1): 7–28.

Balfour, Danny L, and Barton Wechsler. 1990. "Organizational Commitment: a Reconceptualization and Empirical Test of Public-Private Differences." *Review of Public Personnel Administration* 10 (3): 23–40.

Barker, James R. 1993. "Tightening the Iron Cage: Concertive Control in Self-Managing Teams." *Administrative Science Quarterly* 38 (3): 408–437.

Barnard, Chester Irving. 1968. *The Functions of the Executive*. Vol. 11. Harvard University Press.

Baron, Reuben M, and David A Kenny. 1986. "The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations." *Journal of Personality and Social Psychology* 51 (6): 1173.

Bateman, Thomas S, and J Michael Crant. 1993. "The Proactive Component of Organizational Behavior: a Measure and Correlates." *Journal of Organizational Behavior* 14 (2): 103–118.

Baum, J Robert, Edwin A Locke, and Shelley A Kirkpatrick. 1998. "A Longitudinal Study of the Relation of Vision and Vision Communication to Venture Growth in Entrepreneurial Firms." *Journal of Applied Psychology* 83 (1): 43.

Beardwell, Julie, and Tim Claydon. 2007. *Human Resource Management: a Contemporary Approach*. Pearson Education.

Behn, Robert D. 2002. "The Psychological Barriers to Performance Management: or Why Isn't Everyone Jumping on the Performance-Management Bandwagon?." *Public Performance & Management Review* 26(1): 5–25.

Bentler, Peter M, and Douglas G Bonett. 1980. "Significance Tests and Goodness of Fit in the Analysis of Covariance Structures." *Psychological Bulletin* 88 (3): 588.

Bergeron, D M, A J Shipp, B Rosen, and S A Furst. 2013. "Organizational Citizenship Behavior and Career Outcomes: the Cost of Being a Good Citizen." *Journal of Management* 39 (4): 958–984.

Bernstein, Ethan S. 2012. "The Transparency Paradox: a Role for Privacy in Organizational Learning and Operational Control." *Administrative Science Quarterly* 57 (2) (July 16): 181–216.

Bettencourt, Lance A. 2004. "Change-Oriented Organizational Citizenship Behaviors: the Direct and Moderating Influence of Goal Orientation." *Journal of Retailing* 80 (3): 165–180.

Blader, Steven L, and Tom R Tyler. 2009. "Testing and Extending the Group Engagement Model: Linkages Between Social Identity, Procedural Justice, Economic Outcomes, and Extrarole Behavior." *Journal of Applied Psychology* 94 (2): 445–464.

Blau, Peter Michael. 1964. *Exchange and Power in Social Life*. Transaction Publishers.

Blau, Peter Michael, and William Richard Scott. 1962. *Formal Organizations: a Comparative Approach*. Stanford University Press.

Bollen, Kenneth A, and Robert Stine. 1990. "Direct and Indirect Effects: Classical and Bootstrap Estimates of Variability." *Sociological Methodology* 20 (1): 15–140.

Borman, Walter C, and Stephan J Motowidlo. 1993. "Expanding the Criterion Domain to Include Elements of Contextual Performance." *Personnel Selection in Organizations* 71: 98.

Bouchikhi, Hamid, John R Kimberly, and Leading Your Team. 2012. "Escaping the Identity Trap." *Sloan MIT Review.*

Bourgault, Jacques, and Korolien Van Dorpe. 2013. "Managerial Reforms, Public Service Bargains and Top Civil Servant Identity." *International Review of Administrative Sciences* 79 (1): 49–70.

Bozeman, Barry. 1993. "A Theory of Government 'Red Tape'." *Journal of Public Administration Research and Theory* 3 (3): 273–304.

Brewer, Gene A, and Richard M Walker. 2009. "The Impact of Red Tape on Governmental Performance: an Empirical Analysis." *Journal of Public Administration Research and Theory* 20 (1): 233–257.

Brewer, Gene A, and Sally Coleman Selden. 2000. "Why Elephants Gallop: Assessing and Predicting Organizational Performance in Federal Agencies." *Journal of Public Administration Research and Theory* 10 (4): 685–712.

Brief, Arthur P, and Stephan J Motowidlo. 1986. "Prosocial Organizational Behaviors." *Academy of Management Review* 11 (4): 710–725.

Brislin, Richard W. 1980. "Translation and Content Analysis of Oral and Written Material." *Handbook of Cross-Cultural Psychology* 2 (2): 349–444.

Chan Su Jung, and H G Rainey. 2011. "Organizational Goal Characteristics and Public Duty Motivation in U.S. Federal Agencies." *Review of Public Personnel Administration* 31 (1): 28–47.

Cheney, George. 1983. "On the Various and Changing Meanings of Organizational Membership: a Field Study of Organizational Identification." *Communication Monographs* 50 (4): 342–362.

Chiaburu, Dan S, and Vicki L Baker. 2006. "Extra-Role Behaviors Challenging the Status-Quo: Validity and Antecedents of Taking Charge Behaviors." *Journal of Managerial Psychology* 21 (7): 620–637.

Chiang, Flora FT, and Thomas Birtch. 2007. "The Transferability of Management Practices: Examining Cross-National Differences in Reward Preferences." *Human Relations* 60 (9): 1293–1330.

Chibber, Vivek. 2002. "Bureaucratic Rationality and the Developmental State." *The American Journal of Sociology* 107 (4): 951–989.

Child, John. 1972. "Organizational Structure, Environment and Performance: the Role of Strategic Choice." *Sociology* 6 (1): 1–22.

Cho, Yoon jik, and George B Lewis. 2012. "Turnover Intention and Turnover Behavior: Implications for Retaining Federal Employees." *Review of Public Personnel Administration* 32 (1): 4–23.

Cho, Yoon jik, and J W Lee. 2012. "Performance Management and Trust in Supervisors." *Review of Public Personnel Administration* 32 (3): 236–259.

Cho, Yoon jik, and James L Perry. 2012. "Intrinsic Motivation and Employee Attitudes: Role of Managerial Trustworthiness, Goal Directedness, and Extrinsic Reward Expectancy." *Review of Public Personnel Administration* 32 (4): 382–406.

Choi, Jin Nam. 2007. "Change-Oriented Organizational Citizenship Behavior: Effects of Work Environment Characteristics and Intervening Psychological Processes." *Journal of Organizational Behavior* 28 (4): 467–484.

Chun, Young Han, and Hal Rainey. 2005. "Goal Ambiguity in U.S. Federal Agencies." *Journal of Public Administration Research and Theory* 15 (1): 1–30.

Coleman, Venetta I, and Walter C Borman. 2000. "Investigating the Underlying Structure of the Citizenship Performance Domain." *Human Resource Management Review* 10 (1): 25–44.

Conway, James M, and Allen I Huffcutt. 2003. "A Review and Evaluation of Exploratory Factor Analysis Practices in Organizational Research." *Organizational Research Methods* 6 (2): 147–168.

Crant, J Michael. 2000. "Proactive Behavior in Organizations." *Journal of Management* 26 (3): 435–462.

Crozier, Michel. 1969. *The Bureaucratic Phenomenon*. Transaction Publishers.

Damanpour, Fariborz. 1991. "Organizational Innovation: a Meta-Analysis of Effects of Determinants and Moderators." *Academy of Management Journal* 34 (3): 555–590.

Damanpour, Fariborz, and Marguerite Schneider. 2006. "Phases of the Adoption of Innovation in Organizations: Effects of Environment, Organization and Top Managers1." *British Journal of Management* 17 (3): 215–236.

Deci, Edward L, and Richard M Ryan. 2008. "Facilitating Optimal Motivation and Psychological Well-Being Across Life's Domains." *Canadian Psychology/Psychologie Canadienne* 49 (1): 14.

Deci, Edward L, Richard Koestner, and Richard M Ryan. 1999. "A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation." *Psychological Bulletin* 125 (6): 627.

Deckop, John R, Robert Mangel, and Carol C Cirka. 1999. "Research Notes. Getting More Than You Pay for: Organizational Citizenship Behavior and Pay-for-Performance Plans." *Academy of Management Journal* 42 (4): 420–428.

DeHart-Davis, Leisha, and Sanjay K Pandey. 2005. "Red Tape and Public Employees: Does Perceived Rule Dysfunction Alienate Managers?." *Journal of Public Administration Research and Theory* 15 (1): 133–148.

Denhardt, Robert B, and Janet V Denhardt. 2000. "The New Public Service: Serving Rather Than Steering." *Public Administration Review* 60 (6): 549–559.

Dukerich, Janet M, Brian R Golden, and Stephen M Shortell. 2002. "Beauty Is in the Eye of the Beholder: the Impact of Organizational Identification, Identity, and Image on the Cooperative Behaviors of Physicians." *Administrative Science Quarterly* 47 (3): 507-522.

Dukerich, Janet M, Roderick Kramer, and Judi M Parks. 1998. "The Dark Side of Organizational Identification." *Identity in Organizations: Building Theory Through Conversations*: 245–256.

Durant, Robert F, Robert Kramer, James L Perry, Debra Mesch, and Laurie Paarlberg. 2006. "Motivating Employees in a New Governance Era: the Performance Paradigm Revisited." *Public Administration Review* 66 (4): 505–514.

Dutton, Jane E, Janet M Dukerich, and Celia V Harquail. 1994. "Organizational Images and Member Identification." *Administrative Science Quarterly*: 239–263.

Efron, Bradley, and Robert Tibshirani. 1993. *An Introduction to the Bootstrap*. Vol. 57. CRC press.

Eisenberger, Robert. "Perceived Organizational Support and Extra-Role Performance: Which Leads to Which? Zhixia Chen Huazhong University of Science and Technology, China Robert Eisenberger, Kelly M. Johnson, Ivan L. Sucharski, and Justin Aselage."

Eisenhardt, Kathleen M. 1985. "Control: Organizational and Economic Approaches." *Management Science* 31 (2): 134–149.

Eisenhardt, Kathleen M. 1989. "Agency Theory: an Assessment and Review." *The Academy of Management Review* 14 (1): 57–74.

Farh, Jiing-Lih, Chen-Bo Zhong, and Dennis W Organ. 2004. "Organizational Citizenship Behavior in the People's Republic of China." *Organization Science* 15 (2): 241–253.

Fernandez, Sergio, and Tima Moldogaziev. 2012. "Using Employee Empowerment to Encourage Innovative Behavior in the Public Sector." *Journal of Public Administration Research and Theory* 23 (1): 155–187.

Fielding, Kelly S, and Michael A Hogg. 1997. "Social Identity, Self-Categorization, and Leadership: a Field Study of Small Interactive Groups." *Group Dynamics: Theory, Research, and Practice* 1 (1): 39.

Frazier, Patricia A, Andrew P Tix, and Kenneth E Barron. 2004. "Testing Moderator and Mediator Effects in Counseling Psychology Research." *Journal of Counseling Psychology* 51 (1): 115.

Frederickson, H George. 2002. "Confucius and the Moral Basis of Bureaucracy." *Administration & Society* 33 (6): 610–628.

Frederickson, H George. 2003. *Easy Innovation and the Iron Cage: Best Practice, Benchmarking, Ranking, and the Management of Organizational Creativity*. Dayton: Kettering Foundation.

Frederickson, H George, Kevin B Smith, and Christopher Larimer. 2003. *The Public Administration Theory Primer*. Westview Press Boulder, CO.

Frese, Michael, Wolfgang Kring, Andrea Soose, and Jeannette Zempel. 1996. "Personal Initiative at Work: Differences Between East and West Germany." *Academy of Management Journal* 39 (1): 37–63.

Fuller, Jerry Bryan, Kim Hester, Tim Barnett, Len Frey, Clint Relyea, and Danielle Beu. 2006. "Perceived External Prestige and Internal Respect: New Insights Into the Organizational Identification Process." *Human Relations* 59 (6): 815–846.

Gay, Du, Paul. 1995. *Consumption and Identity at Work*. Sage.

Gecas, Viktor. 1982. "The Self-Concept." *Annual Review of Sociology* 8: 1–33.

George, Jennifer M, and Gareth R Jones. 1997. "Organizational Spontaneity in Context." *Human Performance* 10 (2): 153–170.

Gore, Albert. 1993. *From Red Tape to Results: Creating a Government That Works Better and Costs Less: Report of the National Performance Review*. DIANE Publishing.

Gourevitch, Peter A. 1986. *Politics in Hard Times: Comparative Responses to International Economic Crises*. Cornell University Press.

Hage, Jerald, and Michael Aiken. 1967. "Relationship of Centralization to Other Structural Properties." *Administrative Science Quarterly* 12 (1): 72–92.

Haslam, S Alexander. 2004. *Psychology in Organizations*. Sage.

Hayes, Andrew F. 2009. "Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium." *Communication Monographs* 76 (4): 408–420.

Heinrich, Carolyn J. 2002. "Outcomes–Based Performance Management in the Public Sector: Implications for Government Accountability and Effectiveness." *Public Administration Review* 62 (6): 712–725.

Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Vol. 25. Harvard university press.

Hofstede, Geert. 1983. "The Cultural Relativity of Organizational Practices and Theories." *Journal of International Business Studies, Vol. 14, Issue 2, Pp. 75-89, 1983*.

Hogg, Michael A. 2000. "Subjective Uncertainty Reduction Through Self-Categorization: a Motivational Theory of Social Identity Processes." *European Review of Social Psychology* 11 (1): 223–255.

Hogg, Michael A, and Deborah J Terry. 2000. "Social Identity and Self-Categorization Processes in Organizational Contexts." *Academy of Management Review*: 121–140.

Hood, Christopher. 1991. "A Public Management for All Seasons?." *Public Administration* 69 (1): 3–19.

Hood, Christopher. 1995. "The 'New Public Management' in the 1980s: Variations on a Theme." *Accounting, Organizations and Society* 20 (2): 93–109.

Horton, Sylvia. 2006a. "New Public Management: Its Impact on Public Servant's Identity: an Introduction to This Symposium." *International Journal of Public Sector Management* 19 (6): 533–542.

Horton, Sylvia. 2006b. "The Public Service Ethos in the British Civil Service: an Historical Institutional Analysis." *Public Policy and Administration* 21 (1): 32–48.

Houston, D J. 2009. "Motivating Knights or Knaves?Moving Beyond Performance-Related Pay for the Public Sector": 1–15.

Hummel, Ralph P. 1977. "The Bureaucratic Experience." St. Martin's Press: New York.

Hutchison, S, D Sowa, R Eisenberger, and R Huntington. 1986. "Perceived Organizational Support." *Journal of Applied Psychology* 71 (3): 500–507.

Iacobucci, Dawn, Neela Saldanha, and Xiaoyan Deng. 2007. "A Meditation on Mediation: Evidence That Structural Equations Models Perform Better Than Regressions." *Journal of Consumer Psychology* 17 (2): 139–153.

Im, T, J W Campbell, and J Jeong. 2013. "Commitment Intensity in Public Organizations: Performance, Innovation, Leadership, and PSM." *Review of Public Personnel Administration*.

Im, Tobin. 2003. "Bureaucratic Power and the NPM Reforms in Korea." *International Review of Public Administration* 8 (1): 89–102.

Im, Tobin. 2009. "An Exploratory Study of Time Stress and Its Causes Among Government Employees." *Public Administration Review* 69 (1): 104–115.

Im, Tobin. 2013. "Bureaucracy in Three Different Worlds: the Assumptions of Failed Public Sector Reforms in Korea." *Public Organization Review*: 1–20.

Im, Tobin, Hyunkuk Lee, Wonhyuk Cho, and Jesse W Campbell. 2013. "Citizen Preference and Resource Allocation: the Case for Participatory Budgeting in Seoul." *Local Government Studies* (ahead-of-print): 1–19.

Im, Tobin, Jesse W Campbell, and Seyeong Cha. 2013. "Revisiting Confucian Bureaucracy: Roots of the Korean Government's Culture and Competitiveness." *Public Administration and Development* 33 (4): 286–296.

Ingraham, Patricia W. 1993. "Of Pigs in Pokes and Policy Diffusion: Another Look at Pay-for-Performance." *Public Administration Review*: 348–356.

Jackson, Jay W. 2002. "Intergroup Attitudes as a Function of Different Dimensions of Group Identification and Perceived Intergroup Conflict." *Self and Identity* 1 (1): 11–33.

Jaskyte, Kristina. 2011. "Predictors of Administrative and Technological Innovations in Nonprofit Organizations." *Public Administration Review* 71 (1): 77–86.

Jetten, Jolanda, Anne O'Brien, and Nicole Trindall. 2002. "Changing Identity: Predicting Adjustment to Organizational Restructure as a Function of Subgroup and Superordinate Identification." *British Journal of Social Psychology* 41 (2): 281–297.

Jones, L.R., and D.F. Kettl. 2003. "Assessing Public Management Reform in an International Context." *International Public Management Review* 4 (1): 1–19.

Jones, Robert G, and Warren D Lindley. 1998. "Issues in the Transition to Teams." *Journal of Business and Psychology* 13 (1): 31–40.

Jung, Chan Su. 2013. "Organizational Goal Ambiguity and Job Satisfaction in the Public Sector." *Journal of Public Administration Research and Theory* (ahead-of-print).

Jung, Chan Su, and Hal G Rainey. 2011. "Organizational Goal Characteristics and Public Duty Motivation in US Federal Agencies." *Review of Public Personnel Administration* 31 (1): 28–47.

Kamensky, J M. 1996. "Role of the' Reinventing Government' Movement in Federal Management Reform." *Public Administration Review*: 247–255.

Katz, Daniel. 1964. "The Motivational Basis of Organizational Behavior." *Systems Research and Behavioral Science* 9 (2): 131–146.

Katz, Daniel, and Robert Louis Kahn. 1978. "The Social Psychology of Organizations."

Kearney, R C, and S W Hays. 1998. "Reinventing Government, the New Public Management and Civil Service Systems in International Perspective: the Danger of Throwing the Baby Out with the Bathwater." *Review of Public Personnel Administration* 18 (4): 38–54.

Kellough, J E, and L G Nigro. 2002. "Pay for Performance in Georgia State Government: Employee Perspectives on GeorgiaGain After 5 Years." *Review of Public Personnel Administration* 22 (2): 146–166.

Kenny, David A, Deborah A Kashy, and Niall Bolger. 1998. "Data Analysis in Social Psychology." *The Handbook of Social Psychology* 1 (4): 233–265.

Kernaghan, Kenneth. 1992. "Empowerment and Public Administration: Revolutionary Advance or Passing Fancy?." *Canadian Public Administration* 35 (2): 194–214.

Kim, Hyuk-Rae. 2000. "The State and Civil Society in Transition: the Role of Non-Governmental Organizations in South Korea." *The Pacific Review* 13 (4): 595–613.

Kim, Nan Young, and Joon Hyung Hong. 2009. "Contractual Factors of Executive Agencies in Korea: the Working Mechanisms" *Korean Journal of Policy Studies*: 81-109.

Kim, Pan Suk. 2000. "Administrative Reform in the Korean Central Government: a Case Study of the Dae Jung Kim Administration." *Public Performance & Management Review*: 145–160.

Kim, Pan Suk. 2002. "Strengthening the Pay-for-Performance Link in Government: a Case Study of Korea." *Public Personnel Management* 31 (4): 447–463.

Kim, Pan Suk, and Kil Pyo Hong. 2013. "Major Constraints and Possible Solutions for Performance Management in Korea." *Public Management Review*: 1–17.

Kim, Sunhyuk. 2000. *The Politics and Democratization in Korea: the Role of Civil Society*. Pittsburgh: University of Pittsburgh.

Kirkpatrick, Shelley A, and Edwin A Locke. 1996. "Direct and Indirect Effects of Three Core Charismatic Leadership Components on Performance and Attitudes." *Journal of Applied Psychology* 81 (1): 36.

Knippenberg, Daan, and Els Schie. 2000. "Foci and Correlates of Organizational Identification." *Journal of Occupational and Organizational Psychology* 73 (2): 137–147.

Kong, D S, K H Cho, and K W Yoon. 2009. "The Gaming of Individual Performance Appraisal." *Korean Public Administration Journal (in Korean)* 18 (2): 59–80.

Lee, Chang Kil, and M Jae Moon. 2010. "Performance Management Reforms in South Korea." *Public Administration in East Asia: Mainland China, Japan, South Korea, Taiwan*: 427–449.

Lee, Chang won. 2004. "A Critical Review on the Administrative Reforms in the Korean Central Government: a Case Study of the Kim Dae-Jung Administration." *International Review of Public Administration* 9(1): 113–120.

Lee, Geon, and Benedict S Jimenez. 2011. "Does Performance Management Affect Job Turnover Intention in the Federal Government?." *The American Review of Public Administration* 41 (2): 168–184.

Lee, Kibeom, and Natalie J Allen. 2002. "Organizational Citizenship Behavior and Workplace Deviance: the Role of Affect and Cognitions." *Journal of Applied Psychology* 87 (1): 131-142.

Lee, Sam Youl, and Kwangho Jung. 2010. "Public Service Ethics and Anti-Corruption Efforts in South Korea." *CRC Press, Boca Raton*: 401–425.

LePine, Jeffrey A, Amir Erez, and Diane E Johnson. 2002. "The Nature and Dimensionality of Organizational Citizenship Behavior: a Critical Review and Meta-Analysis." *Journal of Applied Psychology* 87 (1): 52.

Levinson, Harry. 1965. "Reciprocation: the Relationship Between Man and Organization." *Administrative Science Quarterly*.

Locke, Edwin A. 1968. "Toward a Theory of Task Motivation and Incentives." *Organizational Behavior and Human Performance* 3 (2): 157–189.

Locke, Edwin A. 1996. "Motivation Through Conscious Goal Setting." *Applied and Preventive Psychology* 5 (2): 117–124.

Locke, Edwin A, and Gary P Latham. 1990. *A Theory of Goal Setting & Task Performance.* Prentice-Hall, Inc.

Locke, Edwin A, and Gary P Latham. 2002. "Building a Practically Useful Theory of Goal Setting and Task Motivation: a 35-Year Odyssey." *American Psychologist* 57 (9): 705–717.

López-Domínguez, Mercedes, Mihaela Enache, Jose M Sallan, and Pep Simo. 2013. "Journal of Business Research." *Journal of Business Research* 66 (10) (October 1): 2147–2152.

MacKenzie, Scott B, Philip M Podsakoff, and Richard Fetter. 1993. "The Impact of Organizational Citizenship Behavior on Evaluations of Salesperson Performance." *Journal of Marketing* 57 (1): 70–80.

MacKinnon, Danny, Andrew Cumbers, and Keith Chapman. 2002. "Learning, Innovation and Regional Development: a Critical Appraisal of Recent Debates." *Progress in Human Geography* 26 (3): 293–311.

MacKinnon, David P, Chondra M Lockwood, Jeanne M Hoffman, Stephen G West, and Virgil Sheets. 2002. "A Comparison of Methods to Test Mediation and Other Intervening Variable Effects." *Psychological Methods* 7 (1): 83-104.

MacKinnon, David P, Ghulam Warsi, and James H Dwyer. 1995. "A Simulation Study of Mediated Effect Measures." *Multivariate Behavioral Research* 30 (1): 41–62.

Mael, Fred, and Blake E Ashforth. 1992. "Alumni and Their Alma Mater: a Partial Test of the Reformulated Model of Organizational Identification." *Journal of Organizational Behavior* 13 (2): 103–123.

Mallinckrodt, Brent, W Todd Abraham, Meifen Wei, and Daniel W Russell. 2006. "Advances in Testing the Statistical Significance of Mediation Effects." *Journal of Counseling Psychology* 53 (3): 372–378.

Mansfield, Roger. 1973. "Bureaucracy and Centralization: an Examination of Organizational Structure." *Administrative Science Quarterly*: 477–488.

March, James G, and Herbert Alexander Simon. 1958. "Organizations."

McCourt, Willy. 2008. "Public Management in Developing Countries: From Downsizing to Governance." *Public Management Review* 10 (4): 467–479.

Meier, Kenneth J, and Laurence J O'Toole. 2011. "Comparing Public and Private Management: Theoretical Expectations." *Journal of Public Administration Research and Theory* 21 (suppl 3): i283–i299.

Meyer, John P, and Natalie J Allen. 1991. "A Three-Component Conceptualization of Organizational Commitment." *Human Resource Management Review* 1 (1): 61–89.

Miaoulis, George, and R Dean Michener. 1976. *An Introduction to Sampling*. Kendall/Hunt Publishing Company.

Minns, John. 2001. "Of Miracles and Models: the Rise and Decline of the Developmental State in South Korea." *Third World Quarterly* 22 (6): 1025–1043.

Mishra, Sushanta Kumar, Deepti Bhatnagar, Premilla D'Cruz, and Ernesto Noronha. 2012. "Linkage Between Perceived External Prestige and Emotional Labor: Mediation Effect of Organizational Identification Among Pharmaceutical Representatives in India." *Journal of World Business* 47 (2): 204–212

Moon, M Jae, and Changho Hwang. 2013. "The State of Civil Service Systems in the Asia-Pacific Region: a Comparative Perspective." *Review of Public Personnel Administration* 33 (2): 121–139.

Moon, M Jae, and Stuart Bretschneiber. 2002. "Does the Perception of Red Tape Constrain IT Innovativeness in Organizations? Unexpected Results From a Simultaneous Equation

Model and Implications." *Journal of Public Administration Research and Theory* 12 (2): 273–292.

Morris, James H, and Richard M Steers. 1980. "Structural Influences on Organizational Commitment." *Journal of Vocational Behavior* 17 (1): 50–57.

Morrison, Elizabeth Wolfe. 1996. "Organizational Citizenship Behavior as a Critical Link Between HRM Practices and Service Quality." *Human Resource Management* 35 (4): 493–512.

Morrison, Elizabeth Wolfe, and Corey C Phelps. 1999. "Taking Charge at Work: Extrarole Efforts to Initiate Workplace Change." *Academy of Management Journal* 42 (4): 403–419.

Mowday, Richard T, Richard M Steers, and Lyman W Porter. 1979. "The Measurement of Organizational Commitment." *Journal of Vocational Behavior* 14 (2): 224–247.

Moynihan, Donald P. 2008. *The Dynamics of Performance Management: Constructing Information and Reform*. Georgetown University Press.

Mumford, Michael D, and Sigrid B Gustafson. 1988. "Creativity Syndrome: Integration, Application, and Innovation." *Psychological Bulletin* 103 (1): 27.

Oakes, Penelope J, John C Turner, and S Alexander Haslam. 1991. "Perceiving People as Group Members: the Role of Fit in the Salience of Social Categorizations." *British Journal of Social Psychology* 30 (2): 125–144.

OECD. 2005. "Performance-Related Pay Policies for Government Employees." Organization for Economic Cooperation and Development.

Ohemeng, Frank Louis Kwaku. 2009. "Constraints in the Implementation of Performance Management Systems in Developing Countries the Ghanaian Case." *International Journal of Cross Cultural Management* 9 (1): 109–132.

Oldham, Greg R, and Anne Cummings. 1996. "Employee Creativity: Personal and Contextual Factors at Work." *Academy of Management Journal* 39 (3): 607–634.

Oliver, Richard L, and Erin Anderson. 1994. "An Empirical Test of the Consequences of Behavior-and Outcome-Based Sales Control Systems." *Journal of Marketing* 58 (4): 53–67.

Organ, Dennis W. 1988. *Organizational Citizenship Behavior: the Good Soldier Syndrome.* Lexington Books/DC Heath and Com.

Organ, Dennis W. 1997. "Organizational Citizenship Behavior: It's Construct Clean-Up Time." *Human Performance* 10 (2): 85–97.

Osborne, David, and Ted Gaebler. 1992. "Reinventing Government: How the Entrepreneurial Spirit Is Transforming Government." *Reading Mass. Adison Wesley Public Comp*.

Ouchi, William G. 1980. "Markets, Bureaucracies, and Clans." *Administrative Science Quarterly* 25 (1): 129–141.

O'Brien, Robert M. 2007. "A Caution Regarding Rules of Thumb for Variance Inflation Factors." *Quality & Quantity* 41 (5): 673–690.

Pandey, S K, D.H. Coursey, and D P Moynihan. 2007. "Organizational Effectiveness and Bureaucratic Red Tape: a Multimethod Study." *Public Performance & Management Review* 30 (3): 398–425.

Pandey, Sanjay K, and Bradley E Wright. 2006. "Connecting the Dots in Public Management: Political Environment, Organizational Goal Ambiguity, and the Public Manager's Role Ambiguity." *Journal of Public Administration Research and Theory* 16 (4): 511–532.

Pandey, Sanjay K, and Hal G Rainey. 2006. "Public Managers' Perceptions of Organizational Goal Ambiguity: Analyzing Alternative Models." *International Public Management Journal* 9 (2) (July 1): 85–112.

Park, Chun-Oh. "A Study on the Perception of Korean Civil Servants for Factors of Promotion: a Comparison Between Local and Central Government Workers." *The Korean Society for Public Personnel Administration* 11 (2): 195–220. [in Korean]

Park, Chun-Oh, and Jaehyun Joo. 2010. "Control Over the Korean Bureaucracy: a Review of the NPM Civil Service Reforms Under the Roh Moo-Hyun Government." *Review of Public Personnel Administration* 30 (2): 189–210.

Park, Chun-Oh, and Kyung-Ho Cho. "Expectations and Performance of the SES." *The Korean Society of Public Personnel Administration* 12 (1): 147–168. [in Korean]

Park, Young won. "Appraisal of and Suggestions for the SES." *The Korean Society of Public Personnel Administration* 7 (1): 147–177. [in Korean]

Perry, J.L., and L.R. Wise. 1990. "The Motivational Bases of Public Service." *Public Administration Review* 50 (3): 367–373.

Perry, James L. 2000. "Bringing Society in: Toward a Theory of Public-Service Motivation." *Journal of Public Administration Research and Theory* 10 (2): 471–488.

Perry, James L, Trent A Engbers, and So Yun Jun. 2009. "Back to the Future? Performance□Related Pay, Empirical Research, and the Perils of Persistence." *Public Administration Review* 69 (1): 39–51.

Pharr, Susan J, Robert D Putnam, and Russell J Dalton. 2000. "A Quarter-Century of Declining Confidence." *Journal of Democracy* 11 (2): 5–25.

Pitts, David, John Marvel, and Sergio Fernandez. 2011. "So Hard to Say Goodbye? Turnover Intention Among US Federal Employees." *Public Administration Review* 71 (5): 751–760.

Podsakoff, Nathan P, Steven W Whiting, Philip M Podsakoff, and Brian D Blume. 2009. "Individual-and Organizational-Level Consequences of Organizational Citizenship Behaviors: a Meta-Analysis." *Journal of Applied Psychology* 94 (1): 122.

Podsakoff, Philip M, Scott B MacKenzie, Jeong-Yeon Lee, and Nathan P Podsakoff. 2003. "Common Method Biases in Behavioral Research: a Critical Review of the Literature and Recommended Remedies." *Journal of Applied Psychology* 88 (5): 879.

Podsakoff, Philip M, Scott B MacKenzie, Robert H Moorman, and Richard Fetter. 1990. "Transformational Leader Behaviors and Their Effects on Followers' Trust in Leader, Satisfaction, and Organizational Citizenship Behaviors." *The Leadership Quarterly* 1 (2): 107–142.

Poister, Theodore H. 2008. *Measuring Performance in Public and Nonprofit Organizations*. Wiley. com.

Pollitt, Christopher. 2001. "Clarifying Convergence. Striking Similarities and Durable Differences in Public Management Reform." *Public Management Review* 3 (4): 471–492.

Pollitt, Christopher. 2006. "Performance Management in Practice: a Comparative Study of Executive Agencies." *Journal of Public Administration Research and Theory* 16 (1): 25–44.

Pollitt, Christopher. 2009. "Bureaucracies Remember, Post Bureaucratic Organizations Forget?." *Public Administration* 87 (2): 198–218.

Pollitt, Christopher, and Geert Bouckaert. 2011. *Public Management Reform: a Comparative Analysis-New Public Management, Governance, and the Neo-Weberian State*. Oxford University Press.

Pratt, Michael G. 1998. *To Be or Not to Be: Central Questions in Organizational Identification.* Sage Publications, Inc.

Preacher, Kristopher J, and Andrew F Hayes. 2004. "SPSS and SAS Procedures for Estimating Indirect Effects in Simple Mediation Models." *Behavior Research Methods, Instruments, & Computers* 36 (4): 717–731.

Radin, Beryl A. 2000. "The Government Performance and Results Act and the Tradition of Federal Management Reform: Square Pegs in Round Holes?." *Journal of Public Administration Research and Theory* 10 (1): 111–135.

Radin, Beryl A. 2006. *Challenging the Performance Movement: Accountability, Complexity, and Democratic Values*. Georgetown University Press.

Rainey, Hal G. 1982. "Reward Preferences Among Public and Private Managers: in Search of the Service Ethic." *The American Review of Public Administration* 16 (4): 288–302.

Rainey, Hal G, Sanjay Pandey, and Barry Bozeman. 1995. "Research Note: Public and Private Managers' Perceptions of Red Tape." *Public Administration Review*: 567–574.

Reid, Scott A, and Michael A Hogg. 2005. "Uncertainty Reduction, Self-Enhancement, and Ingroup Identification." *Personality and Social Psychology Bulletin* 31 (6): 804–817.

Riketta, Michael. 2005. "Organizational Identification: a Meta-Analysis." *Journal of Vocational Behavior* 66 (2): 358–384.

Rousseau, Denise M. 1998. "Why Workers Still Identify with Organizations." *Journal of Organizational Behavior* 19 (3): 217–233.

Rousseau, Denise M, Sim B Sitkin, Ronald S Burt, and Colin Camerer. 1998. "Not So Different After All: a Cross-Discipline View of Trust." *Academy of Management Review* 23 (3): 393–404.

Rubin, Donald B. 1996. "Multiple Imputation After 18+ Years." *Journal of the American Statistical Association* 91 (434): 473–489.

Rucker, Derek D, Kristopher J Preacher, Zakary L Tormala, and Richard E Petty. 2011. "Mediation Analysis in Social Psychology: Current Practices and New Recommendations." *Social and Personality Psychology Compass* 5 (6): 359–371.

Ryan, Richard M, and Edward L Deci. 2000. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being." *American Psychologist* 55 (1): 68.

Sager, Fritz, and Christian Rosser. 2009. "Weber, Wilson, and Hegel: Theories of Modern Bureaucracy." *Public Administration Review* 69 (6): 1136–1147.

Schermerhorn, John R, James G Hunt, and Richard N Osborn. 2003. "Organizational Behavior: Instructor's Resource Guide. Hoboken."

Schlenker, Barry R. 1986. "Self-Identification: Toward an Integration of the Private and Public Self." In *Public Self and Private Self*, 21–62. Springer.

Schneider, Benjamin, and Arnon E Reichers. 1983. "On the Etiology of Climates." *Personnel Psychology* 36 (1): 19–39.

Scott, Susanne G, and Reginald A Bruce. 1994. "Determinants of Innovative Behavior: a Path Model of Individual Innovation in the Workplace." *Academy of Management Journal*: 580–607.

Scullen, Steven E, Michael K Mount, and Maynard Goff. 2000. "Understanding the Latent Structure of Job Performance Ratings." *Journal of Applied Psychology* 85 (6): 956.

Sharma, Subhash, Soumen Mukherjee, Ajith Kumar, and William R Dillon. 2005. "A Simulation Study to Investigate the Use of Cutoff Values for Assessing Model Fit in Covariance Structure Models." *Journal of Business Research* 58 (7): 935–943.

Sherif, Muzafer. 1961. *The Robbers Cave Experiment: Intergroup Conflict and Cooperation*. Wesleyan University Press.

Sherif, Muzafer, Oliver J Harvey, B Jack White, William R Hood, and Carolyn W Sherif. 1961. *Intergroup Conflict and Cooperation: the Robbers Cave Experiment*. Vol. 10. University Book Exchange Norman, OK.

Shrout, Patrick E, and Niall Bolger. 2002. "Mediation in Experimental and Nonexperimental Studies: New Procedures and Recommendations." *Psychological Methods* 7 (4): 422–445.

Simon, Herbert A. 1950. "Administrative Behaviour." *Australian Journal of Public Administration* 9 (1): 241–245.

Smidts, Ale, Ad Th H Pruyn, and Cees BM Van Riel. 2001. "The Impact of Employee Communication and Perceived External Prestige on Organizational Identification." *Academy of Management Journal* 44 (5): 1051–1062.

Smith, C Ann, Dennis W Organ, and Janet P Near. 1983. "Organizational Citizenship Behavior: Its Nature and Antecedents." *Journal of Applied Psychology* 68 (4): 653.

Sobel, Michael E. 1982. "Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models." *Sociological Methodology* 13 (1982): 290–312.

Srithongrung, Arwiphawee. 2011. "The Causal Relationships Among Transformational Leadership, Organizational Commitment, and Employee Effectiveness." *Intl Journal of Public Administration* 34 (6): 376–388.

Stazyk, E C, and H T Goerdel. 2011. "The Benefits of Bureaucracy: Public Managers' Perceptions of Political Support, Goal Ambiguity, and Organizational Effectiveness." *Journal of Public Administration Research and Theory* 21 (4): 645–672.

Stazyk, Edmund C. 2013. "Crowding Out Public Service Motivation? Comparing Theoretical Expectations with Empirical Findings on the Influence of Performance-Related Pay." *Review of Public Personnel Administration* 33 (3): 252–274.

Stazyk, Edmund C, Sanjay K Pandey, and Bradley E Wright. 2011. "Understanding Affective Organizational Commitment: the Importance of Institutional Context." *The American Review of Public Administration* 41 (6): 603–624.

Tajfel, Henri. 1978. "Social Categorization, Social Identity and Social Comparison." *Differentiation Between Social Groups: Studies in the Social Psychology of Intergroup Relations*: 61–76.

Tajfel, Henri, and John C Turner. 1979. "An Integrative Theory of Intergroup Conflict." *The Social Psychology of Intergroup Relations* 33: 47.

Tajfel, Henri, and John C Turner. 2004. "The Social Identity Theory of Intergroup Behavior."

Tan, Hwee Hoon, and Christy SF Tan. 2000. "Toward the Differentiation of Trust in Supervisor and Trust in Organization." *Genetic, Social, and General Psychology Monographs*.

Taylor, Jeannette, and LooSee Beh. 2013. "The Impact of Pay-for-Performance Schemes on the Performance of Australian and Malaysian Government Employees." *Public Management Review*: 1–26.

Trottier, Tracy, Montgomery Van Wart, and XioHu Wang. 2008. "Examining the Nature and Significance of Leadership in Government Organizations." *Public Administration Review* 68 (2): 319–333.

Turner, John C, Michael A Hogg, Penelope J Oakes, Stephen D Reicher, and Margaret S Wetherell. 1987. *Rediscovering the Social Group: a Self-Categorization Theory*. Basil Blackwell.

Turner, Ralph H. 1978. "The Role and the Person." *American Journal of Sociology*: 1–23.

Tyler, Tom R. 1989. "The Psychology of Procedural Justice: a Test of the Group-Value Model." *Journal of Personality and Social Psychology* 57 (5): 830.

Tyler, Tom R, and Steven L Blader. 2000. *Cooperation in Groups: Procedural Justice, Social Identity, and Behavioral Engagement*. Psychology Press.

Vadera, A K, and M G Pratt. 2013. "Love, Hate, Ambivalence, or Indifference? A Conceptual Examination of Workplace Crimes and Organizational Identification." *Organization Science* 24 (1): 172–188.

van de Ven, Andrew H. 1986. "Central Problems in the Management of Innovation." *Management Science* 32 (5): 590–607.

Van Dick, Rolf. 2004. "My Job Is My Castle: Identification in Organizational Contexts." *International Review of Industrial and Organizational Psychology* 19: 171–204.

Van Dyne, Linn, and Jeffrey A LePine. 1998. "Helping and Voice Extra-Role Behaviors: Evidence of Construct and Predictive Validity." *Academy of Management Journal* 41 (1): 108–119.

Van Dyne, Linn, Larry L Cummings, and J McLean Parks. 1995. "Extra-Role Behaviors-in Pursuit of Construct and Definitional Clarity (a Bridge Over Muddied Waters)." *Research in Organizational Behavior: an Annual Series of Analytical Essays and Critical Reviews* 17: 215–285.

van Knippenberg, Barbara, Linda Martin, and Tom Tyler. 2006. "Process-Orientation Versus Outcome-Orientation During Organizational Change: the Role of Organizational Identification." *Journal of Organizational Behavior* 27 (6): 685–704.

van Knippenberg, Daan. 2000. "Work Motivation and Performance: a Social Identity Perspective." *Applied Psychology* 49 (3): 357–371.

van Knippenberg, Daan, and Ed Sleebos. 2006. "Organizational Identification Versus Organizational Commitment: Self-Definition, Social Exchange, and Job Attitudes." *Journal of Organizational Behavior* 27 (5): 571–584.

Vigoda-Gadot, Eran, and Itai Beeri. 2012. "Change-Oriented Organizational Citizenship Behavior in Public Administration: the Power of Leadership and the Cost of Organizational Politics." *Journal of Public Administration Research and Theory* 22 (3): 573–596.

Vigoda-Gadot, Eran, and Larisa Angert. 2007. "Goal Setting Theory, Job Feedback, and OCB: Lessons From a Longitudinal Study." *Basic and Applied Social Psychology* 29 (2): 119–128.

Vroom, Victor Harold. 1964. "Work and Motivation." Oxford: Wiley.

Walker, R M, F Damanpour, and C A Devece. 2011. "Management Innovation and Organizational Performance: the Mediating Effect of Performance Management." *Journal of Public Administration Research and Theory* 21 (2): 367–386.

Weber, Max. 1978. *Economy and Society: an Outline of Interpretative Sociology*. Vol. 1. Univ of California Press.

Weibel, Antionette, Katja Rost, and Margit Osterloh. 2010. "Pay for Performance in the Public Sector--Benefits and (Hidden) Costs." *Journal of Public Administration Research and Theory* 20 (2): 387–412.

Weick, Karl E. 1995. *Sensemaking in Organizations*. Vol. 3. Sage.

Whitener, Ellen M, Susan E Brodt, M Audrey Korsgaard, and Jon M Werner. 1998. "Managers as Initiators of Trust: an Exchange Relationship Framework for Understanding Managerial Trustworthy Behavior." *Academy of Management Review* 23 (3): 513–530.

Williams, Larry J, and Stella E Anderson. 1991. "Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and in-Role Behaviors." *Journal of Management* 17 (3): 601–617.

Wood, Robert E, and Edwin A Locke. 1990. "Goal-Setting and Strategy Effects on Complex Tasks." *Research in Organizational Behavior: an Annual Series of Analytical Essays and Critical Reviews* 12: 73–109.

Wright, Bradley E. 2001. "Public-Sector Work Motivation: a Review of the Current Literature and a Revised Conceptual Model." *Journal of Public Administration Research and Theory* 11 (4): 559–586.

Wright, Bradley E, Donald P Moynihan, and Sanjay K Pandey. 2012. "Pulling the Levers: Transformational Leadership, Public Service Motivation, and Mission Valence." *Public Administration Review 72(2)*: 206-215.

Wright, Bradley E, Robert K Christensen, and Kim Isett. 2011. "Motivated to Adapt? the Role of Public Service Motivation as Employees Face Organizational Change." *11ᵗʰ biennial Public Management Research Association Conference, 2011*.

Wright, Patrick M, Jennifer M George, S Regena Farnsworth, and Gary C McMahan. 1993. "Productivity and Extra-Role Behavior: the Effects of Goals and Incentives on Spontaneous Helping." *Journal of Applied Psychology* 78 (3): 374.

Yamane, Taro. 1973. *Statistics: an Introductory Analysis*. New York: Harper & Row.

Yang, Kaifeng, and Anthony Kassekert. 2010. "Linking Management Reform with Employee Job Satisfaction: Evidence From Federal Agencies." *Journal of Public Administration Research and Theory* 20 (2): 413–436.

Yang, Kaifeng, and Sanjay K Pandey. 2011. "Further Dissecting the Black Box of Citizen Participation: When Does Citizen Involvement Lead to Good Outcomes?." *Public Administration Review* 71 (6): 880–892.

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