

An Institutional Logics Perspective on the Implementation of Performance Measurement Systems in the Public Sector

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DOCTORAL THESIS

Title	AN INSTITUTIONAL LOGICS PERSPECTIVE ON THE IMPLEMENTATION OF PERFORMANCE MEASUREMENT SYSTEMS IN THE PUBLIC SECTOR
Presented by	Benard O. Ngoye
Centre	ESADE Business School
Department	Department of Strategy and General Management
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DISSERTATION ABSTRACT

The focus of this PhD dissertation is on the relationships between institutional logics and performance measurement decisions and practice within the context of the public sector. It is presented as a compendium of three research papers or studies. Consequently, in study one, we review the literature on institutional logics and on performance measurement in the public sector. We conceptualize performance measurement as decision-making, and draw on the theory of institutional logics as a complementary source of explanation for observed variations in performance measurement system implementation in public sector organizations. And we elaborate a model that illustrates the recursive relationships between institutional logics and each phase of the performance measurement decision process.

In study two we test the assumption that institutional logics act as reference frames for organizational actors, and that they influence how organizational actors perceive ambiguous situations. Thus, we draw on insights from cognitive psychology to prime three unique institutional logics in an experimental design setting. And we provide empirical evidence for the influence of institutional logics on perception and judgment. The third study builds on the second by exploring the influence of institutional logics on perception and judgment within the context of performance measurement system use in the public sector. The findings not only provide support for the influence of institutional logics on public sector performance-use preferences, but they also show degrees of overlap between the institutional logics regarding their support for various PMS uses. Altogether, these three essays present tentative steps toward a better understanding of the influence of cognitive frames - specifically institutional logics, on performance measurement system implementation in the public sector.

Dedication

To the memory of my late mother, who instilled in me a love of learning. And to Annette, Gowi and Kemi without whose sacrifices, love and support, this would have been difficult to accomplish.

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CHAPTER 1

INTRODUCTION

This chapter introduces the PhD thesis topic and provides a general overview of the thesis structure and content.

1.1 Introduction to the PhD thesis topic

Contextual uncertainties in the public sector have made the management of costs and expectations both a practical and political imperative, hence the increasing concern with performance measurement and management in the public sector (Lapsley, 2008; van Dooren & van de Walle, 2008; Rautiainen & Jarvenpaa, 2012). The operationalization of public sector performance measurement systems (PMS) has however remained highly variable, making the use of performance information for comparison or organizational improvement exceedingly difficult (van Dooren & van de Walle, 2008; Fryer, Anthony & Ogden 2009; Hoque & Adams, 2011; Rautiainen & Jarvenpaa, 2012).

Consistent with Henman (2016), we define performance measurement as the ‘enumeration of organizational or system level processes, outputs and outcomes’. Thus, a PMS represents an assemblage of interdependent tools and processes that interact to deliver the performance measurement goals (de Lancer Julnes & Holzer, 2001; Radnor & Barnes, 2007). PMS implementation on the other hand, refers to the operationalization of elements of, or a complete PMS. By operationalization, we bind to de Lancer Julnes and Holzer (2001) who conceptualize it as comprising the development of ‘capacity to act’ as well as ‘instrumental action’.

And so, to understand the challenges with PMS implementation, and offer implementation guidance, some researchers have focused on the ‘surface factors’ i.e., the models, frameworks, techniques, standards and indicators, while others have focused on the ‘process aspects’ - describing and analyzing problems with the application of performance measurement models and frameworks (Vakkuri & Meklin, 2006). Despite these efforts, varied

operationalization has persisted with consequent variation in performance measurement outcomes and use (Fryer et al., 2009).

Thus, some authors have proposed variability in performance measurement implementation and its outcomes to be due to the variation in logics applied by the decision-makers (Pollitt, 2013) and the consequent conflict over the operational decisions and choices made (Adcroft & Willis, 2005; Fryer et al., 2009). Such conflict has been hypothesized to lead to problems in performance measurement system design, and in the collection, interpretation and analysis of performance measurement data (Adcroft & Willis, 2005); to disorient organizational actors (Gianakis, 2002), to complicate attempts at integration of new performance measurement systems with the old (Gianakis, 2002) and to lead to decoupling, cheating and different forms of gaming (Bevan & Hood, 2006; Fryer et al., 2009; Pollitt, 2013).

However, while decisions and choices are partially grounded and informed by cognitive frames such as institutional logics (Ashworth, Boyne & Delbridge, 2007; Thornton & Ocasio, 2008; Kahneman, 2012), the nature of the relationships between institutional logics, decisions, practice and outcomes within the context of performance measurement in the public sector has been sparsely studied and is therefore not well understood (Vakkuri & Meklin, 2006; Lawrence & Suddaby, 2006; Pollitt, 2013). Here, we conceptualize institutional logics as shared, socially-constructed decision-making frames (Friedland & Alford, 1991), that ‘influence opinions by stressing specific values, facts and other considerations, endowing them with greater apparent relevance to the issue than they might appear to have under an alternative frame’ (Nelson et al., 1997, p.569).

And so, whereas some authors have studied the influence of institutional logics on PMS implementation (e.g., Carvalho et al., 2006; Andersen & Hjortskov, 2016; Rautiainen et al.,

2017), much of this work has been conceptual rather than empirical, has focused on the technical elements, and has been located at the organizational level of analysis and not the level of the organizational actor (Micheli & Mari, 2014; Henman, 2016). Yet, public organizations are inhabited by individuals of varying backgrounds and affiliations, who are tasked with implementing the PMS. And in their implementation work and sense-making, they are likely to draw on diverse institutional logics, each with a potentially different relationship to performance measurement (Rautiainen et al., 2017).

We believe that three major barriers have prevented more systematic and cumulative discourses on institutional logics and performance measurement in the public sector. The first is the absence of a framework linking the diverse institutional logics with performance measurement operationalization and outcomes, which can be used to structure research and discussion (Pollitt, 2013). Second is the paucity of research on the relationship between institutional and rational (and non-rational) choice explanations of performance measurement practices (Moynihan & Ingraham, 2004; Lounsbury, 2008). And third, not enough attention has been paid to the dynamic and often recursive interplay between institutional mechanisms across different levels of analysis (also, Lawrence & Suddaby, 2006).

This dissertation is thus focused on partially addressing this gap and these barriers, hence providing a platform for structured discussion on how institutional logics may affect the choice, decision-making process and subsequent operationalization of performance measurement systems at the organizational level. Specifically, our goals during the doctoral research period and subsequent dissertation development was, (1) to develop a conceptual framework that suggests how institutional logics affect the operationalization of performance measurement systems in the Public Sector, and (2) to test whether the foundational hypothesis

regarding the influence of institutional logics on organizational actor perception, judgment and action holds.

1.2 The overarching research objectives and questions

This dissertation is concerned with the following over-arching research question: How do institutional logics affect the operationalization of performance measurement systems in the Public Sector?

To address this question, we conducted three studies: The first study was conceptual in nature, focused on developing a framework explicating the relationship between institutional logics and the various stages of performance measurement conceptualized as decision-making. Having conceptualized the relationships between institutional logics and performance measurement in the public sector, the second and third studies were concerned with determining:

- a) Whether institutional logics can be primed among organizational actors by manipulation of the environment?
- b) How these institutional logics, once primed, relate to (i) decision-making in ambiguous situations as are often encountered in the work setting, and (ii) the use of performance measurement in the Public Sector?

In responding to these latter two questions, we operated with the assumption that (a) the selection in one's cognition of which institutional logics to apply as a frame of reference could be triggered by written, verbal or visual cues in the environment (see for example Bargh et al., 1996; Wegner, 1994; Berkowitz, 1984; Bateson et al., 2006); (b) these logics, once activated, would lead to attitudes, perceptions and behavior that is concordant with the activated logic

(Bargh et al., 1996; Bateson et al., 2006); and (c) these logics will relate to performance measurement in definably different ways.

1.3 A synopsis of the overarching theoretical perspectives

1.3.1 On performance measurement in the public sector

Micheli and Mari (2014) conceptualize performance measurement as a “fundamentally epistemic and pragmatic act”. And in this conceptualization, they emphasize human actors and the interactions between them within “external realities that can constrain or facilitate action” (p.148, 149).

Much of the literature on performance measurement in the public sector however implicitly or explicitly assumes cognitive agreement among the organizational actors regarding the essential properties of measurement, and that the ‘external realities’ – conflated as structural or knowledge based constraints – can be identified and managed (Micheli & Mari, 2014). Thus, the idea that “(performance measurement) implementation is primarily a mechanistic exercise and should be susceptible to being managed by classic project management tools” (Bourne et al., p.767); and the imbalanced focus on the development of performance measurement tools, frameworks and procedures, or their critique or support (Micheli & Mari, 2014).

On the other hand, the influence of motives, values and cognitive processes on performance measurement implementation in the public sector has been understated and understudied (Pollitt, 2013). Yet, actors in public organizations are oftentimes confronted with ambiguity in PMS definition and implementation (Vakkuri & Meklin, 2006), which because

of diversity in perception and interpretation, occasions conflict over decisions made and probable differences in implementation (Bevan & Hood, 2006; Fryer et al., 2009).

The perspective of PMS implementation taken in this dissertation is aligned to Micheli and Mari's (2014) conceptualization of performance measurement in the public sector as a pragmatic act, involving the measurement of both physical and socially constructed objects, and involving the balancing of many perspectives and interests (also, Vakkuri & Meklin, 2006; Dalehite, 2008; Fryer et al., 2009; Pollitt, 2013). This perspective thus allows us to confront and address the influence of motives, values and cognitive processes in the balancing of the many perspectives and interests that impact performance measurement implementation in the public sector.

1.3.2 On institutional logics and performance measurement

Individuals make sense of the world through socially-derived interpretive schemes (Goffman, 1974), and institutional logics are one such interpretive scheme that 'condition(s) actor's choices for sense-making' (Thornton et al., 2012, p.3). In this sense, institutional logics can be viewed as fundamental and coherent sets of organizing principles that are unquestioned and unexamined assumptions about the nature of reality (Ford & Ford, 1994), and that therefore provide the 'lenses through which we view everything' (Lincoln, 1985). Thus, we anticipate institutional logics to define and constrain public sector actor assumptions, expectations and choices regarding how performance measurement is to be operationalized.

The exact nature of the relationships between logics, decisions, practice and outcomes within the context of performance measurement in the public sector has however not been explicitly studied and is therefore not well understood (Vakkuri & Meklin, 2006; Lawrence &

Suddaby, 2006; Pollitt, 2013). Early research that took on an institutional approach focused on decoupling or loose coupling of performance measurement practices (e.g., Sharifi & Bovaird, 1995; Lawton, McKeivitt, & Millar, 2000; Modell, 2001). This early research thus offered limited insight into the role of actors, the influence of preformed perspectives (occasioned by institutional logics), the engagement of organizations and individual actors in proactive agency, and interaction with the contextual circumstances (Lawrence & Suddaby, 2006). This is the gap that informs our broad research question, and is more amply dealt with in the three essays that follow.

1.3.3 On priming as experimental methodology

Priming - ‘the influence on later behavior by prior stimuli or events without deliberate intent to be influenced by them’ (Newell & Shanks, 2014, p.4) has been used in many research fields to assess the influence of knowledge structures on perception, attitudes, judgment, decision-making and behavior (Bargh, 2006). It is however relatively new in PA research though exceptions exist (e.g., James & van Ryzin, 2016; Christensen & Wright, 2018). A typical priming experiment involves, first, the performance of a task intended to prime a construct of interest; and second, the performance of a seemingly disconnected task that is then examined for evidence of congruence with the primed construct.

Priming is thus premised on a memory based model of information processing that presumes that information stored in memory leave behind memory traces (Tulving & Watkins, 1975) or activation tags (Collins & Loftus, 1975) that are surfaced or activated by a priming stimulus. These stored constructs then influence how individuals perceive incoming information as well as how they subsequently interpret them (Collins & Loftus, 1975; Tulving & Watkins, 1975). Institutional logics, as cognitive frames of reference (Lounsbury, 2007;

Marquis & Lounsbury, 2007) that provide individuals with rules and conventions for deciding which solutions get considered and which solutions get linked to what problems (Ford & Ford, 1994; Thornton & Ocasio, 2008) are also stored as ‘complex webs of meaning’ (Gioia, 1986), ergo, as mental constructs.

Thus, priming, in activating one or several points of this web, activates the entire web of meaning that is the logic construct. And this institutional logic, once activated or evoked from memory, provides the context from which the public-sector actor then ‘thinks, feels, views or otherwise experiences the world’ (Ford & Ford, 1994), thus influencing their interpretation of, and reaction to, the situation that faces them (Friedland & Alford, 1991; Ford & Ford, 1994; Suddaby & Greenwood, 2005).

Given its acknowledged utility in the determination of causal linkages between perceptions or cognition and behavior, we make use of priming as experimental methodology in studies 2 and 3 where we explore the influence of institutional logics on judgments in an ambiguous scenario (study 2) and on the utility of PMS in the public sector (study 3).

1.4 The methodology

Study 1 (Chapter 2) is a conceptual paper that draws on the content analysis of diverse literatures to develop an explanatory model. For studies 2 and 3 (Chapter 3 and Chapter 4 respectively), we use experimental designs as appropriate research methodologies for causal inference. More specifically, we used a between groups (or, independent measures) design with different participants randomly assigned to each treatment or control condition. Thus, for these two papers we defined our hypotheses, collected primary data, and analyzed them using the appropriate non-parametric ANOVA methods. The choice of analytic method was premised on (1) the data collected was ordinal/ranked, (2) the sample sizes were moderate, and

(3) nonparametric tests don't assume that the data follows a normal or specific distribution. Under these conditions, non-parametric methods are deemed superior to parametric methods (see for example, Zimmerman, 2012; Wiedermann & von Eye, 2013).

1.5 Dissertation overview and structure

This thesis takes the form of a compendium of academic articles that have been published, or are submitted, in the process revise and resubmit. Chapter 2 presents a theoretical paper that conceptualizes performance measurement as decision-making and draws on the theories of institutional logics as a complementary source of explanation for variation in performance measurement system implementation in public sector organizations. The paper further presents a model that illustrates the hypothesized relationships while highlighting the moderating role of organizational context, as well as the recursive nature of the relationship between the PMS, institutional logics and organizational actor action. This paper has been submitted for publication to which end we have received a revise and resubmit.

Chapter 3 is the first of two empirical papers incorporated into this dissertation. This paper presents a study that uses novel priming techniques derived from behavioral and social psychology, to differentially surface three institutional logics – the public, market-managerial and professional logics, in three independent experimental groups. It then examines whether and how the judgments and decisions made by individual organizational actors in an ambiguous scenario may be influenced by institutional logics. This paper has been resubmitted following the first round of review.

Chapter 4 presents the second empirical paper which narrows down on the influence of institutional logics on the deployment and use of performance measurement systems in the public sector. In this regard, this paper reveals logic congruence regarding some uses of

performance measurement systems in the public sector, and divergence regarding others. This paper has been submitted to the International Journal of Public Sector Management and has been accepted for publication. Table 1.1 provides a tabulated synopsis of the studies contained in this dissertation.

The three articles that form the core of this dissertation are connected by several common threads, apart from departing from the same theoretical frameworks as shown in Table 1.1:

- a. The main independent variable of interest is common to all three studies. However, in study 1, institutional logics are recognized as the main influence on how performance measurement system implementation as decision-making is operationalized. In studies 2 and 3, institutional logics are primed and their effect then assessed on different dependent variables
- b. Studies 2 and 3 respond to propositions 1 (organizational actors will show greater support for PMS when its intended use aligns with the norms and expectations of their dominant or referent institutional logic) and 2 (Environmental cues such as text or imagery will (nonconsciously) prime the institutional logics that will consequently anchor the perspectives of the organizational actor regarding the PMS decisional problem) in study 1
- c. Studies 2 and 3 are experimental design studies, rolled out on the same study population, with the same manipulation techniques (priming) and using the same tools, but with different dependent variables

Table 1.1 Synopsis of the studies

Study/Chapter	Study 1/Chapter 2	Study 2/Chapter 3	Study 3/Chapter 4
Title	Institutional Logics, Embedded Agency and Performance Measurement as Decision-making	Different shades of grey: An experimental study on how institutional logics influence organizational actor perception and judgment	Assessing performance-use preferences through an institutional logics lens
Authorship	Benard Ngoye & Tamyko Ysa	Benard Ngoye, Vicenta Sierra & Tamyko Ysa	Benard Ngoye, Vicenta Sierra & Tamyko Ysa
Target Journal	International Journal of Public Administration	Public Administration Review	International Journal of Public Sector Management
Publication status	R&R	R&R	Accepted
Research Question(s)	Conceptual paper that examines performance measurement in the public sector through an institutional logics lens	How do institutional logics affect the judgments made by organizational actors regarding ambiguous scenarios?	How are individuals primed for an institutional logic biased toward whether and why PMS should be introduced in the public sector?
Theoretical Framework	Institutional logics as shared cognitive frames of reference (Thornton et al., 2012) Performance measurement as decision-making (Vakkuri & Meklin, 2006; Dalehite, 2008; Pollitt, 2013; Micheli & Mari, 2014) Memory-based models of decision-making (Scheufele, 2000; Loersch & Payne, 2011)	Institutional logics as shared cognitive frames of reference (Thornton et al., 2012) Memory-based models of decision-making (Scheufele, 2000; Loersch & Payne, 2011)	Institutional logics as shared cognitive frames of reference (Thornton et al., 2012) Performance measurement use in the public sector (Behn, 2003; Spekle & Verbeeten, 2014)
Method	Conceptual based on a literature review	Posttest-only randomized experimental design. Priming as a manipulation technique	Posttest-only randomized experimental design. Priming as a manipulation technique
Findings	The implementation of PMS conceptualized as a multi-stage decision process variously influenced by the actor's referent institutional logics	The empirical evidence is suggestive of judgment regarding the ambiguous scenario presented, to be congruent to the primed logic	The evidence is suggestive of both institutional logic divergence and consensus as far as support for PMS use in the public sector is concerned

And so, while all three studies contribute to the thesis in general, study 1 provides the greatest breadth regarding how institutional logics, as referent cognitive frames, may influence PMS implementation.

Chapter 5, the concluding chapter, provides an integrated discussion of the theoretical contributions of the three papers, as well as managerial and policy implications. The broad limitations of the dissertation are likewise presented, as are possibilities for future research. This chapter therefore fittingly concludes the dissertation.

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CHAPTER 2

INSTITUTIONAL LOGICS, EMBEDDED AGENCY AND PERFORMANCE

MEASUREMENT AS DECISION-MAKING

This chapter addresses the first objective of this PhD thesis by developing a framework explicating the relationship between institutional logics and the various stages of performance measurement implementation conceptualized as decision-making.

The chapter has been submitted as a scientific paper for publication and has received a revise and resubmit decision.

Abstract

We conceptualize performance measurement as decision-making and draw on the theory of institutional logics to explain observed variations in performance measurement system implementation in public sector organizations. Drawing from diverse literatures, we develop and present a model that illustrates the influence of institutional logics at each stage of the performance measurement decision-making process. We also highlight the moderating role of organizational context and individually held values, as well as the recursive nature of the relationship between the PMS, institutional logics and organizational actor action. Assumptions and boundary conditions under which the model holds are presented, as are propositions to guide future research.

2.1 Introduction

A question of increasing concern to researchers in the field of performance measurement is why there is so much variation in performance measurement implementation within and between organizations applying the same performance measurement system (Spekle & Verbeeten, 2014). The public sector has particularly struggled with this variation that has made the use of performance information for comparability or organizational improvement exceedingly difficult. Hyvonen and colleagues (2009), for example, observed significant variations in performance measurement system (PMS) implementation among units of the Finnish Defense Forces whose professed response was similar, as did Hoque and Adams (2011) in their study of the use of the balanced scorecard in 51 Australian Government Departments, and Rautiainen and Jarvenpaa (2012) in their comparative study of two Finnish cities ostensibly employing the same PMS.

Research on the causes of such variation however remains thin (Pollitt, 2013) and has primarily focused on the tools and techniques of performance measurement, on indicators and dimensions, on relative performance evaluation and on the support or critique of specific measurement systems; and not on the processes involved in implementation (Modell, 2009; Micheli & Mari, 2014). Where such processes have been studied, most have understated the inhabited nature of the public-sector organization by people whose doing may influence the PMS implementation process (Micheli & Mari, 2014). The influence of motives, values and cognitive processes on such 'doings' has also been understated (Pollitt, 2013). Moreover, where cognitive processes have been considered, much of the literature seems to assume coherence among the actors regarding PMS definition and implementation (Micheli & Mari, 2014). Yet, ambiguity in PMS definition and implementation often confronts actors in public

organizations (Vakkuri & Meklin, 2006), leading to diversity in understanding and conflict over decisions made about the PMS (Bevan & Hood, 2006; Fryer et al., 2009).

Conflict over decisions and choices is however an implicit part of any discourse in management, and it arises in part from the varied perspectives applied by organizational actors in discourse and in decision-making (Kahneman, 2012). For example, in the public-sector performance literature, Bianchi and Williams (2015) relate behavioral distortions in PMS implementation to differences in perspectives between the PMS designers and users, and between the managers and employees. Though not addressed by Bianchi and Williams in their study, these perspectives are nonetheless variously grounded and informed by diverse cognitive structures (Ashworth et al., 2007; Kahneman, 2012). Institutional logics, defined as, ‘the socially constructed, historical patterns of material practices, assumptions, values, beliefs and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality’ (Thornton & Ocasio, 1999, p.804), are one such set of cognitive structures. And by providing the lenses through which actors view their organizational realities (Gioia, 1984; Ford & Ford, 1994), it is reasonable to assume their influence on how organizational actors perceive and react to performance measurement (also, Skelcher & Smith, 2015).

However, despite calls to further examine cognitive influences on PMS implementation, this topic has remained under-researched (Pollitt, 2013). And of the few but important studies in this area, focus has tended toward the meso-organizational level (e.g., Skelcher & Smith, 2015). Consequently, the nature of the relationships between cognitive structures such as institutional logics, and PMS implementation, at the micro-level of the

organizational actor (which drives the meso-level responses) is not well understood (Vakkuri & Meklin, 2006; Pollitt, 2013).

Thus, to partially address this gap we draw from Micheli and Mari's conceptualization of performance measurement as a "fundamentally epistemic and pragmatic act" (2014, p.148) and recast PMS implementation as decision-making. In this sense, PMS implementation becomes a practical rather than idealist endeavor that is at once both objective and inter-subjective, and that is attuned to institutional contexts that may both enable and possibly constrain options and action. Moreover, this conceptualization emphasizes the role of human agents and the interactions between them within "external realities that can constrain or facilitate action" (Micheli & Mari, 2014, p.149). These "external realities" include cognitive structures such as institutional logics that anchor the perspectives of, and the constructions by, the said organizational actors regarding the PMS, thus delimiting their considerations, judgment and consequent action.

We are however, not the first to examine performance measurement in the public sector through an institutional lens (e.g., Modell, 2009, and Pollitt, 2013 for overviews). Much extant literature however focuses on neo-institutional theory, on the characterization of institutional research on performance measurement and on institutional effects of performance measurement; rather than institutional logics (Modell, 2009). We extend the work of these authors by making the following additional contributions: First, by conceptualizing performance measurement as decision-making we re-orient research toward a view of PMS implementation that underscores performance measurement as social construction, and that stresses the relational and interpretive nature of human activity within specific contextual constraints and enablements. This is important as though exceptions exist (e.g., Yang &

Modell, 2012), much of the performance literature applying an institutional lens has been preoccupied with the macro and meso-levels of analysis, and has ignored the role and experiences of the organizational actor in relation to the institutions within which they are embedded. Second, we focus on institutional logics rather than the broader institutional theory. Third, we connect extant research dots to provide a systematic account of, and build a model encompassing the range of relationships between institutional logics and performance measurement implementation. Moreover, we theorize on when, why and how actors implicitly or explicitly mobilize institutional logics in this PMS implementation process, and the likely effects of such institutional work.

In the next section, we provide an overview of the literature behind the concepts. We then synthesize extant literature on institutional logics, decision-making and performance measurement to derive an explanatory model based on the theorized relationships. We conclude by discussing the paper's implications for the study of performance measurement in the public sector.

2.2 Situating the literature

2.2.1 Conceptualizing PMS implementation as decision-making

Radnor and Barnes (2007) define performance measurement as 'quantifying either quantitatively or qualitatively, the input, output or level of activity of an event or process' (p.393). Similarly, a PMS invokes an assemblage of interdependent tools and processes that interact to deliver the performance measurement goals. Thus, we consider PMS implementation to mean operationalizing specific elements or a complete system of performance measurement. This operationalization comprises a stage of adoption and another of instrumental action (de Lancer Julnes & Holzer, 2001). The adoption stage refers to the

development of ‘capacity to act’ – including the development or refinement of measures and the elaboration of how the different aspects of the PMS are expected to unfold. The instrumental action or system-in-use stage refers to the roll-out of the different components of the PMS. This stage has two essential elements: a technical element that involves operationalizing the tools, technologies and supporting information backbone; and an organizational element that involves personnel putting the system into practice (also, Jaaskelainen & Sillanpaa, 2013).

Thus, the questions afforded by PMS implementation will include what to measure, why, how and by who; as well as how the ensuing information is to be interpreted and communicated (Fryer et al., 2009). And each of these questions will present dilemmas for the organizational actors. For example, regarding what to measure, the multi-faceted nature of the public sector often presents challenges in developing and defining indicators (Moynihan, 2008), and in choosing the most appropriate (Kennerly & Neely, 2002). Then again, the ‘how’ questions require that the ‘what’ question has been clarified, that the data sources and manner of collection are clearly defined, and that the assumptions underlying the ‘why’ are clear (Fryer et al., 2009).

Much of the performance measurement literature conceptualizes performance measurement and PMS implementation in this manner. An implicit assumption in this conceptualization is that of order, that is, the existence of clear desired outcomes, structured stages between the current and the desired state, and clearly identifiable cause-and-effect relationships (Snowden, 2005). Assumptions underpinning this perspective of order are that the essential properties of measurement are straightforward and can thus be taken for granted, and that there is no cognitive disagreement among the actors regarding the definition of the

situation (Micheli & Mari, 2014). Thus, individuals need only know the what, who, how, where and when, and the system would run as intended, yielding consistent results as expected. This perspective is captured by Bourne and colleagues (2000) who state that “(performance measurement) implementation is primarily a mechanistic exercise and should be susceptible to being managed by classic project management tools” (p.767). Exemplars of this philosophy include accounting-based systems such as Activity-Based Costing (Johnson & Kaplan, 1987) and others such as the Performance Pyramid (Cross & Lynch, 1992) and the Balanced Scorecard (Kaplan & Norton, 1996).

Given the limited recognition of the role of cognition in this conceptualization, attendant research has likewise inordinately focused on the technical elements of performance measurement i.e., on the development of tools, frameworks and procedures, and on their critique or support (Micheli & Mari, 2014). This perspective however raises several problems. First, the assumption of order has led researchers in PMPS to inordinately focus on functions that have order, and on the structure and design of processes that ensure repeatability and consistency. Failure of the PMS is seen as a failure of design (hence necessitating change from one framework to another) or of know-how (hence requiring training or more knowledgeable actors), but not as arising from the very nature of the system within which it is made operable (whether ordered or unordered), or from the complexity inherent in human or social interaction during implementation.

Yet the public sector can be more often characterized as un-ordered rather than ordered. Such un-ordered settings accommodate multiple actors with multiple and varied interactions such that cause-and-effect relationships are not clearly identifiable or repeatable, nor are outcomes predictable except in the most general terms (Moynihan, 2008; Snowden, 2005). The

health public sector that is characterized by frequently shifting contexts, multiple stakeholder involvement and high levels of ambiguity regarding process and outcomes is an apt example. Extant research that has taken on a predominantly ordered perspective downplays the subtleties and complexities inherent in such unordered settings.

Furthermore, not enough attention is given to the idea that the process of performance measurement in the public sector can relate to both physical objects (e.g., number of clients served), and socially constructed objects (e.g., patient satisfaction). These socially constructed objects are often ‘complex and difficult to define and measure in their properties’ (Micheli & Mari, 2014: 152), thus leaving room for varied interpretations and negotiation on their meaning. Moreover, the goals of the PMS and the constraints impinging on its implementation may be unclear or fuzzy. In this sense, a fuzzy goal or a fuzzy constraint imply an objective or a constraint that can exist anywhere along a grade of membership ranging from non-membership to full membership (Bellman & Zadeh, 1970). For example, ‘substantial improvement in patient well-being’ is a fuzzy goal, while ‘between one and two percentage points’ is a fuzzy constraint. Additionally, even where the goals are presumably clear, the PMS sponsors and designers may have varied understandings, assumptions and expectations about performance measurement that are explicitly or implicitly built into the PMS, and which may be at odds with those of the implementers (Fryer et al., 2009; Micheli & Mari, 2014).

Consequently, it is possible to examine PMS implementation as a series of decisions preceding action, which is interpenetrated by diverse values, legitimations and pressures (Vakkuri & Meklin, 2006; Dalehite, 2008; Pollitt, 2013). This approach acknowledges the centrality of the human actor in the PMS implementation process, recognizes the messiness of

their interactions in the search for focus and alignment, and allows for the construction of models that amply accommodate the interrelationships between people, process and context.

Accordingly, we review the seminal models developed by Mintzberg, Raisinghani and Theoret (1976), Glueck (1976) and Mazzolini (1981), to derive a simplified PMS decision model whose stages are: PMS decision-need recognition and definition, the generation and consideration of PMS alternatives, choice selection and approval, and instrumental performance measurement action. The first three stages in this model represent processes involved in De Lancer Julnes and Holzer’s (2001) PMS adoption, while the last – instrumental action – represents PMS-in-use. Table 2.1 presents an abbreviated comparison of the models.

Table 2.1 The decision-making models

Glueck (1976)	Mintzberg et al. (1976)	Mazzolini (1981)	The Derived PMS Decision-Making Model	De Lancer Julnes and Holzer, 2001
Appraisal	Decision recognition and Diagnosis	Decision-need identification	PMS Decision-need recognition and definition	PMS adoption
Consideration of Strategic Alternatives	Search for answers and design of the proposed solution(s)	Search for alternatives	Discourse: Generation and consideration of PMS alternatives	
Choice of Strategy	Screening and Evaluation of alternatives, Authorization	Investigation of courses of action, Review and Approval	Discourse: PMS choice selection and approval	
Implementation	-	Implementation	Instrumental PMS action and feedback loops	PMS-in-use
Evaluation	-	-		

Decision-need recognition refers to the awareness of problems or opportunities arising from an appreciation of difference between the current state and some expected standard, and which then evokes decisional activity (Mintzberg et al., 1976). On the other hand, definition relates to attempts to better understand the evoking stimuli and to reframe the issue of concern while determining likely cause-effect relationships (Mintzberg et al., 1976; Mazzolini, 1981).

In public sector performance measurement, the triggering stimulus can arise from ongoing benchmarking, from an active search for opportunities, or as a reaction to crises and problems (Rautiainen & Jarvenpaa, 2012). Equally, the definition stage will involve the explicit and formal or implicit or informal mobilization of diverse channels of information to clarify and define the issues (Mintzberg et al., 1976; Mazzolini, 1981).

The next stage involves the active or passive search for alternatives through internal (individualized) or externalized discourse. Whereas passive search involves the emergence of unsolicited alternatives, active search may include scanning personal or organizational memory, or the direct seeking of alternatives including activation of internal and/or external actors and personal or collaborative reflection on the design of custom-made solutions (Mintzberg et al., 1976).

The third stage in the derived decision model involves an iterative and recursive *mélange* of three closely intertwined processes – the screening of PMS alternatives, selection and approval. Screening reduces the number of alternatives for consideration while selection involves evaluation of these few against preset criteria. Approval on the other hand encompasses ratification of the choice made, which then paves the way for the final stage - instrumental action.

Conceptualized in this way, we are thus able to examine both the process motor that powers the PMS implementation decision sequences, and the socially-constructed realities that temper the ongoing process, to provide an account of how cause and effect relationships may come about. But first, we briefly revisit the literature on institutional logics.

2.2.2 *Situating the literature on institutional logics*

Organizations are a product of their institutional environments (DiMaggio & Powell, 1983) and as such, the institutional lens provides a useful theoretical tool for their examination. The theory of institutional logics specifically places emphasis on the cognitive dimensions of institutions and allows for active agency among the actors (Suddaby & Greenwood, 2005). This is aligned with a major premise of social cognitive research wherein people act based on their interpretations of the world (Gioia, 1984; Kahneman, 2012). Moreover, the conceptualization of performance measurement as an epistemic and pragmatic process (Micheli & Mari, 2014) requires that due consideration is paid to the influence of interpretive models such as institutional logics on the measurer.

Early institutional research on performance measurement however tended to view organizational actors as mere “carriers of institutional processes” (Scott, 2001, p.79), and focused on decoupling or loose coupling of performance measurement practices, while later research focused on active agency and on the actor’s purposive responses to institutional pressures (Modell, 2009). Empirical evidence of these diametrically opposite positions presented researchers with a paradox: how could actors be constrained by the very institutions that they influence and/or change at will? Here, the conceptualization of organizations as inhabited by actors who not only ‘enact preconscious scripts’, but also ‘make sense of and interpret institutional vocabularies’ that ‘emerge from their professional commitments, personal interests and interactional on-the-ground decision making’ to guide their actions and interactions (Binder, 2007, p.548), provided a mechanism for accommodating individuals and their interactions under these paradoxical conditions.

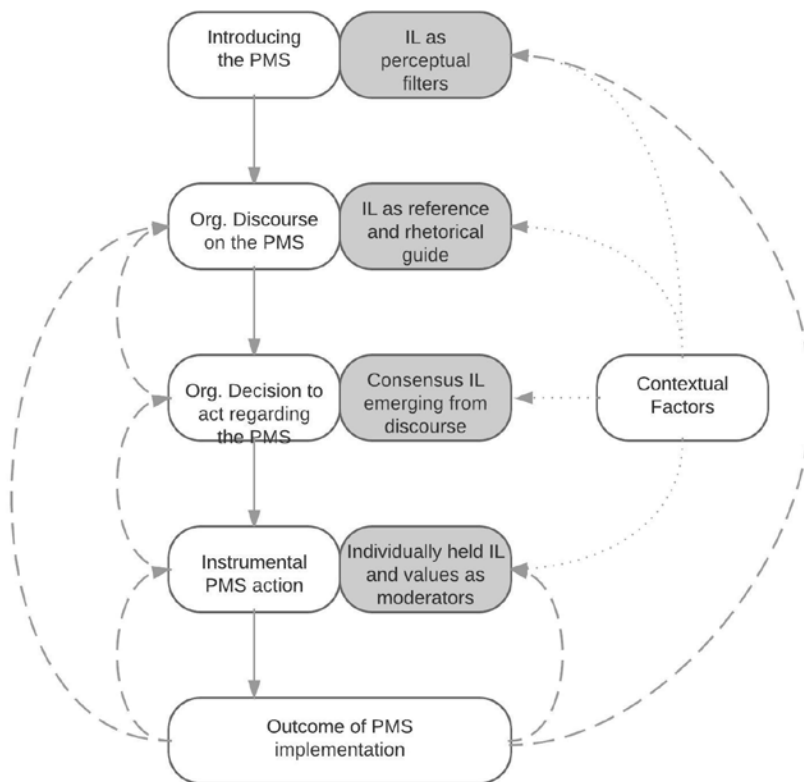
Organizational actors thus neither unquestioningly follow institutionalized scripts nor purely rationalize their action (Everitt & Levinson, 2016). Instead, in attempting to satisfy multiple demands, and in interaction with other organizational actors, they may enact institutional scripts as prescribed, or may combine them in creative ways to generate hybrid, novel or unexpected practices (Binder, 2007; Modell, 2015). Thus, this agency implicitly assumes a range of probable relationships between actors and institutions, and accommodates a spectrum of actor action – from passivity and routine re-enactment to active agentic action. It also assumes intentionality and ingenious effort within institutional structures that both enable and constrain such action (also, Lampel, Honig & Drori 2011; Walker et al., 2014). Ingenuity in this sense is conceptualized as innovative activity within a constraining structural (institutional) environment by means of imaginative problem solving (Lampel et al., 2011, p.458). Institutional logics influence this agency by structuring organizational actor experiences, facilitating interpretations and providing a basis for action (Orlikowski, 1992, 2000; Lawrence et al., 2013; Smets & Jarzabkowski, 2013).

Finally, in the analysis of PMS implementation in the public sector through an institutional lens, we are alive to the tension between top-down and bottom up processes. PMS are often introduced in a top down manner, while responsibility for implementation is heavier at the bottom (Scott, 2001). We address this paradox by acknowledging that all actors in the organization, irrespective of hierarchy, can be and are often engaged in implementation work (see also Lawrence & Suddaby, 2006; Sabatier, 1998). And all, bar none, are subject to the influences of institutional logics.

2.3 Developing the model: Institutional logics and performance measurement as decision-making

From the review and synthesis of the literature on performance measurement, decision making and institutional logics we derive the following model, presented as Figure 2.1.

Figure 2.1 Institutional logics and PMS implementation as decision making



In this representation, the primary relationships first suggest that institutional logics filter the perception of the PMS by the organizational actors. These perceptions are made manifest during organizational discourse, where deliberations are further moderated by other societal institutional logics and by technical, pragmatic and contextual considerations. The deliberations result in an organization-level decision to act. Though closely intertwined, the

elements between the coordinating event and the decision to act are separated in this model to facilitate discussion. Instrumental action is depicted as deriving from the organizational-level decision to act moderated by the actor's values; while feedback loops are shown to recursively affect all the hypothesized decision steps.

2.3.1 Introducing the PMS: institutional logics as perceptual filters in PMS decision-need recognition

Decision-need recognition and definition involves the identification of problems or gaps against a predetermined threshold, the determination of alternative actions and the identification of information necessary to commence the process of problem solving (Mintzberg et al., 1976; Mazzolini, 1981). PMS decision-need recognition and definition has similar concerns. Thus, the PMS decision-making situation will encompass the decisional problem (e.g., choice of PMS, order or ranking), and a set of alternatives, with each alternative representing a possible action for decision-making (Kornysheva & Deneckere, 2012). The interpretation of decisional problems has however been shown to vary between decision-makers (Mintzberg et al., 1976). These differences have been traced to the decision-maker's expectations and beliefs (Kozielecki, 1981) which are in turn anchored on their frame of reference at the time of perceiving the problem. Institutional logics are one such frame of reference.

These institutional logics exist within the societal system, and organizational actors are exposed to them through the processes of learning and socialization (Smets et al., 2012). Thus, institutional logics may be 'brought into the organization' by actors who, 'as participants in broader social discourses and institutions' (Suddaby et al. 2010, p.1235), may transpose their referent logics into the organization (Dunn & Jones, 2010; Pollitt, 2013). Institutional logics

instantiated in organizations may also derive from *ab initio* theorizing (Ocasio et al., 2015), from successful, ideologically-motivated experimentation (Knocke, 1982), and from the imitation of organizations dominating that environment, including mimicking the PMS of donor governments or agencies to gain legitimacy and win their support (Bitektine & Haack, 2015).

Public sector organizations therefore frequently accommodate more than one institutional logic (Skelcher & Smith, 2015). Moreover, a distinct ‘organizational logic’ may develop as an amalgam of individual institutional logics (Seo & Creed, 2002). This amalgam may exist in a relatively stable equilibrium with the temporal acceptance of a dominant institutional logic (Bettis & Prahalad, 1995), or as a combination of institutional logics coexisting in a stable collaborative fashion (Purdy & Gray, 2009), in a state of competitive dynamic tension (Pollitt, 2013) or of temporal dominance (Seo & Creed, 2002; Reay & Hinings, 2009), or in a territorial manner within the organization (Reay & Hinings, 2009; Dunn & Jones, 2010). In the public sector, Skelcher and Smith (2015) propose plural institutional logics taking on segmented, segregated, assimilated, blended or blocked hybrid forms. Over time, this hybrid or amalgamated ‘organizational logic’ may even take on a life of its own complete with built-in maintenance mechanisms (Thornton & Ocasio 2008; Skelcher & Smith, 2015). Such ‘organizational logics’ are nevertheless ideational and capable of being assimilated and acted upon by organizational actors (Seo & Creed, 2002; Skelcher & Smith, 2015).

The diverse institutional logics described above provide organizational actors with different frames of reference that structure their perception and interpretation of issues and events (Thornton & Ocasio, 2008) including how they perceive and interpret PMS decisional

problems. For example, Guven-Uslu and Conrad's (2008) analysis of benchmarking in NHS Trusts reveals variations in the meaning of the term 'benchmarking' for different groups in the same organization. For accountants, benchmarking meant comparative cost measures, while for clinicians benchmarking meant learning from scientifically-proven best practice and not cost comparison.

Thus, following Bettis and Prahalad (1995), an actor's referent institutional logic can be conceptualized as a frequency whose 'bandwidth' is 'a measure of the tightness of the constraints imposed' (p.8). The ability to expand ones understanding of a PMS will require an increase of the bandwidth (i.e., relaxing of the constraints) or tuning to a different band, ergo a different institutional logic. Consequently, logic multiplicity will provide the institutional foundations for variety in the cognitive orientation of organizational actors regarding what can be considered a legitimate response to the PMS decisional problem at entry (Bertels & Lawrence, 2016). Thus, selective perception occasioned by ones' referent logic will lead to the selection of alternatives (from the 'set of possible constructions') that are most flattering to one's position, and the rejection or non-consideration of those that are not.

Proposition 1: Organizational actors will show greater support for PMS when its intended use aligns with the norms and expectations of their dominant or referent institutional logic

There are however, contextual constraints to the influence of institutional logics on organizational actor perception. For example, the accessibility of constructs in an actor's cognition is influenced by their context, through the processes of priming, that is, the nonconscious activation of cognitive structures by environmental cues such as images or text (Kahneman, 2012). Moreover, the introduction of a new PMS may bring with it external

normative pressures concerning how organizational units or actors should behave (Radin, 1998; Rautiainen & Jarvenpaa, 2012). Consequently, a PMS could unambiguously favor all institutional logics, favor some or favor none. Or the PMS could be ambiguous about one or several logics, hence leaving room for actor discretion regarding how they interpret the PMS. Thus, context will not only prime institutional logics, but through this priming action as well as independent of it, will limit the alternatives available to the actor for consideration.

Proposition 2: Environmental cues such as text or imagery will (nonconsciously) prime the institutional logics that will consequently anchor the perspectives of the organizational actor regarding the PMS decisional problem

2.3.2 Institutional logics and organizational discourse on performance measurement

Following the PMS decision-need recognition and definition, alternatives to the questions afforded by its introduction must be generated and considered. In this regard, we are alive to the wide scope for tensions between the institutional logics drawn upon by the different actors (Talbot, 2008). Thus, depending on the perspective embraced by the referent institutional logic, performance measurement may be supported or contested in toto or in part (Talbot, 2008; Moynihan, 2008; Moynihan et al., 2011). And so, organizational discourse, whose role is central in developing shared intentionality, will be the means through which these questions and others afforded by the PMS are re-interpreted and answered by the organizational actors as they seek to coordinate their activities (Moynihan et al., 2011; Bertels & Lawrence, 2016).

During such discourse, actors will draw on their referent institutional logics to frame the PMS issue, to legitimate their preferences, and to structure their rhetoric to persuade others (Ocasio et al., 2015). Persuasion may however require several discourses, and readiness to

provide concessions (Callon, 1986). Accordingly, actors may draw on different logics to create new interpretations, options and solutions (Shrivastava et al., 1987). They may also combine logics by importing understandings from one into another (Reay & Hinings, 2009; Smets et al., 2015). And, they may selectively adopt and deploy institutional logics to legitimize and mobilize political action against incommensurate logics (Seo & Creed, 2002; Reay & Hinings, 2009). Moreover, the greater the ambiguity in the PMS, the greater the chances for discretionary interpretation. And so, throughout this process, there is likely displacement and transformation of (PMS) goals and interests (Townley, 2002; Battilana et al., 2009) as actors and coalitions seek to impose their logic on others while protecting their own (Seo & Creed, 2002; Purdy & Gray, 2009). Moreover, the constellation of actors may change, and as they change they may bring with them new ways of thinking, which may be consonant or conflicting with what was already there (Moynihan & Pandey, 2005; Talbot, 2008).

We thus identify two concurrent discourse processes acting in tandem – an internal self-reflective process based on the emerging discourse on the PMS, and the interrogation and filling-in of gaps in one’s logic about the PMS (Quattrone, 2015); and an external political process based on mobilization of accumulated resources to defend one’s own or to challenge other logics (Modell, 2015). We believe these concurrent discourses are closely intertwined. Furthermore, our analysis of the literature reveals that where there is close alignment between individuals and groups to a specific position (on PMS implementation for example), enrolment to one’s position may happen without resistance; otherwise it may only be achieved through force, seduction or transaction (Callon, 1986).

However, as the organizational actors compete in an arena in which the means and ends of their interests and agency are both enabled and constrained by the prevailing institutional

logics (Thornton & Ocasio, 2008), they are unlikely to introduce logics of performance measurement that are unfamiliar to other participants, as doing so would make it difficult to gain consensus and support. Rather, they are more likely to adopt a frame or set of frames that is 'sufficiently incompatible with the existing institutional arrangements to generate a fundamental departure from the past while also sufficiently resonant with those in existence to mobilize support and resources from other participants' (Seo & Creed, 2002, p.236). Additionally, the gravitation of actors toward a conception of the PMS may include the path-dependent use of older solutions that they are accustomed to regardless of whether these ever worked or whether they can be reasonably expected to work in this new setting (Gersick & Hackman, 1990). These previous or existing practices may not only be used as 'anchors' in the evaluation of other PMS alternatives, they may even preclude their consideration (Shrivastava et al., 1987; Modell et al., 2007).

Moreover, given the organizational context and discourse dynamics, and the social position, roles and power wielded by varied actors in the discourse, some actors may choose to express certain views and to suppress others (Noelle-Neumann, 1993; Clemente & Roulet, 2015), particularly if they consider those views to be socially unacceptable or counter to the emerging organization stance, or if they have reason to anticipate sanctions for deviant judgment expression (Bitektine & Haack, 2015). Thus, the higher the resources commanded by an actor, the greater their power over the course of the discourse, and the more likely their interest will be given preeminence (Lansiluoto et al., 2013). And conversely, the more likely certain views may be suppressed. Self-reflection as a form of internal discourse may also be tempered by the same social acceptability constraints (Modell, 2015). These social and self-imposed constraints may thus provoke a spiral of silence in which observed organizational

consensus may give the appearance of resolution while concealing privately-held-yet-suppressed proprietary judgments (Clemente & Roulet, 2015).

The feasibility of a harmonious PMS approach will thus depend on the dynamics of the organizational discourse. If organizational discourse is successful, there is unity of voice and purpose and action (Callon, 1986). Contrariwise, discordance arising from the various inconsistencies and contradictions in and between institutional logics may be implicit and suppressed, or explicit and generative of a feedback loop, since it questions the processes and outcomes of the previous steps.

Proposition 3: Latent tensions between institutional logics concerning performance measurement will become salient during organizational discourse on PMS change

Proposition 4: Conflicts and inconsistencies between institutional logics regarding performance measurement will provoke a redefinition of actor roles and relational boundaries in PMS implementation

Proposition 5: Actors who straddle different institutional domains, or whose logic encompasses dialectical tensions between other logics, will more likely accept the tensions brought on by a change in, or introduction of, a new PMS

2.3.3 Institutional logics and the organizational decision to act

For a PMS to deliver as intended, it must be purposeful, unified, integrated and fluid (Fryer et al., 2009). And to arrive at this consensus approach, choices will have to be made based on political, subjective and technical considerations (Pollitt, 2013). These decisions and choices take on added importance in the public sector considering the diversity of actors that Pollitt (2013) identifies as core to performance management. They include politicians (ministers,

legislature), top officials and technocrats in the civil service, and operational staffs, all with potentially different motivations to engage in performance measurement, and a varied cognitive grasp of its technicalities (Pollitt, 2013; also, Moynihan & Pandey, 2005; Radin, 2000).

As what gets done is the result of a negotiated process (Zilber, 2007), the different strategies employed by the actors during discourse will influence the decision outcomes regarding the PMS (Jarzabkowski et al., 2013). This decision outcome will thus be dependent on the participants in the discourse, the climate of participation, and the external normative pressures introduced by the PMS concerning how units or individuals within the organization should behave (Greenwood et al., 2011; Rautiainen & Jarvenpaa, 2012). And the criteria considered by these diverse actors when evaluating alternative courses of action may differ in their assigned weights, that is, their relative importance from the perspective of the decision-maker (Kornysheva & Deneckere, 2012) as influenced by their referent institutional logics. Moreover, the decision-makers may have different preferences (defined as wishful values according to given needs), and different thresholds or levels of acceptability (Kornysheva & Deneckere, 2012). These preferences and degrees of acceptability will be further determined by the decision-makers tastes and beliefs that draw from their referent institutional logics.

Thus, the comparison of PMS alternatives will consider alignment or misalignment with logic-influenced preferences and thresholds. The threshold values determine consideration and action – whether support, indifference or veto. And so, to meet these potentially diverse expectations regarding the PMS, the organizational decision-to-act resulting may include acquiescence (Oliver, 1991), and avoidance through loose coupling or decoupling (Chang, 2006). The decision-to-act could also include sagacious conformity or

compromise (Rautiainen & Jarvenpaa, 2012), resistance (Townley, 1997), deflection or manipulation of the sources of pressure to enact the PMS (Oliver, 1991; Ashworth et al., 2007), defiance (Oliver, 1991; Lounsbury, 2008) and compartmentalization (Dunn & Jones, 2010; Jarzabkowski et al., 2013).

All these choices arise from the contestation between logics and reflect the degree to which some form of consensus is achieved. Thus, disconnect between the actors' referent institutional logics and organizational desires regarding the introduced PMS can lead to any of the forms of gaming referred to above, or to inaction or half-hearted action (Radnor & McGuire, 2004; Andrews & Martin, 2007). Structure constrains the relationship between institutional logics and the organizational decision to act on several fronts. In the first instance, it imposes the need to balance expectations with avoidance of the social costs associated with violation of others (Thornton et al., 2012). Additionally, the results of organizational discourses act as a form of social control, putting pressure on individual actors to conform to the consensus PMS implementation decision (Neuwirth & Frederick, 2004; Kim, 2012).

Proposition 6: The collective decision will reflect the degree of congruence between the consensus organizational logic that is the result of negotiation and reconciliation of the norms and values associated with individual logics, and the PMS, moderated by pragmatic concerns

2.3.4 Institutional logics and instrumental performance measurement action

Organizations are known to have 'pockets of discretion and autonomy and local ecologies of power and influence' (Binder, 2007). The reflective purposefulness of organizational actors (Zilber, 2013), underpinned by their referent institutional logics, their values and explicit

rational considerations, will therefore determine whether they ultimately support or resist organizational positions within these ‘pockets of discretion and autonomy’ (Goodrick & Salancik, 1996; Lawrence et al., 2013). As a result, despite coming to organizational consensus on what action to take, PMS may not be implemented as intended partly due to the disconnect between the consensus logic and individually held logic, and the effect of privately-held yet suppressed judgments that draw from their individual values (Ashworth et al., 2007; Bitektine & Haack, 2015). Consistent with Leys (1962), we define values as deeply held frames of reference existing at the level of the individual (Leys, 1962). And they are partly endogenous even though they draw from and are probably tightly linked to exogenous sources (Yang & Modell, 2012). Prior institutional research has not fully appreciated this distinction between values and institutional logics, the latter of which are largely exogenous in origin, and may or may not be as deeply held (Yang & Modell, 2012). Values are thus more resistant to influence and change (Rokeach, 1973).

And so, whereas individuals are not independent of organizational expectations, misalignment may occur because of individual idiosyncrasies drawing from their individually-held institutional logics and their values (Yang & Modell, 2012). Put differently, actors are unlikely to subordinate or change their values to altruistically accept organizational direction - unless the latter fall within their own ‘zone of values’ (Paarlberg & Perry, 2007). Value conflicts are thus part of the story of public management and they occur in situations where organizational actors are unable ‘to dis-embed their actions from their values and beliefs when confronted with their institutional environment’ (Yang & Modell, 2012, p.105). For example, Yang and Modell (2012), observe the challenges faced by a local government department head

in keeping her internalized beliefs and values aligned with institutionalized expectations, because of her ‘relative value rigidity’.

Thus, since frontline action is dependent on the degree of congruence between actor values and individual logics, and the organizational decision (Ashworth et al., 2007), where there is congruence we expect reasonably similar interpretations of the PMS and concordant behavior (Gioia & Sims, 1986; Isabella, 1990). For example, Chang (2006) found that in complex public settings with more than one powerful actor, local managers tended to act in line with the constituent’s interest that was most compatible with their own. Accordingly, where there is less congruence we expect implementation difficulties including deviant behavior (Bitektine & Haack, 2015), or in a best-case scenario, some degree of loose coupling or decoupling (Andrews & Martin, 2007; Reay & Hinings, 2009).

Furthermore, frontline performance measurement action is likely to be influenced by the actor’s implicit loss aversion i.e., whether the desired action and its outcome will yield a net gain or loss (Kahneman, 2012), and explicit consideration of sanction/reward for deviant/concordant behavior (Bitektine & Haack, 2015) as self-regulatory mechanisms. Self-regulation may thus act as a moderator placing social conscience, social acceptance and pragmatic concerns before individual impulse, thus helping prevent action regarding PMS implementation that may be initially beneficial to the actor but costly in the long run (Chang, 2006).

Proposition 7: The commitment of the organizational actor to the implementation of the PMS will vary according to the degree of compatibility between the collective decision and the values, norms and expectations espoused by his own referent institutional logic

2.3.5 *Context and institutional logics*

The role of context in public sector performance measurement has not been comprehensively examined and empirical work remains thin and fragmented (Vakkuri & Meklin, 2006). Yet when members of an organization act on any aspect of performance measurement, they do so within its contextual setting (Vakkuri & Meklin, 2006). Here, by context we refer to the performance measurement decision environment. We are thus concerned with elements that may influence the perspective of the organizational actors or otherwise influence their judgment and action regarding the PMS.

Thus, the literature reveals that organizational configurations matter (Moynihan et al., 2011; Talbot, 2008). For example, Talbot (2008) presents configurations based on Wilson's (1989) typology of public agencies, as well as Mintzberg's (1983) typology of a machine bureaucracy, professional bureaucracy or adhocracy, as interacting differently with the same PMS. Additionally, organizational decision-making may be fragmented with separate units of varying degrees of autonomy responsible for different aspects of PMS implementation (Radin, 1998, 2000; Moynihan et al., 2011). These units will be populated by diverse individuals, thus representing perspectives that are probably differentially aligned to performance measurement and the proposed PMS course of action (Radin, 1998, 2000). Furthermore, in some public organizations, there is a tendency to conflate planning, budgeting and performance management (Radin, 2000). Yet these are complex functions in and of themselves. Moreover, the individuals tasked with each of these functions have their own logic-influenced perspectives, preferences and interests. Thus Radin (2000) observes striking differences between the federal management and workforce issues staff, and the budget issues staff in their approaches to tasks related to the implementation of the American Government Performance

and Results Act. The former emphasized a ‘centralized, control approach’, while the latter focused on ‘institutional constraints’ (Radin, 2000, p.126).

The external social context also matters. Given that discursive struggles usually occur in parallel in the wider societal and narrower public sector spheres, one can reasonably expect societal-level institutional logic to exert influence on organizational PMS discourse when such societal logic is co-opted as individual and organizational frames of reference (Clemente & Roulet, 2015). For example, Pollitt and Bouckaert (2000) find the formulation and implementation of the UK NHS star-rating PMS to have been greatly influenced by political targets. The greater the degree of social, professional, economic and political connectedness, the greater the likelihood of adoption of societal institutional logics and of standardization (DiMaggio & Powell, 1983; Orlikowski & Gash, 1993; Meyer et al., 1997). This hypothesized link may partially explain why PMS in public sector organizations reflect both global and national social forms (Meyer et al., 1997; Drori et al., 2006).

The influence of these external influences is nonetheless likely to depend on the organizations sensitivities to what is going on ‘out there’. For example, a public organization may be embedded in such a way that it is more exposed to the tensions between multiple logics, as would be the case for health sector organizations that bestride multiple institutional logics (Seo & Creed, 2002). The public organization may also be more visible than other actors because of its ‘status, resources, size and media attention’, and thus be more sensitive to certain logics because ‘it is being watched’ (Greenwood et al., 2011).

The sensitivities of organizations to what is going on ‘out there’ may also explain the enactment of a PMS to signal legitimacy (see also Meyer & Rowan, 1977; DiMaggio & Powell, 1983). These sensitivities may include the pragmatic considerations of interested and agentic

actors keen to see their units or organization survive and thrive in contexts where their dependence on external actors demands it (de Lancer Julnes & Holzer, 2001; Yang & Hsieh, 2007; Eliuz et al., 2017). Chang (2006) for example notes that given their dependencies on the central government, local public sector managers are more likely to acquiesce to coercive institutional pressures imposed by central government to preserve their jobs, reputations and funding for their operations. Such managers are also less likely to interrogate proposed PMS changes, and consensus building with them and their subordinates is more likely to be reduced to quasi-participation (Chang, 2006).

Thus, though the organizational actor is partially autonomous from the context in which they exist, their awareness is concurrently influenced by the very context (Kahneman, 2012). This sets the stage for diverse context-dependent interpretations and potential agential action. The organizational actor may thus apply an institutional logic in one setting and not another – a process referred to as segmenting (Smets et al. 2015) or compartmentalizing (Dunn & Jones, 2010). Similarly, a prevailing climate of organizational crisis may foment discontent with the current arrangements thus raising prospects for the emergence, consideration of, and actor receptiveness toward specific PMS alternatives.

Public sector actors are thus political actors with myriad relationships with each other, with society and with their political principals (Talbot, 2008). Contextual factors such as the legal context, organizational and political realities provide the boundary posts within which their referent institutional logics are instantiated (Seo & Creed, 2002; Chang, 2006). And they affect how the organizational actor's consciousness will unfold, making other options unimaginable or un-actionable while concurrently enabling the unfolding of PMS

implementation in a manner reflective of global and national social forms (Meyer et al., 1997; Drori et al., 2006).

Proposition 8: The greater the degree of organizational, social, professional, economic and political connectedness, the greater the likelihood of PMS adoption and/or standardization

2.3.6 *The reflexive dimension: Feedback loops and organizational learning*

Organizational actors are more than ‘mere carriers of institutions’ (Hallett & Ventresca, 2006). They can reflect, that is, think about their own thinking as well as that of others (Micheli & Mari, 2014). And they can engage in agential activity advocating for the legitimacy of certain positions in some situations, yet challenge the same legitimacy in others (Lawrence & Suddaby, 2006). Moreover, the institutional logics they draw from are often internally inconsistent, accommodating ideas that are ambiguous, obsolete, incomplete or incorrect (Quattrone, 2015). The outcome of PMS discourse, rooted in the mobilization of different logics, may thus cause further fragmentation and variety in institutional arrangements (Lounsbury, 2008; Ocasio et al., 2015) including how they relate to performance measurement. The ensuing legitimation of PMS implementation may arise from this purposeful action and conscious sense-making; or from inaction, as actors fail to counter given positions either out of a lack of interest or a failure to define and offer acceptable alternatives (Everitt & Levinson, 2016).

In addition, the performance measurement discourse, the decision to act, and instrumental action are permanently observed by organizational actors, decoded and interpreted. Action and outcomes are evaluated against expectations from whence they may

serve to reinforce, or lead to a questioning of, the decisions made, the action taken and the underlying institutional logic. Radcliffe and Heath (2009) for example note that whereas government policy embodied in the modernization agenda reinforced, and was reinforced by, changing practice on the ground; performance indicators and aspects of organizational culture were similarly reinforcing each other. And so, reflexivity is a core concept in PMS implementation in the public sector. Drawing from Archer (2007), we conceptualize reflexivity as the mental ability of organizational actors to consider themselves and their practices in relation to their social context, and concurrently, to consider their social context in relation to themselves and their desired or actual practices (see also, Modell, 2015). It is this reflective process that leads to the development of a personal strategy for action and consequently, agentic action (Modell, 2015). The absence of such reflexivity would imply that organizational actors are ‘structurally determined to reproduce dominant social orders’ (Modell, 2015, p.776).

Thus, engendering reflexivity helps achieve a balance between agency and structure, with equal attention paid to both the social structures that condition action, as well as the reflexive process of individuals deliberating on their position regarding ‘objective referents out there’ (Archer, 2007; Modell, 2015). So, whereas institutional logics influence actor cognition and action about performance measurement, actor action is simultaneously observed and reflected upon. Thus, the outcomes of actor action in turn influence how these logics will be instantiated in future. This recursive relationship is at the core of organization learning and unlearning (Thornton et al., 2012), and contributes to the dynamism of the PMS implementation process.

2.4 Assumptions and boundary conditions

Although the model depicts PMS implementation in the public sector as a series of decisions made at specific moments in time over which a course of action is selected, it does not prescribe a necessary sequence of events. Rather, the model admits greater complexity regarding causal agency by acknowledging the reflexivity of organizational actors while stressing their purposive movement toward implementation of the PMS as planned, despite potentially conflicting goals or interests. The model also acknowledges the limitations placed by context on actor actions. Thus, the model should be viewed as dynamic and non-linear, with feedback loops that vary in strength over time and depending on the situational context. Its depiction in such a simplistic manner is for ease of representation as well as an effect of the limitations of representing such complex relationships in two-dimensions.

Additionally, several assumptions and boundary conditions limit this model. First, our discussion and inferences are limited to strategic rather than routine performance measurement issues. Strategic issues are characterized by novelty, ambiguity and uncertainty (Mintzberg et al., 1976), and have a significant behavioral component that is reflective of the idiosyncrasies of the decision-makers (March & Simon, 1958). This ties in with our conceptualization of public sector institutions as ‘inhabited by people and their doings’ (Hallett & Ventresca, 2006), and motivates our theorizing on PMS implementation as the result of interplay between individual actor agency and institutional structure (Thornton & Ocasio 1999, 2008).

Second, to operationalize the model, we assume the location of public sector organizations in an inter-institutional system. Institutional logics emerge from the institutional orders of this system and provide organizational actors with a contingent set of norms (Friedland & Alford, 1991; Thornton & Ocasio, 2008). The diversity of these institutional

logics however engenders contradictions, and as ‘no institutional order is accorded causal primacy a priori’ (Thornton & Ocasio, 2008 p.104), we anticipate different realities of the same situation. Likewise, we assume the localization of the organizational actor in a social context characterized by free discussion and consideration of other’s needs (Langley et al., 1995). These assumptions motivate our theorization on diversity in actor perception, and on the dynamics of organizational discourse.

Third, we take adherence to institutional logics to be probabilistic rather than deterministic, driven by both a logic of appropriateness and of consequences (Thornton & Ocasio, 2008). This assumption motivates our theorizing on how the relationship between institutional logics and organizational actor PMS perception and action changes with interaction and over time.

And finally, given ‘institutional logics shape rational, mindful behavior, and individual and organizational actors have a hand in shaping and changing institutional logics’ (Thornton & Ocasio, 2008, p.100), we assume a mutually constitutive relationship between institutional logics and performance measurement implementation by organizational actors. This assumption motivates our theorizing on organizational learning and feedback.

2.5 Conclusions

The tone of the paper suggests our strong advocacy for a perspective that recognizes the decision-context and logic-influenced agency as mutually constitutive elements engaged in a perpetual tango in PMS implementation in public sector organizations. Consequently, we have built on the idea that performance measurement decisions are influenced by institutional logics that are both individually held and collectively shared.

Moreover, in combining institutional logics with performance measurement as decision-making, we recognize certain similarities in their ontologies and epistemologies, and consider them sufficient for us to combine them to analyze performance measurement implementation - akin to placing several focusing lenses in a microscope or telescope, to get a sharper view. Institutional theory is grounded in a social constructivist view of the world and institutional logics present human actors as institutionally embedded, drawing on diverse logics to understand their world and to give meaning to their actions (Modell, Vinnari & Lukka, 2017). Similarly, latter conceptions of performance measurement are based on a social constructivist view (Micheli & Mari, 2014). Moreover, agency as embedded and bound by institutional constraints mirrors the conception of bounded rationality in the decision-making literature.

However, despite this fresh approach, the paper has several limitations. First because of its breadth it has had to sacrifice depth. Second, by assuming the embeddedness of public sector organizations and organizational actors in well-defined institutional fields, the model may be best applied in established rather than emerging institutional fields. Third, the paper to a reasonable degree assumes that human action is intentional and that this intentional action reflects the actor's goals, motivations and beliefs (Zilber, 2013), even though the frames of reference used may be implicit i.e. unbeknown to him (Kahneman, 2012). These limitations notwithstanding, the synthesis of relevant literature and the proposed model sets the stage for subsequent empirical testing that can only enrich our current understanding and help develop a more robust body of knowledge in the field of public sector performance measurement and management.

2.6 References for Chapter Two

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CHAPTER 3

DIFFERENT SHADES OF GREY: AN EXPERIMENTAL STUDY ON HOW

INSTITUTIONAL LOGICS INFLUENCE

ORGANIZATIONAL ACTOR PERCEPTION AND JUDGMENT

This chapter addresses the second research objective of this PhD thesis by empirically investigating whether and how institutional logics influence organizational actor perception and judgment in ambiguous situations such as those experienced in much of the public sector.

The chapter has been submitted as a scientific paper for publication and has received a revise and resubmit decision.

Abstract

Using an experimental design based on principles drawn from psychology, we prime three institutional logics in three independent groups of managers from the public and private sectors and assess their influence on judgment preferences. We find that the actors give recommendations aligned to their primed institutional logic, and that the profiles of their recommendations differ between priming conditions. Given the obscured nature of the priming manipulation, these findings suggest the nonconscious influence and constraining effects of institutional logics on actor perception and judgment. The findings further highlight the potential of text as priming stimuli within institutionally complex work settings as those in the public sector, an important yet under-examined issue.

3.1 Introduction

Many authors (e.g. Coule & Patmore, 2013; Currie & Spyridonidis, 2016) suggest that difficulties and unanticipated outcomes in organizational action could be due to the differences in cognitive structures variously utilized by individuals and groups within the organization, whether public or private. Specifically, these cognitive structures, as ‘built up repertoires of assumptions, tacit knowledge and expectations’ (Gioia, 1986; Orlikowski & Gash, 1994) are used by individuals to ‘impose structure upon, and impart meaning to, otherwise ambiguous social and situational information to facilitate understanding’ (Gioia, 1986, p.56). And they influence both collective action as well as individual projects (Swan & Clark, 2008).

Institutional logics, as one such cognitive structure, have been defined as ‘historical patterns of cultural symbols and material practices, including assumptions, values and beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences’ (Thornton & Ocasio, 2008). Institutional logics thus provide actors with the context from which they think, feel, view or otherwise experience the world (Ford & Ford, 1994). And they consequently influence their interpretation of the ambiguous world (Ford & Ford, 1994), and what reactional options are to be considered appropriate (Suddaby & Greenwood, 2005). Thus, they affect the judgments made by individual and organizational actors (Thornton, Ocasio & Lounsbury, 2012; Besharov & Smith, 2014), and the perception of such judgments’ appropriateness and legitimacy within a given setting (Thornton & Ocasio, 2008).

Extant literature further emphasizes the multiplicity of these institutional logics (e.g., Besharov & Smith, 2014). Indeed, many authors align to Friedland and Alford’s (1991) original conceptualization of institutional logics as arising from the state, the professions, the

corporations, the market, the religions and the family (Thornton & Ocasio, 2008). These logics and their various instantiations have nonetheless been observed at various levels – from the societal to the field and the organization - where individuals and organizations interact and thus encounter their multiplicity (Thornton & Ocasio, 2008, 2012). Accordingly, we anticipate individuals and organizations to be variously influenced by the institutional logics they encounter in different environments (Greenwood et al., 2011; Smets & Jarzabkowski, 2013).

However, not much is known about how individuals experience these multiple institutional logics – hereinafter referred to as institutional complexity (Marti & Mair, 2009; Greenwood et al., 2011; Smets & Jarzabkowski, 2013), as the majority focus has been on the instantiation of institutional logics at the level of the field and organization rather than the individual (Bevort & Suddaby, 2016). As a result, this literature does not fully explain whether and how institutional pressures influence individual interpretations, and whether there are differences between individual interpretations and behavior, and cumulative organizational action (see also, Besharov & Smith, 2014). Exceptions that present conceptual and empirical efforts to bring the individual back into institutional theory include the sense-making literature typified by Hallett and Ventresca (2006) and the literature on institutional entrepreneurship (e.g., Greenwood & Suddaby, 2006). Much of this literature however implicitly assumes significant degrees of autonomy on the part of organizational actors (Martin et al., 2017) despite compelling research in cognitive and social psychology that suggests nonconscious processes operating alongside conscious thinking and reasoning (Loersch & Payne, 2011; Kahneman, 2012).

This possibility of dual conscious-nonconscious influence by institutional logics has been suggested in the work and organizational behavior literature, but has not been adequately

examined. In brief, this literature postulates that organizational actors may ‘preconsciously enact institutional logics, rarely surfacing and reflecting upon them’ (Ford & Ford, 1994), or they may consciously and creatively use them to guide their decisions, actions and interactions (Hallett & Ventresca, 2006; Everitt & Levinson, 2016). Bargh, Chen and Burrows (1996) conceptualized ‘nonconsciousness’ as ‘being unaware’, and we extend this definition to reflect default perception, judgment and action, that is replicated with relative ease outside of the actor’s conscious awareness or deliberate processing of information. Akin to other authors (e.g. Barr, Stimpert & Huff, 1992; Powell & Colyvas, 2008; Thornton & Ocasio, 2008), we posit such default actor perception and judgment and consequent action as exemplary of the taken-for-grantedness nature, and cognitive embeddedness, of the institutional logics in use at the time perception, judgment and action is called for. This embeddedness is core to the institutional logics approach, and may partially explain how any decision (and action that ensues), is both enabled and constrained by the institutional logic within which it is embedded (Thornton & Ocasio, 2008).

Thus, in this study, we examine whether institutional logics can nonconsciously influence organizational actors and their ‘actor-hood’ (Suddaby et al., 2010). Our argument is that the perception, interpretation and judgment of organizational actors is colored by institutional logics as a referent decision-frame such that when presented with an ambiguous scenario, they will make default judgments, in a manner congruent to their referent institutional logic. We further argue that these institutional logics can be nonconsciously primed and made accessible as cognitive frames of reference by seemingly inconsequential cues such as text. Following Newell and Shanks (2014, p.4), we define priming as ‘the influence of prior stimuli

on later behavior (including attitudes, perspectives, choices, impressions, judgment or any other overt and observable act), without deliberate intent to influence them’.

In seeking support for these arguments, we focus on three logics that confront organizational actors in the setting of interest: the public administration logic, the market-managerial logic and the professional logic. There are several reasons for this choice of institutional logics. First, these logics are among the most diffuse in the health sector. It is therefore reasonable to expect that the population of interest and the sample drawn from it have been exposed to them. Second, these three institutional logics are among the most researched. Thus, they and their various instantiations are reasonably well-defined in the literature (e.g., Thornton et al., 2012). Third, the study setting of interest - the health sector - straddles many other sectors, and has been the subject of multiple reforms. During these reforms, these three institutional logics have maintained their salience, distinctiveness and occasional antagonism (Scott et al., 2000; Reay & Hinings, 2005). The determination of whether and how organizational actor perception and judgment is influenced by these three institutional logics, in such fluid and ambiguous circumstances is thus of relevant concern for both practitioners and researchers.

We consequently build on the work of earlier authors in developing the concept of institutional logics as frames of reference for the individual organizational actor. And we apply an experimental design hinged on priming and memory-based information processing to test this hypothesis. In revealing significant differences between the organizational actors’ perception and judgment depending on which institutional logic was primed, the results provide empirical support for the argument that the variations, difficulties and unanticipated

outcomes in organizational action could be due to the differences in the institutional logics accessed and utilized by individuals inhabiting the organization, in their own decision-making.

Our study thus makes several contributions to institutional theory, and especially to its micro-foundations. First, by focusing on the organizational actor, we advance the growing body of micro-level research on institutional logics that examine the lived experiences of actors in the world of work as they navigate, interpret and translate institutional complexity. Second, much research on institutional logics has focused on the examination of two seemingly-contrarian logics, while ignoring other logics that inhabit the same space and that may influence the interactions between the two under study (Scott, 2008). Our study moves away from this dualistic bias and responds to calls for research that more adequately accounts for institutional complexity (Greenwood et al., 2011; Waldorff et al., 2013) without any presumptions of dominance, compatibility or contradiction (Thornton et al., 2012). Thus, with these two focus areas we address the linkages between organizational actors and the wider institutional context within which work is embedded. Third, we introduce a novel methodological approach that may be useful for the exploration of multiple logics as experienced by individual actors. Much earlier research was biased toward the use of comparative longitudinal analysis as a mechanism for understanding how actors experienced institutional logics (e.g., Goodrick & Reay, 2011; Waldorff et al., 2013; Martin et al., 2017). While these approaches have been extremely useful in helping understand collective responses to institutional complexity, their utility for micro-level analysis has been limited. The use of priming techniques, as we have experimented with in this study, opens new avenues for research (see also Perry, 2012) that may better explicate actor experiences under conditions of institutional complexity, including constraints to and enablers of their agency.

This study also makes several contributions to the organizational behavior and human decision processes literature, and to public management - an institutionally complex arena. The role of institutional logics as a cognitive frame is yet untested in these literatures. This paper thus extends the work done by for example Ganegoda and Folger (2015) in empirically assessing cognitive biases in decision-making as opposed to decision making based on fixed criteria, and Swan and Clark (2008) on cognitive dimensions and organizational decision-making. Additionally, by presenting the study participants with an ambiguous scenario, the study opens the space for assessing the influence of these cognitive frames under conditions allowing for possible counterfactual thinking – defined as mental representations of alternatives (Roese, 1997), which could arise from conscious and deliberate, or nonconscious (automatic) processing of information (Kahneman, 1995). This aspect has not been adequately considered in the organizational behavior or public management literature (Grimmelikhuijsen et al., 2017). Moreover, the rigor of the experiment and subsequent statistical analysis allows us to draw causal inference regarding the role of text – a common medium of communication in organizations - in priming institutional logics as referent cognitive frames, and of the influence of such frames on subsequent judgments and decisions.

In the sections that follow, we provide a brief conceptual background. We then present our methods and results. Finally, we discuss novel insights arising from the study, as well as implications for research and practice.

3.2 Conceptual background

3.2.1 The phenomenology of institutional logics

Whereas institutional logics were originally conceptualized at the societal level (Friedland & Alford, 1991), their iterations and influence have been identified at industry and organizational

levels (Thornton et al., 2012), and at departmental and unit levels within the organization (Besharov & Smith, 2014). Organizational actors are exposed to these multiple logics through the processes of learning and socialization (Thornton & Ocasio, 2008). Moreover, as each logic provides ‘a set of organizing principles for a realm of social life’ (Besharov & Smith, 2014:366), we can reasonably assume that organizational actors have alternative ways of making sense of what they experience (Weick, 1979b; Ford & Ford, 1994; Martin et al., 2017).

In this study, we focus on the logic of public administration, the market-managerial logic, and the logic of the professions, which have all been previously defined in the literature (e.g., Thornton et al., 2012). With the logic of public administration, government is perceived as the legitimate and sole provider of services (Pollitt & Bouckaert, 2011). Elected officials make decisions that public officials are then expected to implement (Denhardt & Denhardt, 2000). Furthermore, emphasis is placed on rules and procedure (Hayes, Introna & Petrakaki, 2014) to ensure that operations remain true to the ideals of equality, equity and transparency to the public (Meyer et al., 2014). This focus on rules and procedure, on strict accountability to the state (Meyer et al., 2014), and on hierarchical and jurisdictional demarcation (Hayes, Introna & Petrakaki, 2014), supports the reference to this logic as a bureaucracy. The focus on rules and procedure however seemingly detracts from discretionary action that could have yielded better results (Hyndman et al., 2014), and from efficiency and effectiveness (Hayes et al., 2014).

The market-managerial logic on the other hand, combines market with managerial logic. Though initially conceived as separate, many researchers, conflate the market and managerial logics given their tendency to ‘blend and blur’ (Thornton et al., 2012). Underpinning this composite logic is management discretion, which involves giving

management prominence, and in contradistinction to public administration, the liberation of managers from burdensome rules and regulations (Olsen, 2009). Other ideas associated with this logic are accountability for performance and efficiency in resource use, and competition (Hayes et al., 2014).

The third institutional logic of interest is that of the professions. Professions are key carriers of institutional logics (Thornton, Jones & Kury, 2005). Their legitimacy is strongly tied to the state, which plays a key role in their formation, employment and institutionalization (Light, 2000). This legitimacy is further strengthened by the ‘professionals’ specific knowledge and expertise, usually acquired over a long period of time (Thornton et al., 2012). Members of these professions usually form professional bodies that admit members, and structure and regulate professional practice (Noordegraaf, 2007). Service quality is thus strongly reliant on peer opinion (Reay & Hinings, 2005). Moreover, a high premium is placed on the autonomy of the professional, that is, his/her discretion in designing and managing his/her own work (Reay & Hinings, 2005). Correspondingly, the scope of practice, irrespective of the locale of the professional’s work, often reflects the desires of the professional association rather than that of their employer (Noordegraaf, 2007; Goodrick & Reay, 2011).

Whereas a more detailed listing of the elements that characterize these three institutional logics is given in Appendix 1, their discussion here and in the Appendix, is more illustrative than exhaustive, given editorial constraints. More substantive discussions can be found in for example Thornton and Ocasio (2012), and Hyndman et al., (2014).

And so, in the identification and elucidation of these three logics, we focused on the rich and carefully prepared descriptions provided by other authors e.g. Thornton and Ocasio (2012), and Hyndman et al., (2014). Our analysis was further underpinned by the recognition

that despite not existing as unified constitutions (also, Friedland & Alford, 1991), institutional logics nevertheless possess signature elements that can help tie the observable with their abstract conceptualizations (Meyer et al., 2014). Moreover, these elements can be extracted and used to demarcate and examine institutional logics and their relationships. This approach has been used by others e.g., Dunn and Jones (2010), and is the approach we take in this study.

Consequently, to develop a more fine-grained understanding of how institutional logics influence individual organizational actor perception and judgment under conditions of institutional complexity, we draw on Weick (1979a, b) and Gioia's (1986) notion of frames, which we explicate in the next section.

3.2.2 Institutional logics as frames of reference, priming and information processing

Based on the premise that individual's act based on their interpretations of the world, Weick conceptualized frames as 'implicit guidelines that shape interpretations, endowing them and related events and phenomena with meaning' (Weick, 1979a, b). Gioia expanded this definition, conceptualizing an individual's frame of reference as 'a built-up repertoire of tacit knowledge that is used to impose structure upon, and impart meaning to, otherwise ambiguous social and situational information to facilitate understanding' (1986: p.56). In this sense, frames structure the organizational actor's experience based on established knowledge and assumptions, and provide a basis for acting. Similarly, Ford and Ford (1994), and Thornton and Ocasio (2008) posit institutional logics as providing individuals with rules and conventions for deciding which solutions get considered and which solutions get linked to what problems. Thus, each institutional logic, as a unique decision frame, will stress and increase the apparent relevance of different values, facts and other considerations than might have been under an alternative frame (Thornton & Ocasio, 2008).

Nonetheless, drawing from memory-based models of information processing (Scheufele, 2000), we aver that to be utilized as a frame of reference, an institutional logic must be accessible in the individual's cognition. Accessibility is here conceptualized as the ease with which relevant cognitive material is recalled (Scheufele, 2000), or made available and retrievable from memory (Tversky & Kahneman, 1973). Priming – the use of external stimuli, is one mechanism through which cognitive frames of reference (such as institutional logics), can be made accessible (Bargh, 2006; Vohs, Mead & Goode, 2006). Indeed, extant research has demonstrated that many psychological concepts such as goals and motives (e.g. Bargh et al., 2001), decisions and judgment (e.g. Bargh, Chen & Burrows, 1996), and behavior (Vohs, Mead & Goode, 2006), may be primed by 'seemingly inconsequential and logically irrelevant cues' (Loersch & Payne, 2011, p.234).

Moreover, in the organizational behavior and management literature, Salancik and Pfeffer's social information processing approach seemingly refers to priming when they acknowledge the social environment as a provider of cues that 'focuses an individual's attention on certain information, making that information more salient, and providing expectations concerning individual behavior' (Salancik & Pfeffer, 1978, p.227). Thus, priming can be viewed as a precursor event that leads to the activation of a specific reference frame, giving it pre-eminence over other frames. Consequently, when a new concept is afterward presented, it is accordingly interpreted from within the activated frame (Scheufele, 2000).

And so, to connect the concepts of institutional logics, priming and information processing together, our foundational hypothesis is that the priming of specific logics makes the knowledge, expectations and assumptions of the primed logic more accessible and easier for the organizational actor to retrieve from memory, in comparison to those that have not been

primed. This now-accessible logic will be subsequently used by the organizational actor to answer questions afforded by the circumstance confronting them. This notion of affordances draws from Gibson (1977) and we conceptualize it to mean the possibilities for action provided by the environment (also, Loersch & Payne, 2011).

There have been few, if any, attempts to apply the theoretical and practical concepts of priming and information processing in the understanding of how institutional logics may influence the perception and judgment of organizational actors. We do so in this paper. We hypothesize that specific texts, as environmental cues, can nonconsciously prime institutional logics making them accessible as frames of reference for the individual. Building to Loersch and Payne (2011), we consider nonconscious activation in the context of priming to comprise situations where the individual is unaware that they are being primed, and/or unaware of the prime's effect on their behavior (also, Bargh, Chen & Burrows, 1996). We further hypothesize that these institutional logics once primed, will bias the organizational actor's subsequent perception and judgment when presented with an ambiguous situation that can be interpreted in different ways.

Testing these linked hypotheses requires that we differentially prime the institutional logics of interest, and then check for their influence on organizational actor perception and judgment. Thus, in operationalizing the study, we follow other authors e.g., Goodrick and Reay, (2011), and assume that mental representations in the form of institutional logics exist, and that it is possible to use vocabularies that are descriptors of the different institutional logic constructs as primes. However, to ensure construct validity, we bind to vocabularies and abstractions already identified in previous literature (e.g., Thornton, Ocasio & Lounsbury, 2012; Hyndman et al., 2014). This approach to identifying key vocabularies associated with

unique institutional logics and using them as descriptors for comparison has been previously used by, for example, Goodrick & Reay (2011). Nonetheless, as with previous authors (e.g., Goodrick & Reay, 2011), we acknowledge the imperfect nature of these descriptors given the lack a coherent identity among the institutional logics that they draw from. They however present us with a stable starting point for systematic empirical comparison (Goodrick & Reay, 2011).

In the following section, we describe the study methodology in greater detail.

3.3 Design and methods

We designed this study as a between subjects randomized post-test only experimental study in which different groups from the same population are differentially primed and compared.

Following similar studies in psychology e.g., Vohs et al., (2006), the priming tool was formulated as a 30-item scrambled sentence test that was presented to the participants as a test of English language ability. Each item on the ‘test’ contained a scrambled set of five words from which the participants were expected to construct a grammatically correct four-word sentence as quickly as possible. For example, ‘*was, not, there, he, in*’ could be rewritten as ‘*he was not in*’ or ‘*he was not there*’. Four versions of this test were developed, with three intended to each prime a unique institutional logic, and the fourth intended to prime none. For the test conditions, half the items contained an adjective or verb semantically related to the institutional logic in question. For example, for public administration logic the critical priming stimuli included: *government, authority, compliance, administration* and *regulation*. The rest of the items in the test conditions, as well as all the items in the control conditions, were ordinary-use neutral words not intended to prime any condition but rather to disguise the test objectives. A list of the priming stimuli incorporated in the scrambled sentence tests for the test conditions

is provided in Appendix 1. These priming tools were tested and refined on a small pool of individuals with profiles like the intended study participants.

The study participants comprised 98 public and private sector managers who were concurrently attending executive masters' level courses at a private university in Nairobi, Kenya. Though common, the use of student participants in laboratory experiments has faced much criticism (Anderson & Stritch, 2016). In this study, we used the university as an access point, but these students had a professional profile - working their regular jobs by day and studying in the evenings, or in sandwich programs. Moreover, the study focus was on a general judgment issue which authors such as Druckman and Kam (2011) suggest are generalizable, and can be examined using student populations.

Once enrolled into the study, the participants gave signed consent and completed a form designed to capture age, gender and work experience. Their participation in the study was voluntary. Of the 98 practitioners who participated in the study, 56 were enrolled in an MBA in Healthcare Management program while 42 were in a Master's in Public Policy program. Regarding sex, 65 (66.3%) were female and 32 (32.7%) were male. The participants age range was 23-53 (mean 33.82, SD 8.865), while work experience in the private sector was a mean 4.57 years (SD4.57) and in the public sector 3.91 years (SD 4.934).

The participants were then randomly assigned to one of the three treatment conditions - public administration logic (PUB prime, n=25), market-managerial logic (MKT prime, n=24), and professional logic (PROF prime, n=24); or to a control group (CONTROL, n=25). In terms of distribution across the treatment and control groups there were no differences between the groups based on the master's program attended ($X^2 0.197$, 3df, $p 0.978$), based on age ($F 1.347$, $p 0.264$), years in private sector ($F 1.695$, $p 0.174$), or years in the public sector

($F_{0.441}$, $p_{0.724}$). We however noted an imbalance regarding gender distribution between the groups ($X^2_{13.377}$, 3df, $p_{0.004}$). This is not altogether unexpected given the two-thirds female majority. And given the samples are balanced in all other aspects, we do not consider this gender imbalance inimical to the internal validity of the experiment and the testing of the hypothesis. We nonetheless assess its effect on the study findings.

Following random assignment, the first task - a scrambled sentence test masked as a test of English proficiency, was administered. Participants independently completed their own test, and neither experimenter nor participant knew in advance what group each participant would be assigned. Moreover, the room environment was controlled by making it as plain as possible to ensure that no extraneous environmental variables would attract the participants' attention. This eliminated possible confounding by other text or visual variables in the environment while leaving the priming task as the only manipulated and distinguishing variable amongst the participants.

Upon completion of the scrambled sentence task, participants completed a Positive Affect-Negative Affect Scale (PANAS) questionnaire that was originally designed to categorize feelings and emotions (Watson, Clark & Tellegen, 1988). Following Vohs, Mead and Goode (2006), we applied this scale as a dissociative task to separate and make it difficult to link the first phase of the experiment (the priming manipulation), from the subsequent phase where the effect of the manipulation was to be tested. Additionally, given its original design, the PANAS questionnaire had a supplementary role in checking for potential mood changes after manipulation. In this regard, there were no unforeseen emotional consequences of the priming manipulation.

Next, the participants were presented with an ambiguous scenario that read as follows:

'X has just come from a national health stakeholders meeting. She begins to think of recommendations that she could give to the stakeholders group to improve the current health situation in the country. Which recommendation do you think would be most appropriate?'

We chose to present an ambiguous scenario for two reasons. First, much of the information transmitted between individuals in social contexts is ambiguous (Kahneman, 2012). Second, ambiguity provides opportunity for individuals to freely interpret the scenario based on their individual (in this case, manipulated) cognitive processes, thus allowing differences, if any, to emerge (Kahneman, 2012).

Together with this scenario, the participants were presented with a list of ten recommendations and asked to rank them in order from their most to least preferred. This was the core of the experiment, aimed at checking the influence, if any, of the priming manipulation on the choices made by the study participants. Moreover, the ranking was presented as a forced rank, meaning that each recommendation had to be assigned a unique value ranging from one to ten. The recommendations themselves were structured in such a way that they were concordant with either a public administration logic, a market-managerial logic, or a professional logic.

Prior to analyzing the data, the said recommendations were reorganized and consolidated in accordance with their referent institutional logic as detailed in Table 3.1 below.

Table 3.1 Recommendation categories and codes

Recommendation	Consolidated indicative logic	Code
Recommend to enhance compliance to the rules and regulations	Recommendations aligned to public administration logic	PUBLIC LOGIC
Recommend to clarify hierarchy and flow of information upwards from the frontline health worker to the health facility managers all the way up		
Recommend to increase government oversight		
Recommend greater focus on results	Recommendations aligned to market-managerial logic	MARKET LOGIC
Recommend to enhance competition in service provision		
Recommend focus on public as client/customer		
Recommend to improve management		
Recommend greater involvement of medical professionals in management	Recommendations aligned to professional logic	PROFESSIONAL LOGIC
Recommend greater autonomy for doctors and nurses		
Recommend greater participation of other stakeholders in health service provision		

The pattern of consolidation was drawn from an analysis of extant literature that involved the extraction of key words associated with each institutional logic (see also Appendix 3.1).

Finally, the participants were asked to complete an evaluation questionnaire and debriefed to check on any overlooked factors in the environment or any suspicions about the intent of the experiment that could have influenced their recommendation choices. More specifically, we sought to determine whether the participants attached any theme to the phrases in the descrambling task or whether they connected the descrambling task to the subsequent tasks that they were given. The post-experiment evaluation questionnaires revealed that the few who reported that the descrambling task made them ‘think in a particular way’, gave vague reports tenuously related to the experimental hypothesis. Thus, we report results across all participants.

3.4 Results

Having consolidated the recommendations aligned to a public logic as “PUBLIC LOGIC”, to a market-managerial logic as “MARKET LOGIC”, and to a professional logic as “PROFESSIONAL LOGIC”, we applied the non-parametric Kruskal-Wallis (KW) one-way ANOVA (Kruskal & Wallis, 1952; Corder & Foreman, 2009) to statistically check for experimental effects. The appropriateness of the KW arose from the fact that: (1) the dependent variable was ordinal, (2) the independent variable comprised three categorical and independent groups, and (3) the observations were independent with no relationships between observations in each group, and between groups.

The results show a statistically significant difference between the experimental conditions regarding the choice of recommendations aligned to a public logic ($X^2(2df) = 10.586$, $p = 0.005$), and a market-managerial logic ($X^2(2df) = 6.764$, $p = 0.034$). For the professional logic, the results were not statistically significant ($X^2(2df) = 4.315$, $p = 0.116$). We cannot however dismiss the possibility of an effect regarding the professional prime group, considering that with small sample sizes, important effects can be non-significant, that is, can return a type II error (Cohen 1973, 1988; Prentice & Miller, 1992). Moreover, as the KW is an omnibus test for differences between k-independent samples, we cannot tell whether differences in any one pair combination are masked by differences in another. Consequently, we turn to post hoc comparisons between groups, and to estimates of the magnitude of the effect that is relatively independent of sample size. Table 3.2 below illustrates these post hoc KW comparisons between treatment groups, as well as the effect sizes.

Table 3.2. Posthoc ANOVA comparisons between treatment groups^a

	Group 1 (PUB Prime) v Group 2 (MKT Prime)		Group 1 (PUB Prime) v Group 3 (PROF Prime)		Group 2 (MKT Prime) v Group 3 (PROF Prime)	
	PUB	MKT	PUB	PROF	MKT	PROF
Chi-Square	8.973	6.722	6.008	4.115	.754	1.752
df	1	1	1	1	1	1
Asymp. Sig	.003***	.010***	.014**	.042**	.385 n.s	.186 n.s
ES^{1,2}	.195	.146	.13	.089	.016	.037

^aGrouping variable: Priming code

p<.05, *p<0.01, n.s not significant

¹Eta-Squared as a measure of effect size in ANOVA

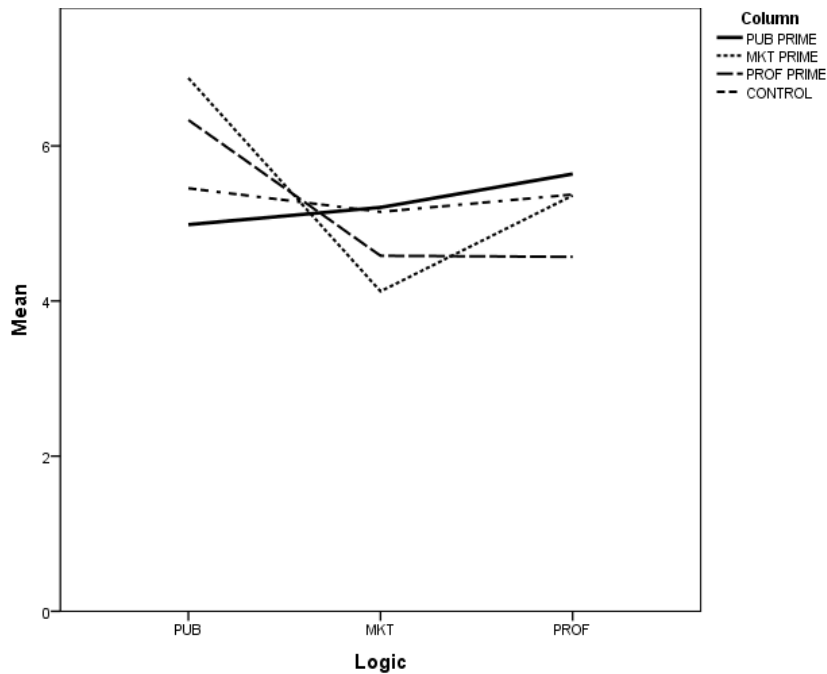
²ES 0.02 small, 0.13 medium, 0.26 large (Cohen, 1973, 1988)

Examination of the results displayed in Table 3.2 reveal statistically significant differences at $p<.05$ between groups 1 (primed for public logic) and 2 (primed for market-managerial logic), and between groups 1 and 3 (primed for professional logic), in how they ranked recommendations aligned to the public and market-managerial, and the public and professional logics respectively. Conversely, the differences between groups 2 (primed market-managerial logic) and 3 (primed professional logic) in how they ranked recommendations aligned to the market-managerial and professional logics were not statistically significant. Nevertheless, calculation of the effect size reveal medium to large effects (Cohen 1973, 1988). This points to an important effect considering Kuhberger’s (1998) meta-analytic findings that suggest framing effects based on the well-accepted prospect theory, to be small to moderate in size.

Our interest however, went beyond the difference within categories, to the pattern of choices displayed after the nonconscious priming. We considered these patterns apt illuminations of nonconsciously guided preferences. Thus, Figure 3.1 below illustrates the pattern of recommendations based on the mean values assigned to all the response category groups (PUBLIC LOGIC, MARKET LOGIC and PROFESSIONAL LOGIC) by each experimental group (Group PUBLIC, MARKET and PROFESSIONAL) in isolation, as well as the control. As the ranking by the study participants was done from one to ten, with one

being the most preferred and ten the least, for each of the response types, lower values imply greater preference.

Figure 3.1. Pattern of recommendations



Analysis of the patterns based on the means of the values assigned by the participants reveal that participants in the public prime condition (Group PUBLIC) most preferred recommendations that were congruent with their primed logic i.e., recommendations relating to increased government oversight and adherence to laid down rules and regulations. They least preferred recommendations that were aligned to the market-managerial logic, ranking them much lower down the scale. On the other hand, participants in the market-managerial prime condition (Group MARKET) gave preference to recommendations congruent with a market-managerial logic. They assigned lower ranks to recommendations that were better aligned to the public administration (ranked third) and professional logics (ranked second). Finally, the analysis shows that participants in the professional prime condition (Group

PROFESSIONAL) most preferred recommendations that were congruent with professional logic. They least preferred recommendations that were aligned to the public administration logic.

And so, for each of these experimental conditions, we find empirical evidence of judgment, regarding the ambiguous scenario presented, to be congruent to the primed logic. Moreover, we observe important differences between their ranking and that done by participants in the control condition. The control group seemingly had no preferences, with an almost even ranking for the three recommendation clusters allied to the public, market-managerial and professional logics.

Figure 3.2. Confidence intervals and pattern of recommendations

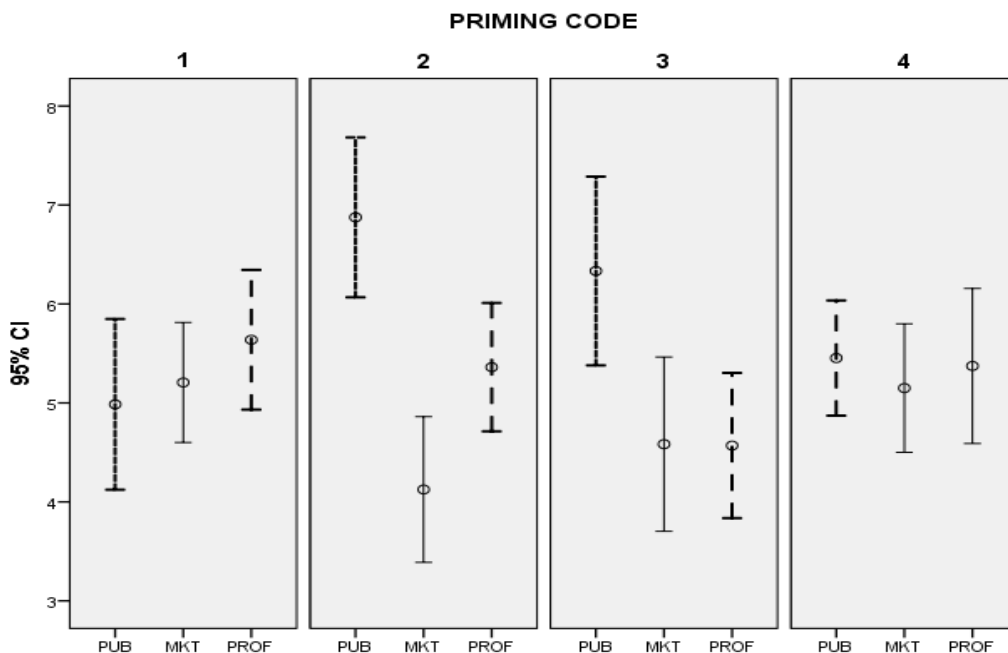


Figure 3.2 above captures the means and confidence intervals by treatment group as well as the control. The figure clearly demonstrates clustering about a mean of 5 for the control group,

while the treatment groups generally had means 0.5-2 units above or below the control. The overlap of confidence intervals however implies that whereas the mean ranks between the treatment groups and the control were numerically different, this difference was not statistically significant for the professional prime group ($X^2(1df) = 2.117, p=0.146$) and the public prime group ($X^2(1df) = 0.526, p=0.468$). It was however significant at $p<.05$ for the market prime group ($X^2(1df) = 6.128, p=0.013$).

Finally, Table 3.3 below presents the results of the ANOVA done to rule out the possibility of influences or confounds by sex or by organizational experience.

Table 3.3. ANOVA for gender and public/private sector experience

Variable	Test statistics	PUB	MKT	PROF
Gender^a	Chi-Square	3.707	.005	2.007
	df	1	1	1
	Asymp. Sig	.054(n.s)	.942(n.s)	.157(n.s)
Organization experience^b	Chi-Square	3.384	1.968	3.109
	df	2	2	2
	Asymp. Sig	.184(n.s)	.374(n.s)	.211(n.s)

^aGender (Female=1, Male=0)

^bOrganization experience (Public Only=1, Private Only=2, Both Public and Private=3)
(n.s) not significant

The results show no differences between gender, in terms of the pattern of their recommendations, at the 0.05 level for the public logic ($X^2(1df) = 3.707, p=0.054$), the market logic ($X^2(1df) = 0.005, p=0.942$) and the professional logic ($X^2(1df) = 2.007, p=0.157$). The results also show no differences between the participants as grouped based on their organizational experience, in terms of the pattern of their recommendations, at the 0.05 level for the public logic ($X^2(2df) = 3.384, p=0.184$), the market logic ($X^2(2df) = 1.968, p=0.374$) and the professional logic ($X^2(2df) = 3.109, p=0.211$). These results thus lend credence to the claim that the observed differences were likely due to the experimental manipulation – the

priming of the different institutional logics, and not due to differences in the sexes or in organizational experience.

3.5 Discussion, implications for theory and practice, and future research

Our findings provide empirical evidence for, and partially explain how institutional logics, as frames of reference, condition how individuals make sense of their environment and react to it (Barr, Stimpert & Huff, 1992, p.16; also, Thornton, Ocasio & Lounsbury, 2012). Moreover, because the priming process was not apparent to the individual, and the link between the priming content and institutional logics subtly hidden, the study suggests nonconscious activation of these institutional logics by the text cues. The results obtained further suggest that once activated, the institutional logic, is then used to answer questions afforded by subsequent scenarios facing the participant.

To illustrate, if an individual is primed for public administration, when faced with an ambiguous set of circumstances to which he must make a recommendation, his perception and interpretation of the situation, and consequent judgment on the questions afforded by it, will be inadvertently colored by the primed public administration logic. This non-conscious influence of institutional logics on his default perception and judgment, may thus partially explain the routine re-enactment, and accordingly the constraining effect, persistence and stability of institutional logics. The fact that this was a controlled experiment with random assignment supports this causal claim.

Furthermore, in this experiment, we used a simple form of priming – text, which is one of the numerous cues in everyday environments. And we obtained significant measurable impacts on perception and judgment. Our findings thus lend support to Barr, Stimpert and Huff's (1992) assertions that environmental stimuli can prompt changes in cognitive models.

Additionally, they bring to the fore the role of text, material objects, artefacts and their representations, as potential priming stimuli for institutional logics – an important yet under-examined issue (Lawrence, Leca & Zilber, 2013).

3.5.1 Theoretical implications

These findings have important theoretical implications. If weak, nonconscious cues such as the text we used in this experiment can strongly influence perception and judgment, then it is plausible that the initial stance taken by individuals on issues that confront them, is an indirect result of subtle, and possibly not so subtle, cues from the environment. Our findings thus draw attention to the importance of text, vocabularies and language in triggering institutional logics. Indeed, they support Weick's (1995) claim that words 'approximate the territory', and may be used, by individual actors to 'convert ongoing cues into meaning' (also, Powell & Colyvas, 2008).

Do these findings then mean that organizational actors are 'cultural dopes' (Garfinkel, 1967) routinely re-enacting institutionalized scripts? We think not. Rather, we align to Seo and Creed (2002), Kahneman (2012) and others, who point to the possibility of both active and passive influences on organizational actor judgment and consequent action. In this conception, actors 'may participate in an automatic, unreflective way, and in other periods they may become very purposeful in trying to reach beyond the limits of their present situation in accordance with alternative conceptions of its purposes, structures, technologies, and other features' (Seo & Creed, 2002 quoting Benson 1977, p.7).

This conceptualization of a non-conscious cognitive process operating alongside a conscious cognitive one has been observed in social and cognitive psychology (e.g., Bargh,

2006; Kahneman, 2012), but it has yet to be fully and more empirically examined in the management literature. We however consider this two-pronged conscious and nonconscious influence of institutional logics an apt model for explaining the theoretical paradox on how actors' perceptions and judgment are conditioned by the very institutions that they consciously engage with and at times, seek to change (also, Seo & Creed, 2002).

3.5.2 Practical implications

The findings in this study suggest that underlying attitudes and motivations that draw from one's referent logics probably have a greater influence on perception and judgment than previously envisaged. Moreover, the environment – in this case, text – has the potential of nonconsciously surfacing unique logics through priming effects. Furthermore, though the experiment did not test the tenacity of the hold that these institutional logics have on organizational actor perception, the demonstration of their nonconscious influence is an indicator of their taken-for-grantedness, and accordingly, their influence on the actors' position. It is plausible that these cues may be strong enough to override explicit instructions given to the actor, thus creating disharmony and increasing the likelihood for inefficiencies in organizational action. Practitioners may therefore want to consider how they frame and communicate issues of strategic import, if the organization is to secure broad-based support towards their implementation.

3.5.3 Limitations of the study

Despite the interesting results presented here, we aver that they be viewed with caution given the study's limitations. The findings are based on a moderately-sized sample and as such

are subject to all the limitations of such sample sizes. Akin to other authors (e.g., Prentice & Miller, 1992) we however opine that small samples can be sufficient to detect large effects. It is in the detection of small effects that large samples are a necessity (Matthews, 2011). Second, the study participants, as a convenience sample, may have a unique profile that could limit the applicability of the results to other settings. They were concurrently practitioners and students – working full time during the day, and attending studies in the evenings or at modular intervals during the year. And so, despite recent positive statements regarding the external generalizability of experiments done with students (e.g., Druckman & Kam, 2011; Ganegoda & Folger, 2015), we advise caution when inferring these results to the broader population.

Finally, this study, in the absence of any precursors, was exploratory. Its intention was to seek empirically-backed clues as to whether and how institutional logics could influence perception and judgment, and further to test the utility and applicability of the experimental design used for such micro-level studies. And so, whereas it cannot make any firm claims of causality, the study findings nevertheless suggest that institutional logics play a role in organizational actor perception and judgment, that they can be primed by inconsequential cues such as text, and that their influence can at times be nonconscious. With these findings, this study thus opens the possibility for further exploration using similar or more refined experimental designs or other appropriate methods, and with larger samples.

3.5.4 Future research

The complexities and limitations described above bring to the fore, several issues that must be considered by future research. For example, what is the nature of interaction between the nonconscious influence of institutional logics and conscious cognitive processes?

Likewise, whereas the relatively simple approach used led to significant results, the possibility of a host of moderators or mediators of the nonconscious activation of institutional logics exists. Future research could explore these moderation and mediation effects including the following questions: What is the effect of the degree of abstractness of the constructs? Does temporal distance between the priming effect and the consideration of the issue of concern have any effect? And how do enduring motives, and individual and organizational goals interact with the process of nonconscious activation of these institutional logics? Does organizational context matter?

Moreover, we also need to examine the role played by conscious processes in interaction with nonconscious processes, and how both these processes interact in the real world where organizational action often relies on collaboration with others (Loersch & Payne, 2011). This is even more important in complex institutional settings such as the public sector, inhabited by actors with varied experiences and expertise, and whose perspectives must be considered for any collaborative activity to be possible (Loersch & Payne, 2011; Grimmelikhuijsen et al., 2017). For example, in such stimulus rich environments, if conflicting perspectives are activated, which one wins? Why? Finally, as may have been alluded to in this study, and in line with the work of other scholars (e.g., Ocasio, Loewenstein & Nigam, 2015), an analysis of the use of language - words, sentences and speech - in getting things done at the organizational level, may be a promising start.

3.6 References to Chapter Three

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3.7 Appendices to Chapter Three

Appendix 3.1 Institutional Logic Definition

Logic	Public Logic (PUB Prime)	Market-Managerial Logic (MKT Prime)	Professional Logic (PROF Prime)
Essential characteristics	organization based on administrative rationality (Hayes et al., 2014); highly centralized bureaucracy based on laws, rules and directives (Pollitt & Bouckaert, 2011; Meyer et al., 2014); strict accountability to the state (Meyer et al., 2014); services provided directly and uniformly to public by government (Gruening, 2001)	corporatized structure, flexible management (Gruening, 2001); focus on economic/cost control, efficiency and effectiveness (Coule & Patmore, 2013); focus on achieving results (Meyer et al., 2014); internal and external competition for service provision (Hayes et al., 2014)	embodies guild power and status differences - these select and reject members, regulate through codes and through supervision (Noordegraaf, 2007; Goodrick & Reay, 2011; Hyndman et al., 2014); premium on professional qualifications and abstract knowledge (Goodrick & Reay, 2011)
Accountability and Control	hierarchical/top-down command and bureaucratic control (Rhodes, 2007; Olsen, 2009; Hayes et al., 2014; Hyndman et al., 2014); logic of appropriateness (Meyer et al., 2014)	strategic plans, performance auditing (Gruening, 2001; Hayes et al., 2014; Hyndman et al., 2014); market parameters utilized to allocate scarce resources and achieve desired economies and efficiencies (Coule & Patmore, 2013)	Autonomy cherished (Goodrick and Reay, 2011); quality of services assessed through strong reliance on professional opinion (Reay & Hinings, 2005); code of conduct, code of ethics, institutionalized disciplinary control through the professional associations (Noordegraaf, 2007)
Key words	Authority, Government, Compliance, Hierarchy, Order/Orderly, Rules, Public, Procedure, Guide, Administration, Bureaucracy, Regulations, Legal statutes, Servant	Competence, Accountability, Benchmark, Value-for-money, Privatization, Corporatization, Contracting out, Results, Performance, Efficiency, Tender/tendering, Managerial/management, Focus, Competition	Profession/professional, Association, Medical, Health, Hospital, Expertise, Autonomy, Doctors, Physicians, Standards, Noble, Independence, Patient, Clinical

CHAPTER 4

ASSESSING PERFORMANCE-USE PREFERENCES THROUGH AN INSTITUTIONAL LOGICS LENS

This chapter also addresses the second research objective but with a specific focus on empirically investigating how institutional logics, once primed, relate to the use of performance measurement systems in the public sector.

The chapter has been submitted as a scientific paper and has been accepted for publication in the *International Journal of Public Sector Management*.

Abstract

The purpose of this paper is to examine the influence of shared cognitive frames, in particular, that of institutional logics, on the deployment and use of performance measurement systems in the public sector. Using novel priming techniques derived from behavioral and social psychology, three institutional logics – the public, market-managerial and professional logics, are differentially surfaced in three independent experimental groups. The influence of these primed institutional logics on performance measurement use preferences are then empirically assessed using appropriate ANOVA techniques. We find that, contrary to theoretical predictions, there is evidence of logic congruence regarding some uses of performance measurement systems in the public sector, and divergence regarding others. Individuals applying a public logic are more likely to propose performance measurement use for strategic planning or strategic alignment; while those applying a professional logic are more likely to propose performance measurement use for learning, compared to otherwise-primed individuals.

4.1 Introduction

Performance is a notion that has preoccupied public administration scholars for decades (Amirkhanyan et al., 2013). It is considered essential that public sector organizations perform, and further that they measure and communicate this performance to key stakeholders (Henman, 2016). Performance measurement, that is, the ‘enumeration of organizational or system level processes, outputs and outcomes’ (Henman, 2016), in the public sector, is however not easy given the need to address multiple dimensions and to satisfy multiple constituents (Amirkhanyan et al., 2013).

This idea of performance measurement serving many purposes is not new (e.g., Atkinson et al., 1997). Nonetheless, its study has been largely overlooked in empirical research that has instead focused on performance measurement system (PMS) design and implementation (Henri, 2006; also, Fryer, Antony & Ogden, 2009; Moynihan & Pandey, 2010), and on whether, why and how information generated by the PMS is used (e.g., de lancer Julnes & Holzer, 2001; Moynihan & Ingraham, 2004; Moynihan & Pandey, 2010; Hammerschmid, van de Walle & Stimac, 2013; Kroll, 2015). Furthermore, the sparse extant research on PMS use has predominantly focused on enumerating the different uses (e.g. Behn, 2003; Franco-Santos et al., 2007) and on identifying the outcomes and consequences of such use (e.g. Spekle & Verbeeten, 2014), but not on the factors that influence PMS use. And so, beyond the few studies as exemplified by Henri (2006) on the relationship between organizational culture and the nature of PMS use, there is a paucity of empirical literature on whether and how similarly shared perspectives or cognitive frames influence PMS use in public sector organizations.

Accordingly, our specific interest is on institutional logics - the shared, socially-constructed decision-making frames (Friedland & Alford, 1991), that ‘influence opinions by stressing specific values, facts and other considerations, endowing them with greater apparent relevance to the issue than they might appear to have under an alternative frame’ (Nelson et al., 1997, p.569). Though other authors have examined the influence of institutional logics on the operationalization of PMS (e.g., Carvalho et al, 2006; Andersen & Hjortskov, 2016; Rautiainen et al., 2017), much extant work is conceptual rather than empirical, is focused on design, consequences and outcomes and not use, and is located at the meso-organizational level of analysis and not the micro-level (Micheli & Mari, 2014; Henman, 2016). Yet, organizations are inhabited by individuals of varying backgrounds and affiliations, who are tasked with implementing these PMS. And they may draw from different institutional logics with potentially different emphases on PMS use, in their sense-making (Rautiainen et al., 2017).

The aim of this paper is therefore to analyze the link between institutional logics and the deployment and use of PMS in the public sector. We hypothesize that each institutional logic will make a specific set of issues about PMS use more salient, in comparison to those identified by a different logic. Accordingly, individuals primed for an institutional logic will be differentially biased regarding whether and why PMS should be introduced in the public sector.

This paper thus contributes to public sector performance measurement literature by elaborating and nuancing the relationships between institutional logics and PMS use. In this regard, we extend the work of Carvalho et al, (2006), and Rautiainen and colleagues (2017), by examining an expanded set of reasons for PMS use, and by assessing the possibility of institutional logics as drivers for these uses. Thus, for researchers, the study underscores the

importance of institutional logics as a lens through which public sector performance measurement can be analyzed. The study also introduces novel experimental methodology that can be exploited by researchers to better understand cognitive influences and inter-personal interactions at the micro-level. For practitioners, the study foregrounds the question of whether and how to craft messaging to garner the support of organizational stakeholders towards the operationalization of PMS in the public sector.

In the next section, we present a brief synopsis of the literature on PMS use and on institutional logics, and further develop our hypothesis. We then describe the experimental methodology used, present the study findings, and discuss the results and their possible interpretation.

4.2 Performance measurement use in the public sector

PMS serve different purposes for organizations. For example, Atkinson et al. (1997) classify the roles of performance measurement systems as coordination, monitoring, and diagnosis. Building on this earlier work, Henri (2006) identifies four types of PMS use: monitoring, attention-focusing, strategic decision-making and legitimization. Also, Franco-Santos et al. (2007) identify and sort 17 different roles played by PMS in organizations into five broad categories: measurement of performance, strategy management, communication, behavior-influencing, and learning and improvement. Conversely, regarding public management, Behn (2003) assumes a practice perspective to identify eight managerial purposes for measuring performance. These are, to evaluate, control, budget, motivate, promote, celebrate, and to improve.

In this paper, we draw on the work of these authors to derive an appropriate list of PMS uses as presented in Figure 4.1.

Figure 4.1. PMS uses

Atkinson et al., 1997	Hansen & van der Stede, 2004	Henri, 2006	Franco Santos et al., 2007	Spekle & Verbeeten, 2014	Experimental grouping captions and choice selections
Coordination: focus on primary and secondary organization objectives	Strategy formulation Communication of goals	Attention-focusing: what should we consider? Cues – key success factors, indicate primary and secondary objectives Strategic decision making: reveals cause and effect (processes), problem solving, learning	Strategy management: planning, strategy formulation, strategy implementation, focus attention, provide alignment	Exploratory use (A): priority setting, policy development	Prognostic (specifying what needs to be done, alignment and control) A -improve productivity & mission effectiveness B -align strategic activities to strategic plans
Diagnostic: assessment of cause and effect relationships, process performance, organization learning and organization performance	Operational planning	Monitoring (A): how am I doing? Output measured, goals & output compared, feedback provided and corrections made	Influence behavior: rewarding or compensation behavior, managing relationships, control	Operational use (A): operational planning, process monitoring	Diagnostic (identifying problems and attributing blame) C -provide rational basis for selecting what process improvement to make first D -help identify best practice
Monitoring: measuring and reporting of performance in meeting stakeholder requirements	Performance evaluation	Monitoring (B): information gathered for internal and external disclosure	Measure performance: monitor progress, measure performance Communication (A): benchmarking, internal and external communication	Incentive Use: target setting, incentives, rewards Operational use (B): communication	Motivational (call to arms for engaging in ameliorating situation or taking corrective action, communication) E -support better judgment and decisions F -enhance competition among service providers)
-	-	Legitimization (?): assertion of self-interest and exercise of power Legitimization (B): establish authority and maintain credibility	Communication (B): Compliance with regulation		Legitimation & Regulation (credibility with internal and external audiences, compliance) I -the law requires it J -is an industry norm
-	-	Legitimization (A): rationalization (retrospective understanding of an action), justification and validation of current and future actions	Learning & improvement: feedback, double-loop learning, performance improvement	Exploratory use (B): double-loop learning	Learning & Improvement G -help in benchmarking H -help learning in order to implement better in the future

As may be evident from Figure 4.1, the main difference between the assorted lists is the boundaries between the categories, the number of PMS roles identified and the labels applied to different roles or categories (also, Spekle & Verbeeten, 2014). Thus, our derived list, mapped against the works of these authors, presents PMS as serving prognostic, diagnostic, motivational, legitimating and learning and improvement roles. Prognostic use implies the specification of what needs to be done to better align strategic activities, and improve productivity and mission effectiveness. Conversely, diagnosis entails identifying problems and attributing blame. Thus, diagnostic PMS uses include helping identify best practice and providing a rational basis for selecting what process improvement to make first. Motivational uses inhere score keeping to enhance competition among service providers and to support better judgment and decision-making. Additionally, PMS use for legitimation inheres compliance, that is, conformity with the law; as well as implementation as an industry norm. Finally, PMS for learning and improvement encompasses both benchmarking and learning to implement better in the future.

Following Behn (2003), this list is practice rather than theory-defined. By practice-defined we suggest that the list captures the language of practitioners, while drawing from the work of earlier authors. The disadvantage of such an orientation, and hence the advantage of theory-defined variables is that the latter are more likely to have more precise meanings (Luft & Shields, 2003; Hansen & van der Stede, 2004). Our literature review however suggests the nonexistence of such precise meanings for PMS use. Previous authors have used different terms, either drawn from the work of earlier authors, or in some instances, developed ab initio to capture the essence of their research interest (Hansen & van der Stede, 2004). Our list, in similar tradition, draws from this earlier work but with a clear caveat that the framing of the

list of uses may be possibly ambiguous, particularly as each use embodies complex organizational phenomena that are generally difficult to measure.

4.3 Institutional logics as frames of reference

Goffman (1974), taking a macro-sociological approach, posited that individuals make sense of the world through socially-derived interpretive schemes that he referred to as 'primary frameworks'. Drawing similar conclusions from individual-level studies, the psychology literature identifies and describes an individual's frame of reference as 'a built-up repertoire of tacit knowledge that is used to impose structure upon, and impart meaning to, otherwise ambiguous social and situational information to facilitate understanding' (Gioia, 1986, p.56).

However, whereas individuals may have unique frames of reference, they also tend to share core beliefs with others (Orlikowski & Gash, 1994). These common elements derive from social interaction (Salancik & Pfeffer, 1978), discussion or negotiation (Isabella, 1990), and from training (Tolbert, 1988). It is these shared cognitive elements that individuals draw on to construct and reconstruct their social reality (Orlikowski & Gash, 1994). And it is these shared elements that are recognizable at the macro-level, as institutional logics (Orlikowski & Gash, 1994). Thornton et al., (2012) explicitly make this connection, presenting institutional logics as 'frames of reference that condition actor's choices for sense-making' (p.3). Thus, conceptualizing institutional logics as shared frames of reference presents an apt mechanism that connects institutional logics at the individual, group and societal levels of abstraction without loss in meaning.

And so, as institutional logics shape and define what concerns are legitimate, which issues deserve attention, and what solutions and answers are appropriate (Thornton & Ocasio, 2008), we anticipate different institutional logics to uniquely shape and constrain actor

assumptions, expectations and choices regarding PMS and their uses. Put succinctly, our hypothesis is that influenced by different institutional logics, organizational actors will rank a set of PMS uses such that the highest rank (or greatest preference) will be given to those uses that best align to the institutional logic they are drawing from as a frame of reference.

To operationalize this study, we focus on three institutional logics - the logic of the professions, the logic of public administration, and the market-managerial logic. These three logics are ubiquitous in the public sector, and have been previously defined in the literature (e.g., Thornton et al., 2012). Specifically, the logic of the professions places emphasis on the professional's specific knowledge, expertise and experience (Thornton et al., 2012), and autonomy (Reay & Hinings, 2005). Thus, service rendered is regulated by professional bodies (Noordegraaf, 2007) and its quality is subject to peer opinion (Reay & Hinings, 2005), rather than the dictates of the professional's employer (Noordegraaf, 2007).

Conversely, the logic of public administration is anchored on rules, procedure, and strict accountability to the state (Meyer et al., 2014). Hierarchy is key, as is oversight (Pollitt & Bouckaert, 2011). Thus, the public administration logic is characterized by top-down bureaucracy (Coule & Patmore, 2013). Moreover, compared to the market-management logic, competitiveness, performance and results are generally considered subordinate to adherence to routines, rules and procedures (Goodrick & Reay, 2011; Hyndman et al., 2014). Contrariwise, competition, competitiveness, and results-based performance underpinned by efficiency and effectiveness are hallmarks of the market-management logic (Hyndman et al., 2014; Meyer et al., 2014). Thus, the primary focus of this logic is targets and results. And managerial discretion in moving resources to better achieve desired results is acknowledged and supported (Meyer et al., 2014).

This description of the three institutional logics of interest is however inexhaustive. And whereas we provide an illustrative table in Appendix 1, more substantive discussions can be obtained from, for example, Saz-Carranza and Longo (2012), and Hyndman et al., (2014).

4.4 Method and Data

In this experimental design study, participants (n=98) were randomly assigned to treatment or control groups, differentially primed, and asked to do an evaluative task. The central feature of the experiment was a forced ranking exercise, with the dependent variable being ranks assigned to each of a set of ten reasons for recommending PMS use in the public sector.

4.4.1 Experimental treatments

The experimental treatment was based on priming, a method that is ubiquitous in psychology. Priming generally involves the presentation of text or images related to a specific concept (Bargh, 2006; Loersch & Payne, 2011). Subsequent cognitive processing of the presented material ensures that pre-existing mental content that is semantically, experientially, evaluatively or otherwise conceptually related, including cognitive frames such as institutional logics, is activated and made accessible for current or latter use (Loersch & Payne, 2011). Consequently, subsequent questions afforded by the individual's environment - whether these questions relate to interpretation, judgment or action, are answered within the framework of the activated and accessible mental content (Loersch & Payne, 2011).

And so, to prime these three logics of interest, we follow similar studies in social and cognitive psychology (e.g., Vohs et al., 2006) and develop a 30-item scrambled sentence test as a priming tool. Each item on the tool comprised a scrambled set of five words from which the study subjects constructed a grammatically correct four-word sentence. For example, the

set *'professionals, work, own, control, their'* could be rewritten as *'professionals own their work'* or *'professionals control their work'*. We developed four versions of this tool – one each to prime the three logics of interest, and the fourth to prime none, hence acting as a control. For the tools intended to prime the three logics of interest, 15 of the items contained an adjective or verb semantically related to the institutional logic of interest, as priming stimuli. A complete list of the priming stimuli incorporated in the scrambled sentence tests for the test conditions is presented in Appendix 4.1. These key words, drawn from the analyses of previous authors (e.g., Thornton et al., 2012), capture the essence of the institutional logics of managerialism-market, the professions and the state. Meyer and Hammerschmid (2006) posit that institutional logics *'contain framing elements...signature cues that identify the frame of reference used'* (p.1005). These signature cues or keywords *'define [the] field and act as a radiating force around which associated terms or words cohere...directing attention and uniting a cluster of words into an image'* (Jones & Livne-Tarandach, 2008, p.1076). The other 15 items in the test conditions, as well as all 30 items in the control conditions, were ordinary-use neutral words purposefully used to mask the intent of the test.

4.4.2 Participants

The subject pool for this study comprised 98 masters-level students from a private university in Nairobi, Kenya. Despite its commonality, the use of students in research has come under increasing criticism for their lack of representativeness (Anderson & Stritch, 2016). Accordingly, though the differences between student and non-student subject pools are sometimes trivial (Anderson & Stritch, 2016), we recruited master's students who were concurrently working and thus attending evening or sandwich programs, to increase the

external validity of possible findings. The students were recruited by an open call in class supplemented by an email channeled through their course administrators, under the guise of helping researchers collect views on government performance. In line with good ethical research practice, this deception was approved by the university institutional review board. Moreover, the study subjects were given opportunities to opt out at the time of recruitment and again prior to the commencement of the study.

The mean age of the study subjects was 33.82 years (range, 23-53). Fifty-six subjects (approximately 57%) were enrolled in an MBA in Healthcare Management (MBA) program while the rest were enrolled in a Master's in Public Policy (MPPM) program. Sixty-five (66.3%) of the study subjects were female. Regarding work experience, 34.7% reported private sector only experience while 21.4% reported public sector only experience. The remainder (37.8 %) had mixed sector experience. Table 4.1 provides an overview of the effects of randomization on the study subjects demographic traits across the treatment and control groups.

Table 4.1 shows that the samples are balanced with respect to age, type of program, and years in the private or public sector, as determined through analysis of variance (ANOVA) for each trait. The table however shows an imbalance, across samples, for gender. This is not completely unexpected considering the majority female subject pool. We nevertheless take this potential threat into consideration in subsequent analysis and discussion.

Table 4.1. Subject demographic characteristics across treatment and control groups

Variable	Treatment Group			Control (n=25)	F	Sig.
	PUB (n=25)	MKT (n=24)	PROF (n=24)			
Age	34.92 (6.94)	36.22 (14.53)	32.79 (4.93)	31.56 (5.92)	1.347	0.264
Gender (Female)	0.44 (0.51)	0.913 (0.29)	0.75 (0.44)	0.60 (0.50)	4.959	0.003***
Years in Private Sector	5.81 (7.65)	5.59 (4.83)	4.15 (4.21)	2.77 (3.56)	1.695	0.174
Years in Public Sector	4.43 (6.87)	3.00 (3.68)	3.52 (3.99)	4.50 (4.42)	0.441	0.724
Public Sector-only experience	0.20 (0.41)	0.21 (0.41)	0.17 (0.38)	0.29 (0.46)	0.388	0.762
Private Sector-only experience	0.36 (0.49)	0.54 (0.51)	0.25 (0.44)	0.24 (0.44)	2.150	0.099
Both Private & Public Sector experience	0.36 (0.49)	0.21 (0.41)	0.50 (0.51)	0.44 (0.51)	1.650	0.183
Masters Course – Public Policy	0.44 (0.51)	0.42 (0.50)	0.46 (0.51)	0.40 (0.50)	0.063	0.979
Masters Course – MBA	0.56 (0.51)	0.58 (0.50)	0.54 (0.51)	0.60 (0.50)	0.063	0.979

***p<0.005

4.4.3 The experimental task

The study was conducted in four sittings at the university over a one week period. The study subjects scheduled appointment times to suit their availability. Consequently, all the experiments were carried out after completion of the day's classes.

Following their random allocation to either treatment or control groups, the study subjects were presented with the appropriate priming tools masked as a test of English language ability. The participants were all seated in a large, plain, all-white theatre-type class room with an examination style set up. No institutional or personal effects could be within view, and there was a minimum five-foot distance between the study subjects in all directions. To further reduce contamination, all instructions relevant to the tasks they were to do were provided on the sheets of paper that were handed out to them, and no between subjects or researcher-subject interaction was allowed. Thus, each participant worked independently to

construct grammatically correct four-word sentences from each of the 30 scrambled five-word sets.

After this priming episode, the participants were presented with, and asked to complete, Watson, Clark and Tellegen's (1988) Positive Affect-Negative Affect Scale Questionnaire. Consistent with other authors (e.g., Vohs et al., 2006), we applied this simple scale to not only check for mood changes post-manipulation, but as a dissociative task, aimed at making it difficult for the subjects to link the priming manipulation to the subsequent ranking exercise. As anticipated, there were no negative affect changes arising from the conduct of the priming episode.

4.4.4 Ranking the reasons for PMS use in the public sector

In this final step, the participants were presented with a 'vote' comprising two questions and a list of 10 reasons for PMS use in the public sector. The first question sought to know whether they would support the strengthening of performance measurement in the public sector. This was a binary yes or no question. The second question sought to know their reasons for supporting the strengthening of performance measurement in the public sector, assuming they had answered the first question in the affirmative. Participants were asked to respond to this second question by ranking their reasons in a hierarchical order from their most to least preferred options. A forced ranking method was applied, hence each option had to be given a unique value, ranging from one to ten.

4.5 Results

To statistically check for the effect of the primed institutional logic on preferences for PMS use, we applied a non-parametric ANOVA (Kruskal-Wallis). The results displayed in Table

4.2 show statistically significant differences in the ranks given to PMS use for aligning strategic activities to strategic plans ($X^2_{4.457}$, $p=0.088$) and for learning ($X^2_{8.795}$, $p=0.012$). There are however no significant differences in the ranks assigned to PMS use for all other uses.

Table 4.2. One-way ANOVA (KW) for difference in preferences across all treatment groups

Variable (Preferred use of PMS)	X ² Statistic	Asymp. Sig.	ES (η^2)
A-improve productivity & mission effectiveness	0.148	0.929	0.002
B-align strategic activities to strategic plans	4.857	0.088*	0.070
C-provide rational basis for selecting what process improvement to make first	2.298	0.317	0.033
D-help identify best practice	2.820	0.244	0.04
E-support better judgment and decisions	0.917	0.665	0.013
F-enhance competition among service providers	0.669	0.716	0.01
G-help in benchmarking	0.715	0.699	0.01
H-help learning in order to implement better in the future	8.795	0.012**	0.127
I-the law requires it	0.559	0.756	0.008
J-is an industry norm	2.381	0.304	0.035

* $p<0.1$, ** $p<0.05$, *** $p<0.005$

ES (eta Squared) 0.02 small, 0.13 medium, 0.26 large (Cohen, 1973, 1988)

Nonetheless, we cannot dismiss the potential for a significant effect and so to supplement our inferential statistics and in line with good practice and the APA guidelines (Wilkinson and APA Task Force on Statistical Inference, 1999), we turn to estimations of effect sizes that are relatively independent of the sample size (Cohen, 1973). The results, also displayed in Table 4.2, show small effects (Cohen, 1973, 1988).

To assess possible between-group differences hidden in the summative ANOVA test, we conduct post-hoc between-group comparisons. The results provided in Table 4.3 show that between the public-prime and market-managerial-prime groups, there is a statistically significant difference in the rank for PMS use for aligning strategic activities to strategic plans ($X^2_{4.802}$, $p=0.028$). For all the other uses the differences in rankings are not statistically significant, and the effect sizes are generally small. Additionally, between the public-prime and professional-prime groups, we observe, in Table 4.3, a statistically significant difference

in the rank for PMS use for learning purposes ($X^2=8.563$, $p=0.003$). There are no significant differences for all other uses. Finally, in the comparison between the market-managerial-prime group and the professional-prime group, we observe no significant differences in their ranking of the entire list of PMS uses. Moreover, the effect sizes are generally small (Cohen, 1973, 1988).

To further examine the effects of institutional logics on PMS use preferences, we assessed differences between the treatment and the control groups. The results displayed in Table 4.3 show statistically significant differences between the public-prime group versus the control in the rank assigned to PMS use in learning ($X^2=6.051$, $p=0.014$). It also shows a statistically significant difference between the market-managerial-prime group versus the control in the rank assigned to PMS use in aligning strategic activities to strategic plans ($X^2=4.464$, $p=0.035$). There were however no statistically significant differences in the rankings for all other uses between the public or market-managerial prime groups and the control, and neither was there any statistically significant difference in the rankings for any of the PMS uses between the professional prime group and the control group. Moreover, the effect sizes suggest a nil to small effect.

Table 4.3. One way ANOVA for Treatment and Control groups

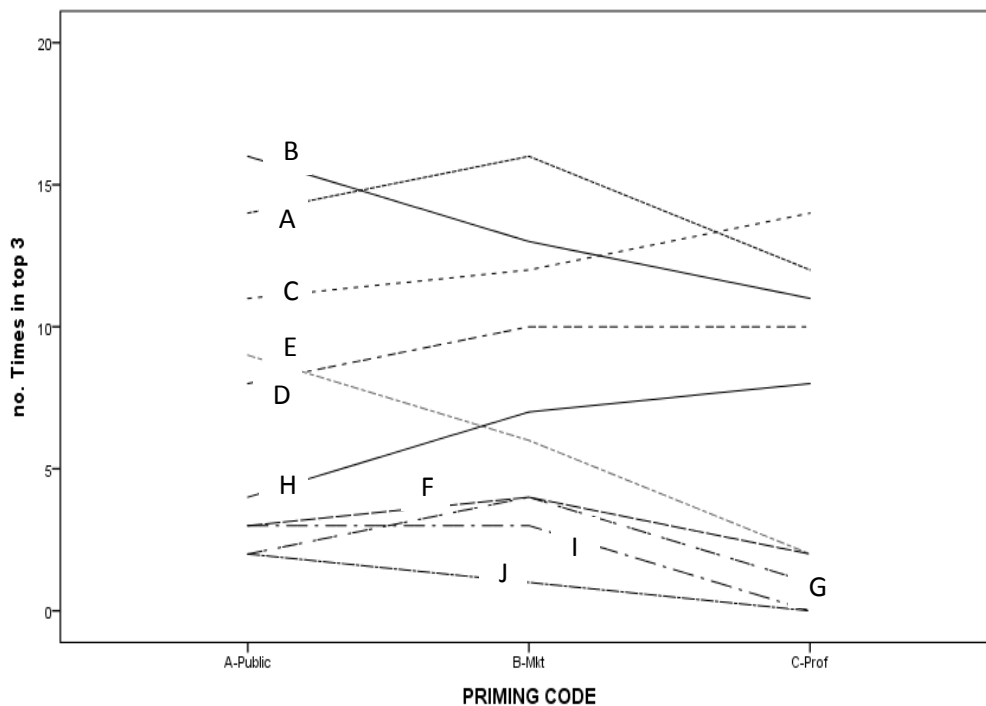
Variable	Public Mkt vs Prime			Public Prime vs Prof			Mkt Prof vs Prime			Public Control vs Prime			Market Control vs Prime			Prof Control vs Prime		
	X ²	Sig.	η ²	X ²	Sig.	η ²	X ²	Sig.	η ²	X ²	Sig.	η ²	X ²	Sig.	η ²	X ²	Sig.	η ²
A-improve productivity & mission effectiveness	0.130	0.719	0.003	0.069	0.793	0.002	0.024	0.876	0.001	0.019	0.889	0.000	0.142	0.706	0.003	0.016	0.898	0.000
B-align activities to plans	4.802	0.028**	0.104	0.171	0.679	0.004	2.233	0.135	0.049	0.000	0.992	0.000	4.464	0.035**	0.093	0.106	0.744	0.002
C- rational basis for process improvements	0.051	0.821	0.001	2.087	0.149	0.046	1.311	0.252	0.029	1.124	0.289	0.024	0.548	0.459	0.011	0.404	0.525	0.009
D-help identify best practice	0.595	0.441	0.012	2.504	0.114	0.056	1.152	0.283	0.025	0.458	0.499	0.01	0.041	0.840	0.001	2.541	0.111	0.054
E-support better judgment	0.331	0.565	0.007	0.820	0.365	0.018	0.079	0.779	0.002	0.019	0.891	0.000	0.382	0.537	0.008	0.790	0.374	0.016
F-enhance competition	0.583	0.445	0.013	0.012	0.912	0.000	0.416	0.519	0.009	0.073	0.788	0.002	0.241	0.623	0.005	0.009	0.923	0.000
G-help benchmarking	0.754	0.385	0.016	0.018	0.893	0.000	0.302	0.582	0.007	0.399	0.528	0.008	0.060	0.807	0.001	0.202	0.653	0.004
H-help learning	2.413	0.120	0.052	8.563	0.003***	0.19	2.313	0.128	0.05	6.051	0.014**	0.129	0.118	0.731	0.002	1.864	0.172	0.04
I-the law requires it	0.590	0.442	0.012	0.117	0.732	0.003	0.128	0.721	0.003	0.112	0.738	0.002	0.080	0.777	0.002	0.007	0.931	0.000
J-is an industry norm	0.135	0.714	0.003	2.040	0.153	0.045	1.361	0.243	0.03	0.535	0.464	0.011	0.070	0.791	0.001	0.767	0.381	0.016

p<0.05, *p<0.005

Effect Size (η², eta Squared) 0.02 small, 0.13 medium, 0.26 large (Cohen, 1973, 1988)

To determine the direction of effect while remaining cognizant of the sample size, we created dummy variables by coding each preferred use as being in the ‘top three’ or not. We then compared these dummy variables (DV) across the treatment conditions. The results displayed in Figure 4.2 below thus depict the total number of times a particular use appeared in the ‘top three’ for each priming condition.

Figure 4.2 Analysis of preferences (using dummy variables) by priming code



We observe that the rank orders, based on these DV, differ for certain uses, while remaining similar for others. Thus, for example, those primed for public logic give most preference to the DV-B (align strategic activities to strategic plans) while those primed for market-managerial or professional logics relegate this dummy to second and third ranks respectively. Those primed for market-managerial logic give most preference to DV-A

(improve productivity & mission effectiveness) while those primed for market-managerial or professional logics give most preference to DV-C (provide rational basis for selecting what process improvement to make first). All three treatment conditions show least preference for DV-J (is an industry norm). But in addition, the public-prime condition has an equally low preference for G (help in benchmarking) as with J; while the professional-prime condition has an equally low preference for I (the law requires it) as with J (is an industry norm).

In checking for any possible effects of the demographic traits we find no correlation between age and years of experience in the public or private sector, with rankings assigned to different PMS uses. The results, summarized in Table 4.4 below, show no statistically significant differences in the ranks assigned to any of the PMS uses, based on gender. However, between study subjects with public-sector-only and private-sector-only experience, there was a statistically significant difference at $p=0.003$ and $p=0.048$ respectively, in the rank assigned to PMS use to enhance competition. Further analysis of this difference reveals that public-sector-only participants ranked PMS use for the enhancement of competition lower than those with private-sector-only or mixed-sector experience, while private-sector-only participants ranked the same item higher. Table 4.4 also reveals that study subjects enrolled in the MBA course ranked PMS use for the alignment of activities to strategic plans, higher than those enrolled in the MPPM course. The MBA study subjects however ranked PMS use for enhancing competition, to help in benchmarking, to help in learning and because the law requires it, lower than those enrolled in the MPPM course.

Table 4.4. ANOVA for control variables

Variable	Gender (F=1)		Pub Only	Sector Exp.	Private Only	Sector Exp.	Both Pub-Pvt. Exp.	Sector	Course - MBA	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.
A-improve productivity, mission effectiveness	0.197	0.659	0.162	0.688	0.636	0.427	0.223	0.638	0.712	0.401
B-align activities to plans	1.056	0.307	0.612	0.436	1.891	0.172	4.433	0.038**	3.475	0.065*
C- rational basis for process improvements	1.318	0.254	0.189	0.665	1.605	0.208	0.755	0.387	0.881	0.350
D-help identify best practice	0.647	0.423	0.044	0.834	0.085	0.772	0.351	0.555	0.000	0.993
E-support better judgment	0.699	0.405	0.663	0.418	1.834	0.179	2.898	0.092*	0.246	0.621
F-enhance competition	0.449	0.505	9.131	0.003***	4.007	0.048**	0.186	0.667	10.069	0.002***
G-help benchmarking	0.199	0.657	1.044	0.310	0.001	0.978	1.042	0.310	4.424	0.038**
H-help learning	0.869	0.354	0.097	0.756	1.064	0.305	3.024	0.085*	3.514	0.064*
I-the law requires it	0.001	0.976	0.002	0.963	0.020	0.886	0.060	0.807	4.134	0.045**
J-is an industry norm	1.020	0.315	0.018	0.894	0.113	0.737	0.000	0.996	2.218	0.140

*p<0.1, **p<0.05, ***p<0.005

4.6 Discussion

The literature suggests that different institutional logics represent different world views that condition how actors interpret their realities, make judgments and act upon them (Thornton & Ocasio, 2008). Thus, one would expect the primed institutional logics to exert differential influence on the study subjects such that distinctively different patterns of preferences regarding PMS use would emerge. Accordingly, one would have expected study subjects primed for the public institutional logic to rank PMS uses for the alignment of strategic activities to strategic plans, and because the law requires it, much higher than those primed for a managerial-market logic or a professional logic. Similarly, given its association with efficiency, competition and market position (Thornton et al., 2005; Saz-Carranza & Longo, 2012), one would expect study subjects primed for a market-managerial logic to give higher ranks to PMS uses for improving productivity and mission effectiveness, for providing a rational basis for process improvements, or for enhancing competition, when compared to those primed for other logics. And for a logic of the professions that is premised on personal reputation, expertise, quality of craft and independence (Thornton et al., 2005; Saz-Carranza & Longo, 2012), one would expect greater preferences for PMS use for benchmarking and for learning.

Our results however show a mixed picture. The public-prime study participants showed a preference for PMS use in aligning strategic activities to strategic plans, compared market-managerial-prime participants. This conforms to theoretical prediction that public logics, based as they are on a political mandate and on principles of democratic participation (Meyer et al., 2014), inheres the need for alignment to an agreed-upon or promised plan. We also observe that professional-prime participants generally assigned higher ranks to PMS for learning

compared to those primed with a public logic. Again, this conforms to theoretical prediction that professional logics, whose identity and legitimacy is based on expertise and quality of craft (Noordegraaf, 2007; Thornton et al., 2012), would rank PMS use for learning much more highly than those primed for either public or market-managerial logic.

We however observe no significant differences between the market-managerial-prime and professional-prime participants in the ranking of the entire list of PMS uses. We also don't observe significant differences between public and market, and public and professional logics for many other PMS uses. On the one hand, these are surprising findings given theoretical predictions based on differences between the institutional logics. On the other hand, maybe not. One explanation for these mixed findings could be that whereas different logics may have different emphasis, it may be that for certain uses of PMS, the interests of different logics are intertwined (also Rautiainen et al., 2017). This intertwining could arise either through cross-pollination by ideas from other logics during the evolution of each unique logic; or through one logic straddling spheres strongly associated with different, opposing logics, thus developing sub-logics that have elements of all.

To illustrate, across many jurisdictions, market-managerialism has been promoted within the public sector under labels such as public management reform and new public management (Meyer & Hammerschmid, 2006; Pollitt & Bouckaert, 2011). Given the continuing evolution of this struggle, it is conceivable that the current conception of public logic may encompass a distortion of the borders between a 'pure' form of public logic and the market-managerial logic, reflecting 'a truce following past struggles' (Meyer & Hammerschmid, 2006, p.1002). Thus, individuals primed for a public logic may simultaneously draw on this 'distorted' frame comprising elements of both public and market-

managerial logics (Meyer & Hammerschmid, 2006). Additionally, the health profession straddles both the public and the private sectors. Such positioning has been theorized to not only expose actors to contradictions inherent in the prevailing institutional logics, but also to lower their embeddedness in any specific logic while loosely founding them in all (Thornton & Ocasio, 2008). Thus, authors such as Reay and Hinings (2009) posit the health professional logic as a superordinate logic comprising the sub-logics of medical professionalism and business-like healthcare, co-existing in some form of ‘pragmatic collaboration’. Health professionals draw on either of these sub-logics, as appropriate, for their needs (Reay & Hinings, 2009).

In assessing the differences between the treatment and the control groups, we find a statistically significant difference between the public-prime group and the control in the rank assigned to PMS use for learning. We also find a statistically significant difference between the market-prime group and the control, in the rank assigned to PMS use in aligning strategic activities to strategic plans. Read together with the between-group comparisons, these findings seem to suggest that once primed for a market-managerial logic, preference for PMS use in aligning strategic activities to strategic plans was depressed, hence the lower ranks assigned to this use by the market-prime condition in comparison to both the public and professional-prime conditions. Regarding PMS use for learning, priming public logic suppressed this preference, compared to the controls. This corroborates the finding of a statistically significant difference in ranking PMS use for learning between the public-prime and professional-prime groups.

However, there were no statistically significant differences in the rankings for all other uses between the public or market prime groups and the control, and neither was there any statistically significant difference in the rankings for any of the PMS uses between the

professional prime group and the control group. A plausible interpretation of this finding is the ubiquity of performance measurement across all three logics, to the degree that preferences across many PMS uses have become homogenized.

In summary, we find evidence suggestive of both logic divergence and consensus as far as support for PMS use is concerned. However, the possibility of confounding by sectoral experience, and course attended exists. The results revealed that study subjects with public-sector-only experience ranked PMS use for the enhancement of competition lower than those with private-sector-only experience. This makes intuitive sense, given the central role of competition in the private sector vis-à-vis the public sector (Saz-Carranza & Longo, 2012). Interestingly though, given the obvious correlation between private sector experience and a market-managerial logic on one hand, and a public-sector-only experience with a public logic on the other, we do not observe any effect of sectoral experience on PMS use in the alignment of activities to strategic plans. This implies that the earlier observed bias of a public logic to PMS use for strategic alignment can only be attributable to the priming manipulation.

Additionally, in assessing whether the course attended had any influence on preferences, we observed several statistically significant differences. These included PMS use for the alignment of activities to strategic plans, and for learning, thus implying that the course attended may be a potential confound for the linkage so far observed between the primed institutional logics and PMS use. However, given the observed mixed results, we interpret these findings as indicative of the idea that the course attended, rather than propel the study subjects toward a specific logic, made the possibilities, strengths and shortcomings of each unique logic more manifest to the participants, thus allowing them to draw from all, or to create a hybrid understanding of each. In this sense, our study corroborates Meyer and

Hammerschmid (2006) finding that educational background (business studies) did not raise the probability of a managerial identity being enacted, nor decrease the probability of a public logic, but rather increased the probability for hybrid interpretations (p.1009).

There are however, several limitations to the inferences that we can make from this study. In the first instance, this was a laboratory study and as such suffers from threats to external validity occasioned by the lack of realism in a laboratory environment (Anderson & Stritch, 2016). Additionally, as our sample comprises masters' level students albeit with a professional profile, there are limits to how far we can generalize to the working population (Anderson & Stritch, 2016). Replication of this study in the field will therefore likely add considerable nuance.

Moreover, the novelty of our priming tools brings to the fore the possibility of inappropriateness or greater-than-intended subtlety in eliciting the desired institutional logics. The former is reasonably addressed by adhering to the definitions and keyword lists provided by previous authors (e.g. Hyndman et al., 2014), thus enhancing construct validity. Regarding the latter, it is possible that the treatments low intensity was not enough to prime institutional logics to a degree that could influence preferences. Nonetheless, a counter argument is that highly intense treatments would have occasioned a loss of contextual realism by making the manipulation obvious, thus triggering effortful correction. Consequently, subsequent use of these tools in diverse experiments, will likely lead to their refinement and enhanced utility.

A final limitation of this study is its small sample size. This was occasioned by the design of the study that required both a convenience sample to accommodate resource constraints; as well as the need to have practitioner participation, hence the executive master's programs. The implication of such small samples is their reduced statistical power to find small

but significant effects (Loken & Gelman, 2017). Additionally, small samples make it difficult to ensure randomization across all demographic characteristics or possible control variables, and to parse the study population for statistical analysis across multiple variables (Spencer, Lay & de Lopez, 2017). Nonetheless, significant effects such as those we have demonstrated with a small sample, indicates that the treatment effect is likely larger than the equivalent result with a larger sample (Friston, 2012). And although the risk of false positives is high with small samples, the use of non-parametric tests to some degree mitigates the possibility of an inflated Type I error rate (Zimmerman, 2012; Wiedermann & von Eye, 2013). Moreover, for asymmetric distributions, non-parametric procedures are generally more powerful than their parametric counterparts (Wiedermann & von Eye, 2013). Still, though we find statistically valid results using this sample and with conventional analytic strategies, the obvious implication remains a replication study with a larger sample size.

4.7 Conclusion

The aim of this exploratory study was to provide clues toward a better understanding of the relationships between institutional logics and PMS use in public sector organizations. In this regard, we find evidence suggestive of both institutional logic divergence and consensus as far as support for PMS use is concerned. These findings have been elaborated in the discussion above. And so, despite the study's limitations, we can derive several theoretical and methodological contributions, as well as practical implications.

From a theoretical standpoint, this paper extends and nuances previous work on performance measurement in the public sector by examining the influence of institutional logics on PMS use, an area that has so far been overlooked (Moynihan & Pandey, 2010). We have highlighted differences between institutional logics and their influences on support for

PMS use, showing areas of alignment between institutional logics and PMS use as well as points of divergence. Our findings thus support the use of institutional logics as appropriate analytical tools for examining and explaining contradictory uses of PMS in public sector organizations. This perspective will complement the pervasive political, power and contingency models, and likely help scholars develop a better understanding of how organizational actors interact with performance measurement.

Second, this study introduces new methodology to the public administration literature - priming experiments - that can be appropriated to better examine individual and group level perceptions, attitudes, judgments, decision-making and behavior (Bargh, 2006). Moreover, as the reported study was a true experiment in the fashion described by Shadish, Cook and Campbell (2002), the observed differences being partially attributable to the priming manipulation, suggest the capability of text in activating commensurate institutional logics. This finding, supports those of researchers in the social and cognitive psychology fields (e.g. Vohs et al., 2006), as well as assertions by management scholars that words can be used to 'convert ongoing cues into meaning' (e.g., Colyvas & Powell, 2006). And, whereas practitioners and scholars may feel that public sector workers' judgments and motives regarding performance measurement are freely chosen, and reflective of due consideration of organizational intent, the findings of this experiment suggest that this impression is only partially true. Judgments and motive are seemingly nonconsciously influenced by the actor's most accessible frames of reference, among them, institutional logics. Consequently, difficulties and conflicts in PMS implementation and use, may arise from differences in organizational actor identification with, and referencing from, the different logics.

Thus, for managers developing a common goal or attempting to harness support for PMS, they can choose to leverage inherent affinities between specific logics and PMS uses, to mobilize support for the PMS in its entirety; or they can choose to appeal to a specific use depending on the target audience. Moreover, given the suggested importance of text in priming commensurate institutional logics, managers can choose to either differentiate text to appeal to different identities; or they can utilize text in manner that legitimizes across different institutional logics i.e., deploy multivalent key words or combine key words to activate favorable logics (Jones & Livne-Tarandach, 2008).

However, as a single study, this paper's findings are in no way conclusive. Much more needs to be done.

4.8 References to Chapter Four

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Appendix 4.1. A synopsis of institutional logics and identification of key words

	Public logic	Market-Managerial logic	Professional logic
Main ideas and arguments	Neutral and objective public administrative activity, objectives selected in accordance with political rationality	Investor and managerial capitalism, objectives selected in accordance with economic and organizational rationality	Personal capitalism, profession as a relational network
Structures and systems	Departmentalized, hierarchical and bureaucratic	Competitive, led by management teams, decentralized control	Based on personal expertise, professional association, relational network
Basis of attention and action	Formal procedure	Processes and results	Professional ideals, personal reputation, quality of craft
Accountability mechanisms	Based on regulation, compliance	Efficiency and effectiveness evaluation	Internal and external peer review
Key words	<ul style="list-style-type: none"> - bureaucratic^a/bureaucracy^a - administration^a - rules^a/norms/requirement - regulation^a/legal statutes^a - compliance^a - procedures^a/guide - administrator^a/bureaucrat - hierarchy^a/hierarchical <p>Also:</p> <ul style="list-style-type: none"> -public interest^a -public servants^a -public good^a -government^a -order^a 	<ul style="list-style-type: none"> - efficiency^x/effectiveness - output/results^x/outcomes - customers/client - managers/managerial^x - performance^x/performance measurement^x/indicator/target/objective - market/corporatization - competition^x/tendering^x/contract - benchmarking^x/value-for-money^x <p>Also:</p> <ul style="list-style-type: none"> -accountability^x -privatization^x 	<ul style="list-style-type: none"> - Profession/professional(s)^y - professional association^y/guild - Expertise^y/reputation - professional autonomy, professional independence^y - Standards, peer review - Noble^y - Doctors/Physicians^{*y} - Medical, Health, Hospital^{*y} - Patient, Clinical^{*y}

^{a-x-y} Specific words included in scrambled sentence test and intended to prime commensurate logic.

* Specific to the health professional logic.

Adapted from Thornton et al., (2005), Saz-Carranza & Longo (2012), Hayes et al., (2014), Hyndman et al., (2014).

Appendix 4.2. Sample Scrambled Sentence Test intended to prime a public logic

ENGLISH PROFICIENCY TEST (SCRAMBLED SENTENCE CODE: 1A)

INSTRUCTIONS: Create a sensible phrase using only 4 words (or word pair combinations), as separated by commas, in each of the following 5-word (or word pair combination) sets.

For example: “cold, so, it, outside, was,” may be rewritten as “it was so cold” or “it was cold outside”

Take as much time as you need but please try not to exceed 10 minutes

bureaucratic, is, government, good, then	
compliance, very, important, is, not	
hierarchy, management, orderly, scrambled, ensures	
ensures, fair, is, government, distribution	
rules, followed, must, the, be	
We, public interest, work, must, for	
procedure, must, public-servants, follow, light	
Objectivity, is, work, very, important	
legal statutes, public, servants, guide, others	
public opinion, government, to, matters, us	
public good, governments, valued, provide, always	
public administration, delivery, public goods, supports, the	
neutral, he, be, must, public servants	
bureaucracy, orderly, communication, work, ensures	
regulations, help, always, order, create	
was, not, there, he, in	
hot, it, outside, was, so	
never, the, she, cooking, does	
weekly, tennis, play, you, do	
going, to, I'm, him, see	
calls, she, ever, remembers, hardly	
you, see, me, can, now	
never, I, breakfast, eat, daily	
go, now, home, will, I	
speaks, she, learn, English, does	
you, don't, coffee, do, like	
the, up, I, balloon, blew	
raining, is, outside, hard, it	
heavy, this, table, too, is	
bus, the, here, comes, is	

CHAPTER 5

REVIEWING THE COHESIVE CONTRIBUTIONS OF THE THREE ESSAYS

This chapter presents a brief integrated discussion of the theoretical contributions; the managerial, practical and policy implications; and future research opportunities deriving from the studies that compose chapters 2, 3 and 4.

5.1 Introduction

The first essay (Chapter 2) presented an aggregative conceptual model that demonstrated the pervasive influence of institutional logics on performance measurement implementation in the public sector. In this sense, the essay synthesized and organized what is known in the literature, connecting extant dots, and presenting new propositions to guide future research. At its core, the essay presents institutional logics, in their application as cognitive frames of reference, as contributors to the variation seen in PMS implementation in the public sector.

The second and third studies (Chapters 3 and 4) present the possibility of priming institutional logics through text or visual cues, and demonstrate the differential relationships between institutional logics and judgment in ambiguous scenarios (Study 2/Chapter 3), and between institutional logics and PMS use (Study 3/Chapter 4). Thus, beyond providing empirical evidence for the nonconscious influence of institutional logics on organizational actor perception, judgment and action regarding public sector performance measurement, these latter two essays/studies open possibilities for *ex ante* public management research using priming as a technique.

A summary of the cohesive theoretical and practical contributions of the three essays is presented below.

5.2 Theoretical contributions

The first essay (Chapter 2) conceptualizes performance measurement as decision-making and presents an apt framework for depicting how variations in implementation can arise from the implicit and explicit influence of institutional logics on the agency (and institutional work) of organizational actors within broader contextual constraints. In this sense, the essay re-orient

research toward a view of PMS implementation that underscores performance measurement as social construction, and that stresses the relational and interpretive nature of human activity within specific contextual constraints and enablements. This is important as though exceptions exist (e.g., Yang & Modell, 2012), much of the performance literature applying an institutional lens has been preoccupied with the macro and meso-levels of analysis, and has ignored the role and experiences of the organizational actor in relation to the institutions within which they are embedded. Moreover, the synthesis of relevant literature and the proposed model that draws on prior others in decision-making (e.g., Mintzberg et al., 1976; Mazzolini, 1981) and in the field of performance measurement and management (e.g., De Lancer Julnes & Holzer, 2001), connects extant research dots and sets the stage for subsequent empirical testing that can only advance the field of public sector performance measurement and management.

The second study (Chapter 3) made use of text as a ubiquitous cue in work environments, to prime institutional logics, and obtained significant measurable impacts on organizational actor perception and judgment. Thus, the outcomes of this study not only suggest that environmental stimuli can prompt changes in cognitive models, but also that the initial stance taken by individuals on issues that confront them, is an indirect result of subtle, and possibly not so subtle, cues from the environment. Moreover, by demonstrating nonconscious influence, the study presents empirical evidence on how actors' perceptions and judgment are conditioned by the very institutions that they at times consciously engage with and/or seek to change. The study thus advances the growing body of micro-level research on institutional logics that examine the lived experiences of actors in the world of work as they navigate, interpret and translate institutional complexity (see also Goodrick & Reay, 2011; Waldorff et al., 2013; Martin et al., 2017). It also builds on the work of earlier authors (e.g.,

Ganegoda & Folger, 2015; Swan & Clark, 2008) in developing the concept of institutional logics as frames of reference for the individual organizational actor, an aspect has not been adequately considered in the organizational behavior or public management literature (Grimmelikhuijsen et al., 2017).

The third study (Chapter 4) examines the influence of institutional logics on the deployment and use of performance measurement systems in the public sector. The paper thus extends and nuances previous work on performance measurement systems use in the public sector (e.g., Franco-Santos et al., 2007; Fryer, Antony & Ogden, 2009; Moynihan & Pandey, 2010; Hammerschmid, van de Walle & Stimac, 2013; Kroll, 2015) by examining an area that has so far been overlooked. In this regard, the paper reveals that contrary to theoretical predictions, there is logic congruence regarding some uses of performance measurement systems in the public sector, and divergence regarding others.

5.3 Practical, managerial and policy implications

Put together, the findings of the latter two studies show that institutional logics do have an influence on organizational actor perception and judgment. Thus, the greater the diversity of logics they draw from, the greater the diversity of possible responses to any PMS issue/situation that confronts them in the organization. Moreover, both studies do demonstrate that the environment – in this case, text – has the potential of nonconsciously surfacing unique logics through priming effects (see also Bargh, 2006; Vohs et al., 2006). Public sector managers may therefore want to consider how they frame and communicate performance measurement issues of strategic import, if the organization is to secure broad-based support towards their implementation. And so, for managers intent on developing a common performance measurement goal or attempting to harness broad-based support for PMS, they

can choose to leverage inherent affinities between specific logics and PMS uses; or they can choose to make targeted appeals drawing on the hypothesized relationships between specific logics and particular PMS uses.

For the public administration academic practitioner, the latter two studies introduce novel experimental methodology that can be exploited to better understand cognitive influences and inter-personal interactions at the micro-level.

5.4 Limitations and future research

The ambition of the thesis was very broad, and despite our best intentions there were a number of limitations. These are provided in great detail with each essay/study as they are study-specific, and will not be repeated here for the sake of parsimony. Similarly, elements relating to future research have been discussed in the relevant subsections of each essay. We nonetheless, highlight some of the broad opportunities for future research.

The first study presents several propositions that need to be further investigated. Indeed studies 2 and 3 are a first step toward addressing proposition 1. Studies 2 and 3 open the space for assessing cognitive biases in performance-measurement-related decision-making as opposed to performance-measurement decision-making based on fixed criteria. The two studies press for research that assesses the influence of these cognitive frames under conditions allowing for possible counterfactual thinking; as well as examination of the role of text in priming institutional logics or other cognitive frames, that are then used as perceptual lenses by decision makers at all levels in the performance measurement and management process. Thus beyond looking at the replicability (or otherwise) of the latter two experimental studies, future research could, for example, (1) test the tenacity of the hold that these institutional logics have on organizational actor perception given the possibility of conflict between the diverse

logics, regarding how any organizational situation is perceived, (2) explore the possibility of moderators or mediators of the nonconscious activation of institutional logics, including the role of context; and (3) examine the nature of interaction between the nonconscious influence of institutional logics and conscious cognitive processes, motives and goals.

Studies 2 and 3 were however exploratory studies that were based on small samples. They were also designed as laboratory experiments may thus be criticized for lacking some degree of realism. Replication of these studies with larger samples and at best in the field will therefore likely add considerable nuance. Nonetheless, the significant results obtained open the door for further and more rigorous testing, as well as extension and probing of the emergent ideas and questions that derive from the two studies in particular, and the thesis in general.

5.4 References to Chapter 5

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