

Lye, J., Hoque, Z. and Parker, L. (2021) How do employees learn from performance measures? Evidence from a local government entity. *Accounting and Finance*, 61(2), pp. 3443-3480. (doi: [10.1111/acfi.12709](https://doi.org/10.1111/acfi.12709))

The material cannot be used for any other purpose without further permission of the publisher and is for private use only.

There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

This is the peer reviewed version of the following article:

Lye, J., Hoque, Z. and Parker, L. (2021) How do employees learn from performance measures? Evidence from a local government entity. *Accounting and Finance*, 61(2), pp. 3443-3480, which has been published in final form at: [10.1111/acfi.12709](https://doi.org/10.1111/acfi.12709)

This article may be used for non-commercial purposes in accordance with [Wiley Terms and Conditions for Self-Archiving](#).

<http://eprints.gla.ac.uk/223173/>

Deposited on 11 September 2020

How do employees learn from performance measures? Evidence from a local government entity

Joanne Lye*
Zahirul Hoque**
Lee Parker***

*Retired from Monash University, Australia; **Email:** sammyblye07@gmail.com (Joanne Lye)

**Department of Accounting and Data Analytics, La Trobe Business School, La Trobe University, Bundoora, Vic 3086, Australia; Tel + 613 9479 3433; E-mail: z.hoque@latrobe.edu.au

***Professor Lee D. Parker, RMIT Distinguished Professor, School of Accounting, RMIT University, Melbourne, Victoria, Australia Research and Professor in Accounting Adam Smith School of Business, The University of Glasgow, Scotland, UK; *email:* lee.parker@rmit.edu.au

****Corresponding author: Zahirul Hoque**

How do employees learn from performance measures? Evidence from a local government entity

Abstract

We examine how employees learn from a performance measurement system. Employing the social construction of reality theory, we analyse how actors constructed knowledge in their specific setting. Qualitative research within a local government entity involved interviews, observation of meetings and examination of archival records. We find that the process of individual learning from a performance measurement system is based around aligning varying episodic experiences of individuals at differing levels. The outcome of these findings is that learning by individuals is a socio-technical process in which the use of performance measures is embedded in everyday thinking of the social world examined.

Keywords: Individual learning, organisational learning, performance measures, public sector, local government.

JEL classification: M41; H83

1. Introduction

Over the past fifty years, organisational learning as a research field has grown significantly (Adonis, 2018; Argyris, 1977; Argote, 2011; Argote and Miron-Spektor, 2011; Askim et al., 2008; de Wall and Counet, 2009; Easterby-Smith et al., 2009; Easterby-Smith and Lyles, 2011; Jardioui et al., 2019; Popova-Nowak and Cseh, 2015; Rashman et al., 2009). Researchers have acknowledged the importance of linking individual, group and organisational levels of learning in an organisational setting. Argyris and Schon (1978, p. 9) argued that 'organizational learning is not merely individual learning, yet organizations learn only through the experience and actions of individuals.' Here, Argyris and Schon implicitly conceptualised organisational learning as being a phenomenon at more than one level. Similarly, Kim (1993) developed a theoretical model whereby shared-mental models were the conduit that linked information transferred from the individual level to the organisational level. Later, Crossan et al. (1999) developed a framework conceptualising organisational learning as a dynamic process linking the individual, group and organisational level.

At this juncture, these theoretical discourses have simultaneously contributed to the literature on organisational learning and at the same time revealed the fragmented and partial nature of the field. More importantly, the concept of organisational learning has primarily been articulated in discourses abstracted from practice, thereby omitting the details and intricacies of organisational learning in a specific domain. A consequence of such discourses is that the search for abstract theory has privileged decontextualised forms of knowledge over situated learning that captures the nuances and complexities of practice. Yet, as asserted by Cook and Yanow (1993) organisational learning is intimately linked to a specific organisation. Furthermore, it is not clear that in either case, such instances of learning constitute how individual learning occurs, situated in practice. A key motivation for our study is to extend this line of inquiry, in this instance through the case study of a local government-owned water utility company (hereafter referred to as Urban Water¹).

Our review of the empirical literature in accounting that links the phenomenon of organisational learning and performance measurement reveals that it is a growing body of literature but still a sparse field of enquiry (see Adonis, 2018; de Wall and Counet, 2009;

¹ We use a fictional name of our subject research site to preserve confidentiality.

Jardioui et al., 2019; Kloot, 1997; Van Helden et al., 2001; Rouse et al., 2002; Chenhall, 2005; Henri, 2006). To Neely and Bourne (2000), the challenge of the 21st century is 'how do we extract the maximum value from our performance measurement data' (p. 6)? The pluralism of research design, context, and a priori theory is evident in past studies. For instance, scholars have adopted differing research designs such as case study, survey and mixed methods in investigating the phenomenon of organisational learning in different contexts and adopted differing a priori theories. Questions that remain unanswered include how learning by individuals occurs in an organisational setting. In this study, we take an empirical step toward answering that question from the domain of performance measurement systems. Sanger (2008) amongst others, suggests that to understand how performance measures are used in an organisation it is best to focus research within the organisation's broader socio-political context. Hence, the primary research question we explored in this study is:

How do members of an organisation's strategic business unit learn from the recursive use of performance measurement information?

Through examining the primary research question within Urban Water, our paper contributes to the existing organisational learning and performance measurement literature by considering three research objectives.

First, scholars such as Argyris and Schon (1978) and Fiol and Lyles (1985) consider the acquisition and use of information by individuals as pivotal to organisational learning. Also, Huber (1991) provides an information platform for describing the cognitive processes whereby learning at the individual level subsequently gets transferred to the organisational level. According to Huber (1991), the information platform is based on four constructs: knowledge acquisition (how knowledge is obtained); information distribution (the process by which information from different sources is shared and thereby leads to new information and understanding); information interpretation (the process by which distributed information is given one or more shared meanings); and organisational memory (how knowledge is stored for future use). Thus, the first research objective considered in this paper was:

- a) To identify and elucidate the performance measurement information flows within the organisation that enable individuals to learn from their experience and to modify current behaviour given that experience.

This objective contributes to the research question by probing the individual as to what is happening when learning takes place whilst using performance measurement information, which is subsequently transferred to the organisational level. In particular, the aim is to identify what keeps learning moving forward leading to a modification of existing routines and what disrupts it.

The second objective of this study was to develop an understanding of the contextual factors that influence the use of performance measurement information. Hedberg (1981) describes the importance of an organisation's interaction with its outer (external) and inner (internal) environment. For the current study, positioned in the local government sector, influences in the external environment include state and local government laws, regulations and policies, and parliamentary overseeing regulatory bodies such as offices of the federal and state Auditor-Generals and public accounts committees (Hoque and Thiagarajah, 2015). Influences in the internal environment may include unique characteristics of the organisation such as organisational culture (Cook and Yanow, 1993; Fiol and Lyles, 1985; Jardioui, Garengo and El-Alami, 2019), structural arrangements (Fiol and Lyles, 1985) and the

interactions of individuals within an organisation (Strauss and Corbin, 1990). The contribution of this objective is to identify specific influences that emerge as relevant to learning within a particular context concerning the performance measures.

- b) To examine the process of how individuals learn about their organisation's internal and external environment and how their knowledge impacts on/or responds to the performance measurement system.

In the current study, the actions of individual managers are pivotal to an understanding of how they make sense of their work environment through the processing of information in a particular decision context (Argyris and Schon, 1978; Fiol and Lyles, 1985; Huber, 1991). Within an organisation, sense-making is derived from the interaction of members in sharing and interpreting information creating organisational memory through shared beliefs, assumptions and norms (Argyris and Schon, 1978; Wrzesniewski et al., 2003). As asserted by Argyris and Schon (1978), individuals' sense-making through reflexive inquiry, leads to either validation or modification of existing processes, norms, strategies and assumptions. Since, members of an organisation are the agents of organisational learning, investigating the actions of managers, whether strategic or routine, contributes to the research objective by capturing the dynamic processes employed to manage, respond to, or self-reflect on the phenomenon. The third objective supporting the primary research question considered in this study therefore became:

- c) To ascertain and understand individuals' interpretations and actions and subsequent responses to performance measurement information, thereby capturing the nature and direction of relationships between performance measures, their communication, usage, and individuals' learning.

In this paper, we consider the term 'performance measurement system' as an artefact providing financial and non-financial information for strategic and operational actions (Chenhall, 2003; Kaplan and Norton, 1996). Motivated by the unique characteristics inherent in the public sector (Arnaboldi and Azzone 2010; Askim et al., 2008; Broadbent and Guthrie, 2008; Hood, 1995; Hoque and Adams, 2011), this study highlights the potential to learn from the recursive nature of performance measures that influence, and are influenced, by the actions of organisational members at different levels within the organisational hierarchy. Within the existing literature, there is a shortage of studies that are conducted in the field to understand how organisational members at varying levels within an entity learn from the organisational performance measurement system. The public sector provides the context from within which learning from a performance measurement system is explored.

In addition to its contributions to the academic literature discussed above, the findings of this study have the potential to improve both the provision of public services as well as the governance of the entity. Policymakers could capitalise upon individuals' learning from performance measures as a mechanism to improve public sector services. In turn, this could lead to more efficient and/or effective use of financial resources by entities, both in private and public sectors across the globe. Indeed, our enhanced understanding of individual learning through performance measurement systems can enhance both private and public sector organisations' efficiency and effectiveness.

The rest of the paper is organised as follows. Section 2 reviews the literature in the areas of performance measurement in government, the conceptualisation of organisational learning and the extant literature that links the two domains of interest: performance measurement and organisational learning in the public sector. In section 3, the theoretical

framework is outlined. Section 4 describes the context to the study. Section 5 outlines the research design and method. Section 6 presents the findings. In section 7, the findings of this study are integrated into the relevant extant academic literature. The final section concludes.

2. Literature reflections

A brief review of two strands of prior literature is needed to position this study and its contribution to that literature. First, while this study is focused on individual learning in organisations, its broader organisational learning context merits recognition, since organisational and individual learning arguably interrelate and inform each other. This will be provided first, before then moving on to explore the literature on individual learning regarding performance measurement.

2.1 Organisational learning

Dodgson (1993) observed nearly twenty-seven years ago that the concept of organisational learning in the academic literature was ubiquitous and matched by a variety of disciplines in which academic scholars have researched this phenomenon. The position in the 21st century is still the same in that organisational learning continues to be investigated by scholars from different disciplines with distinct ontological views regarding how the social phenomena considered to be central to this phenomenon should be researched. That is, the domain or focus of the research varies significantly (Argote, 2011). For example, from the strategic management perspective, the focus is on competition, whereby organisational learning is assessed based on whether one organisation obtains an advantage over another. Similarly, Fiol and Lyles (1985) assert that to remain competitive, organisations must align themselves with their environment. Furthermore, to stay competitive and survive in the long term, 'the firm must have the potential to learn, unlearn, or relearn based on its past behaviours' (Fiol and Lyles, 1985, p. 804).

From the management science perspective, the critical concern is information processing within and about the organisation (Galbraith, 1973). A key contributor to this perspective is Huber (1991) who examines organisation learning from the perspectives of knowledge acquisition, information distribution, information interpretation, and organisational memory. Huber (1991) states that organisations learn through processes that are often interpersonal and social, but sometimes they are routine, and usefully viewed as logistical processes.

Scholars have also noted that different types of learning occur in an organisational space. For example, Argyris and Schon (1978) identified two types of organisational learning: single-loop learning and double-loop learning. Organisational learning is single loop learning when managers make decisions in response to changes within their environment that do not challenge existing rules, norms, routines and paradigms (Argyris and Schon, 1978). This type of learning has short-term focus and unambiguous problems (Fiol and Lyles, 1985). For example, a single loop learning process in terms of strategy is managers need feedback as to whether they achieved their goal as expected (Adonis, 2018; Kaplan and Norton, 1996). Here, the focus is on measuring the deviation from the plan (Simons, 2000).

Organisational learning is double-loop learning when there is a challenge to standard assumptions leading to a change in organisational norms (Argyris and Schon, 1978; Fiol and Lyles, 1985). Management may question whether the underlying assumptions of the strategic plan are still relevant based upon current evidence, observations and experience (Kaplan and Norton, 1996). We are thereby questioning whether the strategic assumptions remain valid?

Single-loop learning and double-loop learning are not mutually exclusive but instead can be seen along a continuum and what distinguishes the two is the depth of learning that occurs within different decision-making contexts (Argyris and Schon, 1978). Scholars suggest other

types of learning such as experiential learning (Huber, 1991), development of a knowledge base (Huber, 1991; Shrivastava, 1983) and adaptation (Fiol and Lyles, 1985).

Others distinguish levels of learning. For example, Fiol and Lyles (1985) differentiate between higher-level learning and lower-level learning, noting that either can occur at any organisational level. However, higher-level learning is characteristic of an uncertain environment and linked to upper-level management. By way of contrast, lower-level learning is typically indicative of lower and middle management, where it is perceived the situation can be controlled and is often the result of routine decisions. Fiol and Lyles (1985) higher and lower levels of learning are akin to Argyris and Schon's (1978) 'double-loop learning' and 'single-loop learning' respectively.

Scholars have also developed a variety of theories as to what constitutes organisational learning. The discussion of theoretical studies here is by necessity, a partial representation of the organisational theories developed by scholars. Nonetheless, the variety of theories presented and discussed is a testament to the thinking undergone by scholars that are integral to this phenomenon. For Argyris and Schon (1978), the research context is individual learning in organisations. On the other hand, Levitt and March (1988) focus on the historical context of an organisation, whereby lessons learned by organisational members are subsequently embedded into routines that guide managerial behaviour.

Shrivastava (1983) developed a typology of learning systems based on different structures within organisations. His typology focuses on two continua: the individual-organisational dimension and the evolutionary-design dimension. The individual-organisational aspect is about how the process of knowledge sharing is accomplished within an organisation. At the individual end of the continuum, knowledge sharing may be accomplished by influential individuals such as the chief executive officer, or by any senior managers who possess a dominating personality such as chief operating officer, chief financial officer or executive directors. The second aspect of the continuum is about how learning systems come to exist within an organisation on the evolutionary-design dimension. In this context, learning systems may develop in response to historical practices of an organisation, or they may be designed from analysis to capture specifically tailored information (Shrivastava, 1983).

The multi-dimensional nature of organisational learning is seldom recognised (Lam, 2001; Popova-Nowak and Cseh, 2015)), and most prior empirical studies have focused on the organisational level, relatively ignoring individual levels within an entity. A further weakness in the extant literature is an underlying assumption that it is only top managers who learn (Chenhall, 2005; Henri, 2006; Widener, 2007). Yet the success of learning may be influenced by what happens through interactions with other levels of organisational members collaborating throughout the business (Adler and Borys, 1996).

From the above review, there seems to a reasonable level of consensus that the field of individual and organisational learning is a dynamic and complicated process. However, further empirical work is required to examine contextual influences as well as to uncover how individual learning is transferred into learning at the organisational level capturing an organisation's context. Hence, this study is positioned in the growing but the sparse domain of learning from an organisation's performance measurement system. There is a need to focus on the actions of organisational members, who act as agents for the organisation. In the next section, a brief discussion of the literature that links the two substantive areas of study, performance measurement and individual learning is presented.

2.2 Performance measurement and individual learning

A performance measure (or indicator or target) is a single measure that could be expressed in either financial or non-financial terms to serve as a proxy for gauging success (Simons, 2000). Performance measurement creates a context for performance management

(Lebas, 1995). A performance management system is a system that translates strategy into an integrated set of financial and non-financial measures across a range of perspectives (Chenhall, 2005; Kaplan and Norton, 1996). Lebas (1995, p. 35) defines a performance management system as one containing measures that: a) gives autonomy to individuals within their span of control; b) reflects cause and effect relationships; c) empowers and involves individuals; d) creates a basis for discussion, and thus supports continuous improvement, and e) supports decision-making.

In the public sector context, Neely and Bourne (2000) identify that since the 1980s there have been three distinct phases within the evolution of performance measurement systems that can be observed from the government performance literature. The first phase occurred during the 1980s in response to mandated initiatives imposed upon public sector entities in various jurisdictions. During this time, the academic research focused on the development and design of effective performance measurement systems, calling for non-financial measures to support traditional financial measures such as the return on investment and profit margin (for a review, see Hoque, 2014). This period reflects a plethora of individual performance measures that were unrelated, yet constituted a performance measurement system. In the second phase, researchers (e.g., Hoque and Adams, 2011; Neely and Bourne, 2000) observed that in the early to mid-1990s the trend shifted away from the focus on individual performance measures to the adoption of contemporary integrated measurement frameworks such as the Balanced Scorecard (BSC) developed by Kaplan and Norton (1996).

Advocates of the BSC approach (Kaplan and Norton, 1996) contend that it is a mechanism for translating an entity's strategy and communicating strategic intent that is subsequently used for measuring performance against strategic goals (Hoque and James, 2000; Hoque, 2014; Kaplan, 2012). Similarly, Neely, Gregory and Platts (1995) assert that performance measures should be positioned in a strategic context because they influence what individuals do. Thus, performance measurement constitutes a key tool that individual managers can use to align management processes and systems to facilitate strategic learning by individuals (Kaplan and Norton, 1996). Indeed, Kaplan and Norton (1996) state that the feedback and learning potential of the BSC at the executive management level to be the most important and valuable aspect in the management process. That is, executives can use the BSC to eliminate the gap between the strategic plan and the day-to-day actions of the individual managers within a firm to become a continuous process of adaptation.

Studies of performance measurement in the public sector have linked the characteristics of performance measurement design with a variety of contextual variables that highlight the complexity inherent in trying to measure the performance of government (Hoque and Adams, 2011). In particular, the organisation's external environment has been identified as being crucial in determining the design and use of performance information (Behn, 2003; Cavalluzzo and Ittner, 2003; Hoque and Adams, 2011). Public sector studies have identified many external environmental factors such as a wider group of stakeholders (relative to private sector entities) with varying interests (Behn, 2003; Brignall and Modell, 2000; Ozdil and Hoque, 2019; Rana et al., 2019), multiple competing goals (Kravchuk and Schack, 1996), the type and source of funding received by the entity (Geiger and Ittner, 1996), low levels of commitment by legislators motivated by short-term re-election considerations (Cavalluzzo and Ittner, 2003) and the evolution of programs and policies during their lifespan (Kravchuk and Schack, 1996). We extend this literature by understanding individuals' learning episodes in a local government-owned water utility company.

The organisational learning literature also has documented the occurrence of both direct and indirect learning experiences by individuals in an organisation (for details, see

Argote and Todorova, 2007; Gino et al., 2010). The direct learning can occur from the direct interaction that occurs between the immediate supervisor or manager and their direct reports at varying hierarchical levels. Outside of that direct relationship is 'indirect learning' that occurs with cross-functional teams within the organisation or interactions with any of the stakeholder groups. Gino et al. (2010) demonstrated how, in a product development setting, direct task experience leads to 'higher levels of team creativity and more divergent products than indirect task experience' (p. 102). In other studies (e.g., Argote, Gruenfeld, and Naquin, 2001; Edmondson, 1999; Ellis et al., 2003; Wilson, Goodman, and Cronin, 2007) both direct and indirect experience have been shown to enhance performance outcomes (cited in Gino et al., 2010, p. 102). In the performance measurement context, de Haas and Kleingeld (1999) argue for the importance of dialogue between employees at differing levels of using the performance measurement system in an organisation.

Thus, in the literature, the process of strategic dialogue is moved from predicting what will happen to how it happens, which is important information for practitioners when trying to achieve a fit between the organisation's goals and the behaviour of its members (de Haas and Kleingeld, 1999). Seen in such a context, aligning can be either direct or indirect. In terms of the hierarchical structure, at the vertical levels, there is a strong two-way alignment of individual performance plan targets. That is, a manager has a strong alignment with his or her direct reports as well as with their immediate manager. For example, aligning is direct when an employee is seating, discussing and reviewing performance targets with their immediate manager during the annual performance cycle. Any discussion outside of these hierarchical relationships can be indirect. These 'direct learning' and 'indirect learning' terms were adopted for this study to capture those public sector organisations, and more specifically the focus of this study the case entity operates within a complex web of regulatory and political influences in a constantly changing environment (Hoque and Moll, 2001; Rana et al., 2019).

3. The social construction of reality

The literature on organisational learning and performance measures discussed above highlights the potential to learn from the recursive nature of performance measures. While the anecdotal research on individual learning has explicitly identified the concept as a process, the identification of how and why that process emerges from the use of performance measures poses a new empirical question for researchers. Thus, what is needed is more substantive empirical investigation oriented towards explaining of, and insights into, how organisational and contextual factors (Hopwood, 1983; Otley, 1994) impact upon the use of performance measures in organisations. Specifically, more effort is required to investigate how performance measures are used as a learning tool for individuals within a specific organisational context.

As asserted by Pallot (2001), there is an imperative to capture the dialogue generated through the use of meaningful performance indicators. One way forward would be to locate research within the interpretive paradigm to understand such dynamic processes from subjective experiences of individuals (Burrell and Morgan, 1979; Lukka and Modell, 2017) in their natural setting (Van Maanen, 1979). To this end, we engage with the social construction of reality theory (Berger and Luckmann, 1967; Covaleski et al., 2013; Covaleski et al., 2017a) as it helps us develop an understanding of how actors in their specific setting construct knowledge from their everyday use of organisational processes, namely the performance measurement system.

The social construction of reality theory brings about opportunities to gain a higher level of understanding concerning organisational processes and practices over and above other theories that accept a limited focus on organisational practices. According to Covaleski

et al. (2017a), social constructionist attempts to observe actors' divergent opinions, contested positions, and complex social dynamics at play. Consistent with Covaleski et al. (2017a), we employed the social construction of reality approach 'to preserve some of the complexity and integrity of the phenomenon under study from the viewpoint and using some of the languages of the subject in a largely inductive, descriptive, interpretive manner' (p. 30).

For this study, the social construction of reality theory facilitates our engagement in process-related questions, capturing what context means in practice from organisational members' viewpoint and its importance in shaping the use of performance measures within an organisation. Informing our interpretive approach through the social construction of reality theory illuminates how realities (individual learning in our case) are socially constructed (Garfinkel, 1967; Hopper and Powell, 1985; Lukka and Modell, 2017; Van Maanen, 1979). Further, this approach enabled us to emphasise the importance of understanding human actions within a pattern of symbolic relationships and meanings derived primarily from the perspective of the actors being studied (Morgan and Smircich, 1980).

4. Context and the research site

4.1 Context

Internationally, over the past two decades, the public sector has been transformed in pursuit of efficiency, effectiveness and accountability regarding the provision of services (OECD 1993, 1994; Guthrie et al., 2003; Hoque and Moll, 2001; Rana, et al., 2019). The reforms associated with the transformation of the government sector became known as New Public Management (NPM) (Hood, 1991). Further, Hood (1995) traced many of the changes in new public sector management to origins related to practices in the private sector.

Guthrie, Olson and Humphrey (1999) examined changes on an international basis regarding government organisations noting five critical themes that were relevant to the area of 'new public financial management' (NPFM) reforms. These were: Changes to financial reporting systems; Development of commercially minded, market-oriented management systems and structures; Development of a performance measurement approach; Devolvment/decentralization or delegation of budgets; and Changes to internal and external public-sector audits (Guthrie, et al., 1999). Thus, a vital component of the NPFM² reforms was the introduction of more specific measurable standards of performance to improve the efficiency and effectiveness of government entities (Osborne and Gaebler, 1993; Modell, 2001).

As shown in Figure 1, in Australia, government entities operate in an environment that has experienced significant changes over the last two decades due to the adoption of NPM reforms internationally (Guthrie et al. 2003; Hoque and Adams, 2011). In response to this broader initiative, public sector entities have made several significant changes to their strategy and operational modes (Broadbent and Guthrie, 2008; Rana et al., 2019). For example, the Financial Management Improvement Programme (FMIP) was the pivotal document that required all federal departments and agencies to develop performance measures (Guthrie et al. 2003). *A priori*, this can be interpreted as evidence of learning by public services managers because changes were imposed, and managers had to learn from this process. For example, the change from cash-basis accounting to accrual accounting was an enormous undertaking, designed to facilitate better decision-making by providing more relevant information for managerial evaluation and the assessment of financial performance

² According to Guthrie, et al., (1999) the term 'New Public Management' (NPM) is a much broader term focusing on management reforms whereas the term 'New Public Financial Management' (NPFM) captures the financial reforms that occurred. They go on to state that 'without financial' management reforms, 'new public management' would be a far less significant programme' (Guthrie, et al., 1999, p.211). NPFM reforms are concerned with the application of private sector accounting and auditing techniques being used in the public sector.

(Andriani, Kober and Ng, 2010; Broadbent and Guthrie, 2008; Kober et al., 2010; Kober et al., 2020).

Insert Figure 1 here

More recently, changes at the Commonwealth government level that have impacted on the State water industry are the establishment of the National Water Initiative (NWI), the National Water Commission (NWC) and the Australian Government Water Fund (AGWF). Under the NWI, the signatory governments agreed to complete the reform agenda outlined in the 1994 strategic water reform framework and extend the implementation of water reforms (NCC, 2002). The NWC was established as an advisory board that reports directly to the Minister and the Council of Australian Government (COAG, 2004), their assessments concerning the implementation of the NWI by all signatory states and territories. Finally, the Australian Government Water Fund set up in 2004 was a commitment of \$2 billion by the Commonwealth Government to invest in 'water infrastructure, improved knowledge and water management, and better practices in the stewardship of Australia's scarce water resources' (LandcareOnline, 2010).

The research study has been based within the Corporate Services unit, a strategic business unit of Urban Water. The State water industry in which Urban Water operates comprises three sectors: the metropolitan sector, the non-metropolitan urban sector and the rural water sector. According to the State Water Industry Association³, all water businesses are publicly owned, and the State Government intends that they remain within public ownership (Department of Sustainability and Environment (DSE), 2004). The Minister for Water is the responsible Minister.

4.2 The research site

Urban Water was selected for investigation through the following steps. First, an approach was made to the office of an Australian Auditor-General. A director of the office recommended Urban Water as an entity that had already developed an extensive performance measurement system. Second, to gain access, an initial meeting with the Corporate Services manager was organised, whereby the researcher presented a one-page outline of the study that detailed the aim, scope, implications, and outcomes of the project to be discussed. The meeting was successful, and access was gained to conduct the study in this organisation.

The executive team is made up of several strategic business units (SBU), one of which is the corporate services unit. The corporate services unit has the responsibility for providing support to all areas of the business about the development, implementation and maintenance of strategies, systems, and policies and procedures. The structure of the unit at the time of the study was made up of seven units: six cost centres and one profit centre. The six cost centre units within the team were Finance, Contract Services (including Supply), Information Technology, Corporate Strategy, Regulation and Planning, Risk Management and Insurance, Corporate Secretariat and Legal Services. Thus, there is a diverse range of functions under the control of the General Manager of this SBU.

Below the SBU General Manager level, is a team manager responsible for one of the diverse functional areas within the Corporate Services strategic business unit. The size of each team within the Corporate Services unit varied from two organisational members in the smallest group to twenty organisational members in the largest team. Consequentially, the nature of each of these diverse functional areas is different, and their internal organisational contexts differ. For example, the Finance Manager is responsible for the financial affairs of the organisation, all undertaken in-house. By contrast, the Information Technology manager

³ The State Water Industry Association Inc was formed in January 1996 and represents water utility companies across the State.

and their team are primarily a management group that manages the services that have been outsourced.

Access to Urban Water was obtained on the basis that a confidentiality agreement be entered. Thus, many detailed aspects of the entity have been concealed such as the period of the field study, the specific location and the state within which it operates. Notwithstanding this, the concealment of such specific information did not impact materially on the outcomes of this study as the research focus was to understand how performance measurement information was constructed and used for learning by individuals within the entity.

5. Research design and data

The nature of the study's research question and supporting objectives suggest that the research focus is on organisational members' meaning and their perceptions of their reality (learning from performance measures). Hence, this study employed an interpretive qualitative research methodology (Garfinkel, 1967; Hopper and Powell, 1985) to identify the core themes and concepts around individual learning from performance measures in the public sector context. That context offered a diverse set of stakeholders and numerous layers of complexity that provide plentiful opportunities for longitudinal qualitative research. To develop an understanding of events and actions and to theoretically explain the complex phenomena within the organisation that is being studied, qualitative methods were considered most appropriate (Lee and Humphrey, 2017; Miles and Huberman, 1994). Further, as discussed earlier, qualitative methods fit well with the social constructionist approach (Covaleski et al., 2017a) that emphasises understanding day-to-day social actions of actors in an organisational process and practice such as learning from performance measures.

Data were collected from open-ended interviews, observations of meetings and archival and organisational documentary evidence. To assure that the data collected came from all levels of the strategic business unit, participants interviewed were selected from three levels (see Table 1). In total, 31 interviews were conducted. The selection of the participants was based on their direct involvement and experiences in the use of performance measurement information. Interviews lasted between 50 minutes and two hours and 45 minutes, and all were conducted on the location of the interviewee after informed consent from the participant had been received. All interviews were recorded and transcribed.

Insert Table 1 here

The qualitative techniques of coding via NVivo, constant comparative method and memo-writing (Glaser, 1978; Miles and Huberman, 1994) were employed throughout the process of data collection and analysis and including the write up of the study.⁴ We posed some basic questions (see Appendix) for eliciting data that proved useful: (a) what are these data a study of? (b) what category does this incident indicate? (c) what is happening in this data?

All interview data were analysed by making a comparison of one piece of data to another, and subsequently developing thematic labels (Patton, 1990). During the analysis of the interview data, theme labels were derived as well as using themes that originated from the words used by the interviewee. First-level codes called open (substantive) codes were subsequently clustered into groups at a higher level, called categories. Using the constant comparative method, all the tentative codes were analysed comparing incidents and actions

⁴ For a detailed analytical process of qualitative field interviews data, refer to Mahama and Khalifa (2017) and Covaleski, Dirsmith and Samuel (2017b).

within the category to elaborate upon the dimensions of the main categories. To assist this process of within code analysis, researchers wrote explanatory memos (Glaser, 1978).

To complement the interview data, archival data and documentary evidence were also collected and used for the empirical analysis. The archival data collected included publicly available information such as strategy documents, annual reports as well as any relevant newspaper articles. The internal documents obtained throughout the study included an organisational chart; Pro-forma performance and development planning documentation, and corporate target information. During some interviews, individual performance reports were examined.

The documentary evidence collected was considered during data collection and analysis as well as and including the final write-up of the study. This involved comparison of what was being said by interviewees about the performance measurement system compared to the documentary evidence. To ensure trustworthiness in our qualitative data collected, we employed several strategies recommended by Guba (1981) and Patton (1990). These include credibility, transferability, dependability, and confirmability (Shenton, 2004). To address all these criteria, we used multiple techniques, namely (a) "open-ended" line of interview questioning, (b) a pilot study for collecting background material of the subject organisation, identifying potential research participants, peer review of the draft interview questions and research design, c) meeting all ethical requirements (such as voluntary participation, privacy and confidentiality, etc.), d) feedback from participants on their interview texts, e) triangulation of multiple data sources, f) detailed description of the phenomenon under study, g) relating our findings to past relevant studies, h) reflection on our study of a local government entity in the context of other types of the public sector organisation, and i) collection of data from key personnel involved in PMS practice. The credibility and authenticity of the data collected were assessed via multiple data sources and organisational members' feedback on researchers' understanding and interpretation of the performance measurement system in practice (Messner et al., 2017). In addition to all the above strategies, we became assured of participants' common views of concepts and practices such as PMS, learning, and control, through the detailed analytical process of constant comparison of first level open codes and their related memos, and emergent categories.

6. Findings

6.1 Aligning levels of organisational members changing episodic learning experiences

The focus of this investigation was how learning occurs from the use of the performance measurement system by organisational members within the Corporate Services unit of Urban Water. The central phenomenon that emerged from the field study is around which all of the other categories are related and integrated is defined in this section. An illustrative diagram of the core category and the four auxiliary categories around the research issues that emerged from the field data is illustrated in Figure 2. In this study, the core category around individual learning from the performance measurement system occurred in the case entity was discovered to be a process of:

aligning levels of organisational members changing episodic learning experiences.

The model illustrated in Figure 2 is a holistic model capturing the key themes for how learning by individuals occurs from the performance measurement system used at Urban Water. Organisational performance measures are cascaded through individual performance plan targets at the various organisational levels by responding over time to changing 'Contextual Influences', noting the issues to be concerned about in the documents that comprise the 'Organisational Reporting Regime' and once captured in the documentation

providing a platform for interaction of 'Diverse Organisational Members' who interact in 'Social Worlds'.

Insert Figure 2 here

Aligning organisational members' changing episodic learning experiences can be either direct or indirect (Gino, et al., 2010). In terms of the hierarchical structure, at the vertical levels, a manager has a strong alignment with his or her direct reports as well as with their immediate manager. Another essential dimension of aligning that is direct is with some influential stakeholders such as government, regulators, customers, and to a lesser extent, the community. For example, during our study, Urban Water was required by a regulator to prepare three yearly plans to obtain funding. Outside of these hierarchical relationships, the alignment is indirect (source: State Auditor-General Office).

Second, 'levels' reflect that individuals are employed at differing levels within the organisational hierarchy; therefore, organisational members have different visibility of what is happening, based on their differing roles. The levels are usually functionally aligned at the lowest level, with a broader view of what is happening across the diverse functional units of the Corporate Services Unit at the senior manager level.

Third, individual learning from the performance measurement system can only occur through the experiences of the organisational members and interactions among individuals. Learning deemed to occur collaboratively with supervisors when setting goals, monitoring progress periodically and conducting annual performance review. Individual learning also can take place informally from supervisors outside of the formal meetings through other means such as social gathering, tea/coffee break, or email messages. Several interviewees also said that they believed their learning also took place through their self-reflection during the mid-year review process as well as the end-of-year performance review and rating.

Interview data revealed that through formal and informal mechanisms, learning experiences by individuals have led to either positive or detrimental performance outcomes. On the one hand, individual learning experiences transferred to the organisation can lead to positive outcomes such as organisational effectiveness. On the other hand, the learning experience can be detrimental. For example, one interviewee articulated the negative impact of behaviour by a manager from one area on another in terms of him:

'... jumping on people around the organisation to say you got to do this and when that starts happening, people start to smell a rat and get a bit sceptical shall we say... He's in a hurry for me to do this and us to do this because - so he can get his bonus. It does not go down very well, surprisingly.'

Fourth, the term 'changing' in this study is ubiquitous and reflects the dynamics of the business environment at every level within Urban Water. For example, changes are continually occurring in the contextual influences (as shown in Figure 1), which may be reflected in one of the reports making up the organisational reporting regime.

A performance measurement system is a vital tool for learning by capturing and signalling changes to organisational members at all levels. Within Urban Water, the 'Organisational Reporting Regime' captured documents at all levels and the individual level signalled to individuals the organisational philosophy of continuous improvement. As one interviewee remarked:

'So, a lot of it can be done through performance plans, so if you've identified what needs to be changed, you can – yeah, use the performance plans to get that done.'

Fifth, 'Episodic' is used to reflect that learning occurs in episodes that can either be constant or sporadic, either closely connected (within the boundary of the entity) or even happen independently. For example, the performance planning documentation provided a continuous and closely related forum for discussing individual performance regularly with a staff member and their immediate manager. By contrast, a board member raising a query about the disposal of computer equipment from independent discussions with a director of another firm could create an issue subsequently responded to within the boundary of the firm at the appropriate level.

6.2 Supporting categories - 'organisational recursive learning experiences.'

The four supporting categories emerged from the field data that support and are reflected in the core category are: 'Contextual Influences', 'Organisational Reporting Regime', 'Diverse Organisational Members', and 'Social Worlds'. The core category can be seen in each of these supporting categories. And each of these supporting categories has sub-categories that help to explain the relevance of each of the categories. The core category 'aligning levels of organisational members changing episodic learning experiences' permeates the supporting categories. Each of the supporting categories also influences the core. Thus, organisational learning is recursive.

6.2.1 Contextual influences

For this study 'Contextual Influences' refers to forces that have either a direct or indirect impact upon the business organisational outcomes at Urban Water, as captured in the corporate plan, key performance indicators at the organisational level, operational targets, and/or organisational members' individual performance plans. With the case-entity being in the public sector and the nature of the industry that the entity operates within means that there are a range of 'Contextual influences' (Figure 1) that impact upon the business outcomes that are subsequently incorporated in the performance management system through the 'Organisational Reporting Regime' at all levels (organisational, operational, team and individual). Thus, 'Contextual Influences' captures the environmental conditions specific to the entity within which the strategic business unit operates. The strength of these influences varies depending on level and function at which the influence is exercised. The sub-categories of this category include 'External Influences', 'Internal Influences' and 'Organisational Culture'. Each of these is now discussed in turn.

At the organisational level, 'external influences' that have a direct impact on Urban Water in achieving alignment at the inter-organisational level are the State Government as a shareholder, and a group of stakeholders referred to as 'technical regulators'. Each of the technical regulators has an impact on the business in terms of outcomes and expenditures of Urban Water. For instance, from the analysis of interview data, it emerged that a new regulatory reporting regime had been imposed at the state level that subsequently influenced planning and expenditure decisions for the whole organisation. For the first time at the state level, Urban Water became regulated for pricing and service output. The nature of this contextual influence is considered to be direct and substantial. Under this new system of reporting to a newly established external regulatory body, Urban Water was required to plan three years in advance what their projected outcomes as measured by performance indicators, both financial and non-financial, would be during that period in exchange for an amount of money.

Additionally, there are several other stakeholders' in addition to the 'technical regulators' that impact on the strategic and operational measures'. All of which exert a degree of

influence that must be considered when calculating the expenditures, prices and key performance indicators to be reported upon. As one interviewee explained,

'the impacts of the external influences affect the organisation at different levels: ...So, obviously heavily influenced, just about every level in our organisation by regulators, customers, and to some extent the community'.

Besides external stakeholders, legislation is another example of an external influence in the development of performance indicators cascaded into an individual's performance plan. Interviewees elaborated on how new legislation that Urban Water had to comply with created an action measure in their performance plan to develop a risk management plan to ensure the company complied with the new Act. So, it is the organisational members at differing levels who assess the significance of the influences on their functional role within the organisation.

The primary internal influences were the Board of Directors and Urban Water's diverse organisational members identifying and questioning what the issues within their span of responsibility are. Thus, often it is the organisational members' dialogue and interpretation of what needs to be discussed that is subsequently included in the Organisational Reporting Regime. That is, learning occurs from experience, interaction and judgement of organisational members at all levels as they react and respond to the range of Contextual Influences.

More specifically, at the operational level, there exists variation about the impact of internal and external contextual influences on the functional teams within the Corporate Services strategic business unit. That is, each of the teams has differing external and internal contextual influences that impact upon their area of focus either directly or indirectly. For the Corporate Secretariat and Legal Services team, it was difficult for this functional area to set specific targets in advance because it depended on what legal advice was sought by the business, but not always known in advance.

Nonetheless, some external influences are described as being general ones that impact business processes. For example, a member of the legal team elaborated upon the Essential Services Commission (ESC) Statement of Obligations, an external influence that had a far-reaching impact upon the way corporate governance processes are managed within Urban Water, but the specifics were to be interpreted by relevant organisational members.

In the Regulation and Planning team, the change of reporting directly to the ESC imposed upon the case entity can be traced to performance targets for the team and in an organisational member's performance plan. For example, for one staff member of the team, there was both an objective and subjective measure that the interviewee mentioned when talking about the measures in their individual plan. They stated:

'...there was a quantity point, for example, minutes from those meetings completed within a week of the meeting or something; I can't remember what the target was. But there was also a quality one, and that maintained a good relationship or productive relationship with the retailers, and that was as assessed by my manager, so there was a bit of sort of expert judgement in evaluating that one. But in the end, the results were the group delivered excellent results and you can't do that without a good relationship, so that was OK'.

The influence of the State Government's sustainability approach captured by Urban Water's change of name for their strategic framework is filtered down throughout the organisation at all levels. For example, in the Contract Services (including Supply) group the organisational member responsible for the fleet was required to consider the environment and green impact of motor vehicles leading to an increase in the use of hybrid vehicles. This was

to achieve alignment with the enactment of the new sustainability framework. In another team, Risk Management and Insurance, the team manager described how they experienced learning from the internal and external influences on their segment of the business. The manager identified key areas of responsibility under their role and monitored the relevant internal and external pressure areas. Through this monitoring of influences, they see this learning as being fluid to capture issues appearing 'on the radar' for consideration and potential subsequent inclusion as an action in someone's individual performance plan.

'Organisational Culture' is a sub-category of 'Contextual Influences'. All interviewees expressed a comment either explicitly or implicitly on a culture that was interpreted to be relevant. In this study, organisational culture is about the articulation of the goals and values in either written or verbal communication as well as the beliefs expressed by the organisational members (Jardioui, et al., 2019). At Urban Water, there was a widespread belief by organisational members that the performance measurement system, no matter at what level, was a tool used to improve performance and add value leading to better business outcomes. These shared beliefs about improvements by organisational members relate to their individual jobs at all levels. For it is in the individual performance plans, that organisational members identify tasks, activities, processes, and skills that can be improved upon. Not only was the idea of continuous improvement a shared belief it was also embedded in the performance planning documentation. This observation is gleaned from the internal generic planning documentation (both the development and performance plans) and outlined in the 'Strategic Framework' and other publicly available documentation such as the 'Sustainability and Annual Report'.

Within the organisational culture, many sub-cultures co-exist. For example, the organisational culture of Urban Water, being a legislative protective monopoly, and the team culture of the profit centre is quite stark primarily due to the differences like the business undertaken by each. For instance, one reason for these cultural clashes was differences in the measurement of performance. For Urban Water, the entity measures performance over very long-term time frames sometimes over a hundred years, whereas the profit centre has short-term annual time frames. Second, in recruitment processes at Urban Water culture permeates the selection of potential staff members. For instance, one interviewee stated that the recruitment strategy at Urban Water was significant concerning whether a potential employee would fit into the behavioural culture of Urban Water. This interviewee was aware of technically brilliant individuals that had been denied a role in the entity because from a behavioural perspective, it was considered they may not fit in.

Another sub-culture that existed within Urban Water that was mentioned by interviewees related to the primary nature of the business being an engineering firm and the gender mix of staff. A macho male culture was said to exist, and at the time of the study women made up just over a quarter of all employees. Many interviewees noted that Urban Water was considered to be an engineering-focused entity which over a long period permitted the existence of a culture of 'we're right, or we're wrong'. Although it should be noted that this was changing with the newly introduced focus around behavioural attitudes being included in the performance planning documentation reflecting that how an organisational member undertakes a task is nearly as important as the technical aspects. This change of focus to include approximately thirty per cent weightings on behavioural attributes was a significant change introduced to the performance planning documentation during the duration of the study reflecting the importance of promoting desired behaviours. One interviewee elaborated in more detail what some of those behaviours that were being sought were and their weightings in the individual performance plan:

So, the performance plan describes what expected standards there are, for example, anticipating problems and challenges, pursuing goals, demonstrating an organisation-wide mindset and staying current on what's happening in the external working environment, share my learning's with others. So, some of the performance plan measure this year is weighted toward actually it's now – I think it is about thirty per cent weighted towards how I do things and about seventy per cent towards doing them, getting the job done, yeah so, it's which is good. So, it's a change from just getting your job done to doing it the right way and involving other people.

By way of overview, the category 'Contextual Influences' discussed in this section outlines the context within which Urban Water operates. The organisational culture permeates the performance measurement system through organisational members' beliefs and there are many external as well as internal influences that are dynamic and constantly changing. These changes are occurring all the time at various levels throughout the organisation against a background of organisational culture and sub-cultures that co-exist.

6.2.2 Organisational reporting regime

The term 'Organisational Reporting Regime' emerged from interviewees referring to the structure of the reporting regime in place at Urban Water. In the context of the case entity 'Organisational' captured the widespread applicability of the process of setting performance measures at varying levels such as organisational, operational, team and individual levels. 'Reporting' is defined as the process of reporting to stakeholders about the performance of the organisation often comparing planned KPIs against actual performance. 'Regime' captures both the external and internal reporting requirements that are well established at different levels within Urban Water, from the organisation-wide level to individual organisational members.

From the analysis of the interview data, the critical documents identified as relevant in the 'Organisational Reporting Regime' are classified either under the sub-category headings of 'Planning Documentation' or 'Operational Reports'. At this point, it should be noted that there are linkages at various levels between the different components of the 'Organisational Reporting Regime' that are either vertical or horizontal in the organisational hierarchy. The consequence of this is that performance is interpreted in a variety of ways by differing organisational members at differing levels.

Pivotal to the performance measurement system and organisational learning is individual performance plans completed annually by organisational members within Urban Water. Staff artificially link individual performance measures to one or more goals within the corporate strategy. The targets in the individual performance plan are agreed through the interaction of the organisational member and their immediate manager (supervisor). They are above and beyond day-to-day duties, focusing on improvements termed as 'stretch' targets and determine the amount of performance pay earned by way of a year-end bonus. There is an opportunity for changes to targets to be documented throughout the year and to be included in the annual review process.

Two significant changes were observed in the individual performance planning documentation during data collection. These were the introduction of behavioural targets and enterprise agreements with organisational members as a component for the completion of day-to-day duties. The performance planning documentation specified a vital aspect of the measure expressed as an action target which was to be specific, measurable and to be completed on a particular date. One team manager said:

In my plan, it would merely say produce a set of guidelines by a specific date. I would then put into my financial analyst's plan several things that will support the achievement of that, so I'd break it down, I'd establish the steering committee in terms of reference by, complete economic assessment by 'x' time and run a training course.

We observed that the individual performance plan documentation evolved to focus both on task completion and on whether the right behaviours were exhibited. To this end, the generic documentation helped in outlining some of the expected standards of behaviour. The individual performance development planning document was prepared annually. According to a senior member of Urban Water:

The development planning framework is structured around the organisational member's development and improvement in terms of technical skills, career aspirations, behavioural and leadership competencies. It provides a learning opportunity and is discussed at a different time in the year from the individual performance plan.

The development plan involved a self-assessment process conducted by both the organisational member and their immediate manager over a range of areas such as 'role-specific technical skills', 'behavioural competencies', and if applicable, 'leadership competencies'. The discussion around the rankings (range of one to five) for each of these components provided a learning opportunity for both parties to discuss the agreed development and training actions of the subordinate in their current job as well as planning for the intermediate and long-term future. For example, one interviewee referred to their discussion with their immediate manager:

So, for myself, some cases where I needed more experience in people management and I participated in a mentoring program for graduates at Urban Water, did some training, some management training. I identified I need to be more assertive, so I did an assertiveness course and then came back and tried to actively I guess, put into place what I had learned.

The development plan process is another example of interactive learning of two parties in terms of an organisational member's current and future role within the organisation. The development plan was also linked tenuously to the organisational member's performance plan making it an integral element of the Organisational Reporting Regime. Monthly operational performance reporting was linked to and supported the individual performance planning processes of setting targets.

Monthly operational reports to the board (via the managing director) related to key issues, measures and achievements. Such reports summarised significant targets or issues from each SBU drawing upon the monthly operational reports information provided by each team manager. Similarly, the Managing Director provided the board, extracts of relevant key indicators and significant issues. Hence, there was a focus on exception reporting.

Several interviewed team managers reflected on the contents of the monthly operating report to their immediate manager, outlining how the report was constructed around key measures and whether they were being met or not. According to an interviewee:

If the target was met, then there was a tick, if not, a cross and a brief explanation were provided. If there were ticks in all the boxes for one month, then there is a good news

story. However, it was also noted that if there were ticks all the time, then it could be considered that the target needs to be revised as perhaps it is pitched a little bit low.

Thus, 'Operational Reports' were an integral element of learning about what was happening in each of the functional areas in terms of operational performance issues at differing levels. Furthermore, they complemented and underpinned the Planning Documentation at both the organisational and individual level in the process of aligning levels of organisational members changing episodic learning experiences.

6.2.3 Diverse organisational members' interpretations of learning

At the micro-level, the theme 'Diverse Organisational Members' was developed to signify that each organisational member was simultaneously a separate and distinct individual as well as belonging to the Corporate Services sub-group. Each organisational member interpreted learning from the performance measurement system in conjunction with their experience. Of the 'Diverse Organisational Members' who were interviewed from different hierarchical levels and different functional responsibilities, there were individual differences in 'Managerial Style': how people related to it across different managers and teams.

Managerial Style emerged as of key importance and was noted as a pervasive influence mentioned by most interviewees in terms of the success of the performance measurement system and its processes. Several interviewees observed a variety of managerial styles being employed. The Corporate Services manager had a human resources background and was perceived to be more focused on individual planning processes and would be more involved in scrutinizing the plans than senior managers of other segments of the business. The influence of organisational and individual managerial style permeating the performance measurement system including how the system could be used to thwart somebody's individual performance plan targets is reflected upon by one interviewee who stated that *there had been 'differing experiences over the last five years with different managers in the positions ...have a pretty significant influence on how it's actually implemented*

Differing viewpoints of diverse organisational members created areas of tensions that appeared to be related to principles and people. The most significant of these were in the areas of weightings of achievement of targets, bonus weighting aspects of the system and engagement of managers with their staff. First, with respect to bonuses, managers were seen to be loath to rate individuals above average for the achievement of a performance measure. Average in this instance attracted a score of 50%, meaning the target was achieved. A grading of either 75% or 100% above expectations was perceived to be given rarely. Second, with the issue of assigning weightings to the achievement of targets, a managerial style emerged as relevant. Employees perceived inconsistency across the organisation because the performance rating depended on who your manager was. They were variously considered to be fair, lenient, harsh or unfair. Third, interviewees from differing levels expressed the desire for personal interaction among managers and staff in the performance planning process. As one interviewee suggested: 'if you are to be a good manager and consider staff to be your most valuable resource, it is important to make the engagement a priority'.

Many organisational members at the lower levels observed how the individual and team performance targets were managed, depended upon the managerial style of the immediate manager. At the senior management level, it was recognised that a range of managerial styles existed, and the focus was on trying to get more consistency between the managerial style of the Managing Director and corporate services managers. Concerning the manager-direct report relationship, there was contention about who received credit for the achievement of tasks and the subsequent bonus amount associated with performance plan

targets. Here there was the potential for conflict to emerge between different levels of staff. For instance, an interviewee reflected:

Well as I mentioned to you before I see a couple of issues. One, a lot of them as I mentioned to you are filtered down from managers' 'til they get down to the people at the bottom to do. So long as we do it, they get a tick in theirs like it's been completed, um, so I find that a bit hard to deal with sometimes, you know, it just seems that we do the work and they get the big bucks for it.

The evidence revealed that individual learning also took place through interaction among diverse organisational members concerning the performance measurement practice within the organisation. Our data collection and analysis led us to name this theme as 'Social Worlds' (or 'Interactive Strategies'). We discuss this in turn.

6.2.4 Social worlds or interactive strategies

The interactive strategies employed, captured differing people interacting together in relation to the performance measurement targets. This occurred whether they were an individual, team, operational or strategic measures, as an essential element of learning episodes from the performance measurement system. While this term captured the underlying purpose of interaction at differing levels of performance, it did not entirely reflect what we found was taking place. Although organisational members interacted formally and informally within the boundary of the firm, for learning purposes, many also interacted with a variety of regulatory agencies and stakeholders outside of the organisational boundary through communicating, sharing knowledge and relationship building. So, interaction and communication both included and transcended the formal organisational boundary of Urban Water. The key interactive strategies or social worlds that emerged from the data were 'knowledge exchange' and 'action processing' through which people create order and meanings in their everyday practice.

In Urban Water generally, and more specifically the Corporate Services strategic business unit, 'knowledge exchange' is where each of the themes 'organisational reporting regime' and 'diverse organisational members' intersect with people engaging in discussion about performance metrics at various levels. Thus, this theme captures the actions, interpretations and processes employed by organisational members at multiple levels within Urban Water as they give and receive information to bring concentrated attention to support learning from the use of the performance measurement system. At the organisational level, the performance planning documentation provided a systematic structure and interactive focus to add value to the business through discussion of organisation members' performance measure action targets that were tenuously linked to strategic organisational outcomes. The overall purpose of this 'knowledge exchange' was driven by a desire to improve organisational and individual performance. As stated by one participant: *'...through that [performance planning] process it gives the focus for discussion, the focus for business improvement, without it individually and organisationally, you just – how do you know whether you are getting there or not?'*

At the end of the year, 'knowledge exchange' in a one-on-one discussion focused on the achievement of targets, review of the performance plan and actions and what happened over the prior twelve months to assess individual performance. From the data, it emerged that a manager who met monthly one-on-one with their staff often kept a record of meetings and appended the notes made during the year to their performance plan and actions. Thus, the manager was able to extract that monthly information either before the one-on-one meeting or during the review process and incorporate these notes at the end of the year.

The holistic conceptual findings discovered in the current study were parsimoniously illustrated in Figure 2. To recap, the core category to which all others are linked was discovered to be the process of 'aligning levels of organisational members changing episodic learning experiences'. The four supporting categories were 'Contextual Influences', 'Organisational Reporting Regime', 'Diverse Organisational Members' and 'Social Worlds'. Besides, the study illustrates that each of the categories both influence and are influenced by each category. Thus, there is a recursive relationship between the elements of the model because each category influences and is influenced by the other.

7. Discussion

The primary research question driving this study was, “How do members of an organisation’s strategic business unit learn from the recursive use of performance measurement information”? It aimed to advance the existing literature by collecting empirical evidence grounded in individuals' learning from performance measures in a specific context - an Australian local government-owned water utility company.

At the theoretical level, we contribute to the literature by answering the 'how question' of how individual learning occurs from a performance measurement system. Second, we contribute to the literature by providing a definition of the concept of individual learning that is contextually linked to a specifically focused research domain, thereby adding conceptual clarity derived from empirical evidence. The findings discovered in the current study were parsimoniously illustrated in Figure 2. To recap, the core category to which all others are linked was discovered to be the process of aligning levels of organisational members changing episodic learning experiences (Nuxoll, 2012). The four supporting categories were 'Contextual Influences', 'Organisational Reporting Regime', 'Diverse Organisational Members' and 'Social Worlds'. Also, the study illustrates that each of the categories both influence and are influenced by each other category. Thus, there is a recursive relationship between the elements of the model because each category influences and is influenced by the other. As such, the study is among the first in the individual learning, performance measurement and accounting literature to define what individual learning is, in a specific domain of research enquiry. This important phenomenon has been observed by scholars to have eluded prior studies (see Crossan et al., 1999; Bapuji and Crossan, 2004; Rebelo and Gomes, 2008; Mazutis and Slawinski, 2009).

There were three research objectives identified at the beginning of this paper. The first was to identify and elucidate the performance measurement information flows that enable organisational members to learn from their experience and to modify their behaviour given that experience. The performance measurement flows are primarily in the category titled 'Organisational Reporting Regime'. The key information flows are captured in the 'Planning Documentation' (either individual or organisational) and the 'Monthly Operational Reports'. All of these reports provide information on performance measures, albeit for different purposes. For instance, in the individual performance development plan, the measures are action targets. In the organisational documentation performance measures are either compliance, financial, social or economic measures. In the “Monthly Operational Reports”, the performance measures are functional in orientation and may be either financial or non-financial. Individual targets are usually reviewed and discussed monthly by the immediate manager in a one-on-one meeting with the subordinate to learn for example what is happening if there are any issues, and whether more resources are required. This process of communication updates both parties on what is happening and is thus reciprocal.

Thus, critical to the success of learning at the individual level from the performance measurement system linked to strategy, was the organisational reporting regime (Adonis, 2018; de Wall and Counet, 2009; Henri, 2006; Kaplan and Norton, 2001; Simons, 1995,

2005). Thus, our study identifies that at the individual level, learning from the performance measurement system is another system that can be used by a firm to manage strategy, operations, organisational member decision-making and future actions (de Wall and Counet, 2009). In this scenario, discussion and future actions are based around the planning documentation (individual and organisational) that identify the organisation's and the individual's key performance dimensions as well as the monthly operational reports when used collaboratively.

The second research objective was to examine the process of how organisational members learn about their internal and external environment and how their knowledge impacts on or responds to the performance measurement system. The category 'Contextual Influences' was identified from the data and included the sub-categories external or internal, as well as organisational culture. Within those sub-categories, influences could be classified as either direct or indirect. Examples of how managers learned about these 'Contextual Influences' included the imposition of changes by one of the powerful stakeholders such as the State Government or a regulator such as the Essential Services Commission. The major internal influences were the Board of Directors and organisational members of Urban Water themselves asking "what are the issues?" Some managers talked about the comparability of their functional area of performance compared to "best practice" and implementation of government policy. Some managers talked about capturing issues appearing on the radar through their scanning both the internal and external environment for issues. Organisational members' learning could also be through interaction with supervisors in social worlds.

The third research objective was to ascertain and understand organisational member's interpretations and actions and subsequent responses to performance measurement information, thereby capturing the entire process, from the setting of individuals' performance goals and KPIs, to their manner of communication to individuals, to how these measures are used in individuals' everyday practice, and to how individuals' use of these measures help improve their learning.

The learning from performance measures came about through 'Diverse Organisational Members' interacting in 'Social Worlds'. These findings suggest that relationships between diverse internal organisational members and external stakeholders interact in a given context to influence the organisation's performance reporting regime. Learning at the individual level is simultaneously both indirectly and directly aligned with the strategic framework of Urban Water. At the individual level, performance measures are indirectly connected to the strategic framework through the individual planning documentation but at the same time directly aligned through discussions with a member's immediate manager. This type of learning is different from Argyris and Schon's (1978) popular notions of single and double-loop learning, despite simple instances of single and double-loop learning being observed at the individual level. For example, single-loop learning occurred when individual performance target dates for completion of a report were shifted. An example of double-loop learning occurred when an individual target was deleted because a new project emerged during the year that was not on the radar at the beginning of the year.

In our study, the concept of learning occurring in episodes is not entirely new as it has been discussed by Jönsson (1992) in his investigation of two field studies looking at productivity improvements related to accounting and operational signals. In Jönsson's study, accounting information was seen to play a role in the initial and final stages in the episodes of organisational learning. By way of contrast, the concept of episodes in our study is elevated in importance because individuals' learning episodes are planned, continuous and more structured. Performance action targets are monitored jointly to a greater or lesser extent by the immediate manager throughout the year, as well as being evaluated at the end of the year. Alternatively, learning episodes can occur indirectly or through serendipity as well. Thus, in

the context of our study, individuals' learning episodes were happening continuously or through serendipity in response to changes in the organisational reporting regime, and by diverse organisational members to achieve alignment of actions.

In comparison with these findings, a search of the management and accounting literature reveals that much of the research undertaken has been searching for generic or generalisable rather than individual or organisational specific findings. We suggest here that the effectiveness of an individual's learning is contextually and culturally specific (Jardioui et al., 2019). Yet, the organisational member's learning is specific to the formal and informal interactions and interpretations of the episodic experiences they encounter with the organisational performance measurement system. Informal processes serve as a support and adjunct to the formal performance measurement system. The key elements of those informal processes include a) informal communications between peers and superiors-subordinates within the organisation; b) informal communications with external parties; c) individual self-reflection; and d) individual's contributions to and absorbing of organisational culture. Bednall et al (2013) suggest that employees' participation in informal learning activities benefits their workplace performance, and ultimately their long-term career development. As Behn (2003) stated with learning from performance measures, there is neither a cookbook approach nor a tentative theory that explores what happens inside the 'black box'. We contribute to the literature through the exploration of how people situationally tend to use performance measures to stimulate improvement throughout the organisation, thus providing empirical evidence about the processes employed inside the 'black box'.

Our study also complements and extends the normative framework proposed by de Hass and Kleingeld (1999) confirming the importance of dialogue around the performance measurement system used at varying levels. In our study, the term "social worlds" (Kling and Gerson, 1978) captures learning that occurs collaboratively between diverse organisational members either from the interaction between individuals' immediate manager and their direct reports or in relationships outside of this one-on-one social world. For instance, as we found, learning could occur in meetings, cross-functional groups, in teams, informally or in interactions with any of the many stakeholder groups that exist. These findings support the view put forward by Bednall et al (2013) suggesting that informal feedback on performance plays an important role in "building rapport with employees and to coach them in an ongoing manner".

8. Conclusions

Several conclusions can be drawn from this study. First, individual learning from performance measures can occur through diverse organisational members' interacting in an organisation. That is, the individual learning that is generated in the organisation occurs through communication and interaction, particularly in the one-on-one formal meetings. A second conclusion is that learning from organisational members' daily lives can be captured at differing levels within the organisational hierarchy and be transferred in both a direct and indirect manner. Third, the organisational performance reporting regime is comprised of several documents that are used to plan, review and report performance at all levels whether that be at the organisational, operational, team or individual level. Hence, diverse organisational members are the agents of learning within the organisation, and they can experience a variety of managerial styles, types of people, their motivations and attitudes. All the key findings coalesced in social worlds.

Prior research has suggested various theoretical discourses to be linked with organisational learning (Strauss, 1978). Our study, however, indicates that individual learning from performance measures might alternatively be viewed, not within separate and isolated theoretical discourses, but holistically as a complex, dynamic and socially constructed

process grounded in practice. Such an approach would support those scholars, such as Covaleski et al. (2013), Covaleski et al. (2017a), Hopwood (2008), Llewellyn (2003) and Lounsbury (2008), who have contended that more accounting research should have relevance to practice.

Finally, our analysis of the findings reveal several emergent themes within the individual learning process, namely, a) targets and alignment of learning experiences, b) individuals' level of visibility, c) interactive learning with others, d) detrimental learning, e) learning through the performance measurement system, f) the role of reports in individual learning, g) interactive learning through the planning process, h) performance evaluation tensions and their causes, and i) learning through interactions inside and outside the organisation. Future research may extend our study by investigating these phenomena in other contexts and settings such as private sector and not-for-profit charities. Through conducting contextually based research, scholars could come to more fully understand how organisational learning at individual levels occurs as a dynamic process.

The findings of the study will be useful to decision-makers interested in reviewing their performance measurement system as a strategic management tool (Kaplan and Norton, 1996; Simons, 2000). The findings suggest that no one system fits all but identifies key elements that should be considered in developing an effective performance management system, that suits a specific entity. It leads to a conclusion that any performance measurement system must be tailored to the specific organisation's requirements. Despite this, the implications of this research are substantive ones about how organisational learning by individuals is defined in a specific contextual domain. Consequently, the primary research findings relate to the core phenomenon of aligning levels of organisational members' changing episodic learning experiences. This process of aligning their changing episodic learning experiences is continually being produced and reproduced in subjective interactive processes indicative of a socially constructed reality.

This study of the daily affairs of organisational members learning from performance measures is a small first step along the path that can contribute to the practical relevance of performance measurement systems research. It provides a conceptual framework that identifies constructs that offer insights for other research settings. One important advance to emerge from this research is an understanding of how a performance measurement system might be used collaboratively as a management control tool for learning by organisational members.

In the end, we acknowledge that informal performance measures or other control mechanisms may also play a role in the process of learning by individuals (Bednall et al., 2014). Future case study research could offer a more complete understanding of this phenomenon in various settings across the globe. Further, a cross-sectional questionnaire survey may also consider the influence of size, sector, management style, organisational culture, organisational climate or some other effect on the level of organisational or individual learning or responses to performance measurement systems.

APPENDIX

Interview Questions

1. Can you please describe the performance measurement reporting structure of your unit within the Business Services Unit?

Prompt for:

- a. What aspects of performance are measured?
- b. What are the different levels of reporting?

- c. The frequency of reporting at different levels?
2. How are the measures chosen? That is, do factors in the external and internal environment influence the performance measures used? If so, what are those factors?
Prompt for:
 - a. What are the regulatory influences?
 - b. Are there customer driven influences? Social factors? Stakeholder influences (for example, employees and community)? Parliamentary? Policy issues?
3. Describe an ordinary occurrence when you receive a report on performance measures (allows the interviewee to define what is important).
4. How is each of the performance measures used at each of the various reporting levels? (types of measures and objective versus subjective use)
 - a. Are they clearly communicated?
 - b. Are they understandable?
5. In your view what does performance measurement mean to people at different levels in the organisation? How do you feel about performance measurement and management changes?
 - a. On yourself?
 - b. On your work?
 - c. On your staff?
 - d. On the organisation?
6. If you were going to change something about performance measurement/management in your unit, what would it be?
7. Is there anything that I haven't asked that you think I should have?

References

- Adler, P., and B. Borys, 1996, Two types of bureaucracy: Enabling and coercive, *Administrative Science Quarterly* 41(1), 61–90.
- Adonis, V. A., 2018, Performance management system for strategy implementation in local government: an integrated development planning perspective, *Journal of Public Administration* 53(2), 259 – 275.
- Andriani, Y., R.O. Kober, and J. Ng, 2010, Decision usefulness of cash and accrual information: Public sector managers' perceptions, *Australian Accounting Review* 20(2), 144 - 153.
- Argote, L., D., Gruenfeld, and C. Naquin, 2001, Group learning in organizations. In M. E. Turner (Ed.), *Groups at work: Advances in theory and research* (369–411). Mahwah, NJ: Lawrence Erlbaum Associates.
- Argote, L., and G. Todorova, 2007, Organizational learning: Review and future directions. In G. P. Hodgkinson and J. K. Ford (Eds.), *International review of industrial and organizational psychology* (193–234). New York: Wiley.
- Argote, L., 2011, Organizational learning research: Past, present and future, *Management Learning* 42(4), 439-446.
- Argote, L., and E. Miron-Spektor, 2011, Organizational learning: from experience to knowledge, *Organizational Science* 22(5), 1123-1137.
- Arnaboldi, M., and G. Azzone, 2010, Constructing performance measurement in the public sector, *Critical Perspectives on Accounting* 21(4), 266–282.
- Argyris, C., 1977, Organizational learning and management information systems, *Accounting, Organizations and Society* 2(2), 113-123.
- Argyris, C., and D. Schon, 1978, *Organizational Learning: A Theory of Action Perspective*. Reading, Massachusetts: Addison-Wesley.

- Askim, J., A. Johnsen, K-A. Christophersen, 2008, Factors behind Organizational Learning from Benchmarking: Experiences from Norwegian Municipal Benchmarking Networks, *Journal of Public Administration Research and Theory* 18(2), 297–320.
- Bapuji, H., and M. Crossan, 2004, From questions to answers: Reviewing organizational learning research, *Management Learning* 35(4), 397-417.
- Bednall, T. C., Sanders, K., and Runhaar, P. (2014). Stimulating Informal Learning Activities Through Perceptions of Performance Appraisal Quality and Human Resource Management System Strength: A Two-Wave Study, *Academy of Management Learning & Education*, 13(1), 45-61.
- Behn, R. D., 2003, Why measure performance? Different purposes require different measures, *Public Administration Review* 63(5), 586-606.
- Berger, P. L., and T. Luckmann, 1966, *The social construction of reality*. London: Penguin Books Ltd.
- Brignall, S., and S. Modell, 2000, An institutional perspective on performance measurement and management in the "new public sector," *Management Accounting Research* 11, 281-306.
- Broadbent, J., and J. Guthrie, 2008, Public sector to public services: 20 years of 'contextual' accounting research, *Accounting, Auditing & Accountability Journal* 21(2), 129–169.
- Burrell, G., and G. Morgan, 1979, Sociological paradigms and organizational analysis, elements of the sociology of corporate life: Heinemann Educational Books Ltd.
- Cavalluzzo, K., S, and Ittner, C. D. 2003, Implementing performance measurement innovations: evidence from government. *Accounting, Organizations and Society*, 29(3-4), 243-267.
- Chapman, C. and Kihn, L-A 2009, Information system integration, enabling control and performance. *Accounting, Organizations and Society*, 34, 151-169.
- Chenhall, R. 2003, Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study. *Accounting, Organizations and Society*, 30, 395-422.
- Chenhall, R. 2005, Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study. *Accounting, Organizations and Society*, 30, 395-422.
- Cook, S. D. N., and Yanow, D. 1993, Culture and organizational learning. *Journal of Management Inquiry*, 2(4), 373-390.
- Covaleski, M., Dirsmith, M. W., and Weiss, J. M. 2013, The social construction, challenge and transformation of a budgetary regime: The endogenization of welfare regulation by institutional entrepreneurs. *Accounting, Organizations and Society*, 38, 333-364.
- Covaleski, M. A., Dirsmith, M. W. and Samuel, S. 2017a, Social Constructionist Research in Accounting: A Reflection on the Accounting Profession (chapter 2). In Hoque, Z, Parker, L.D., Covaleski, M. A. and Haynes, K. (eds.), *The Routledge Companion to Qualitative Accounting Research Methods*, London: Routledge.
- Covaleski, M. A., Dirsmith, M. W., and Samuel, S. 2017b, Analyzing and Interpreting Qualitative Data in Management Accounting Research (chapter 23). In Hoque, Z, Parker, L.D., Covaleski, M. A. and Haynes, K. (eds.), *The Routledge Companion to Qualitative Accounting Research Methods*, London: Routledge.
- Crossan, M. M., Lane, H. W. and White, R. E. 1999, An organizational learning framework: From intuition to institution. *Academy of Management Review*, 24(3), 522-537.
- de Haas, M., and Kleingeld, A. 1999, Multilevel design of performance measurement systems: enhancing strategic dialogue throughout the organization. *Management Accounting Research*, 10, 233-261.

- de Waal, A.A., and Counet, H. 2009, Lessons learned from performance management systems implementations, *International Journal of Productivity and Performance Management* 58(4),367–390.
- Dodgson, M. 1993, Organizational learning: A review of some literatures. *Organization Studies*, 14(3), 375-394.
- Department of Sustainability and Environment (DES), 2004, The White Paper. Melbourne.
- Easterby-Smith, M., Li, S., and Bartunek, J. 2009, Research methods for organizational learning: The transatlantic gap. *Management Learning*, 40(4), 439-447.
- Easterby-Smith, Mark P. V. and Lyles, Marjorie, eds. 2011) *Handbook of organizational learning and knowledge management*. Wiley, Chichester.
- Edmondson, A. C. 1999, Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44, 350–383.
- Ellis, A. P. J., Hollenbeck, J. R., Ilgen, D. R., Porter, C. O. L. H., West, B. J., and Moon, H. 2003, Team learning: Collectively connecting the dots. *Journal of Applied Psychology*, 55, 929–948.
- Fiol, C. and Lyles, M. A. 1985, Organizational learning. *Academy of Management Review*, 10(4), 803-813.
- Galbraith, J. R. 1973, *Designing complex organizations*. Reading: Addison-Wesley.
- Garfinkel, H. 1967, *Studies in methodology*. Englewood Cliffs, NJ: Prentice-Hall.
- Geiger, D. R., and Ittner, C. D. 1996, The influence of funding source and legislative requirements on government cost accounting practices. *Accounting, Organizations and Society*, 21(6), 549-567.
- Gino, F., Argote, L., Miron-Spektor, E., and Todorova, G. 2010, First, get your feet wet: The effects of learning from direct and indirect experience on team creativity. *Organizational Behavior and Human Decision Processes*. 111, 102-115.
- Glaser, B. G. 1978, *Theoretical Sensitivity*. Mill Valley: The Sociology Press.
- Gray, B. 1990, The enactment of management control systems: A critique of Simons. *Accounting, Organizations and Society*, 15(12), 145-148.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries, *Educational Communication and Technology Journal* 29, 75–91.
- Guthrie, J., Olson, O., and Humphrey, C. 1999, Debating developments in new public financial management: The limits of global theorising and some new ways forward. *Financial Accountability and Management*, 3 and 4(August/November), 209-228.
- Guthrie, J., Parker, L., and English, L. M. 2003, A review of new public financial management change in Australia. *Australian Accounting Review*, 13(2), 3-9.
- Guthrie, J., and Parker, L. D. 1998, Managerialism and Marketisation in Financial Management Change in Australia. In O. Olson, J. Guthrie, and C. Humphrey (Eds.), *Global Warning: Debating International*, 49-75.
- Henri, J. F. 2006, Management control systems and strategy: A resource-based perspective. *Accounting, Organizations and Society*, 31, 529-558.
- Hoque, Z. and Moll, J. 2001, Public sector reform implications for accounting, accountability and performance in state-owned entities: An Australian perspective, *International Journal of Public Sector Management*, 14(4), 304-326.
- Hoque, Z. 2014, '20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research', *The British Accounting Review*, 46(1), 33–59.
- Hoque, Z. and Adams, C. 2011, The rise and use of balanced scorecard measures in Australian government departments, *Financial Accountability and Management*, 27 (3), 308-334.

- Hoque, Z. and James, W. 2000), Linking balanced scorecard measures to size and market factors: Impact on organizational performance, *Journal of Management Accounting Research*, 12, 1-17.
- Hood, C. 1991, A public management for all seasons? *Public Administration*, 69(1), 3-19.
- Hood, C. 1995, The "new public management" in the 1980s: Variations on a theme. *Accounting, Organizations and Society*, 20(2/3), 93-109.
- Hopper and Powell 1985
- Hopper, T., and Powell, A. 1985, Making sense of research into the organizational and social aspects of management accounting. A review of its underlying assumptions [1]. *Journal of Management Studies*, 22(5), 429-465.
- Hopwood, A. G. 1983, On trying to study accountintg in the contexts in which it operates. *Accounting, Organizations and Society*, 8(2/3), 287-305.
- Hopwood, A. G. 2008, Changing pressures on the research process: On trying to research in an age when curiosity is not enough. *European Accounting Review*, 17(1), 87-96.
- Hoque, Z., and Thiagarajah, T. 2015, Public accountability: the role of the auditor-general in legislative oversight, In Hoque (ed), *Making Governments Accountable: The Role of Public Accounts Committees and National Audit Offices*, Routledge, New York, pp. 1-23.
- Huber, G. P. 1991, Organizational learning: The contributing processes and the literatures. *Organization Science*, 2(1), 88-115.
- Jardioui, M., Garengo, P. and El Alami, S. 2019, "How organizational culture influences performance measurement systems in SMEs", *International Journal of Productivity and Performance Management*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJPPM-10-2018-0363>
- Kaplan, R. S., and Norton, D. P. 1996, *The balanced scorecard - Translating strategy into action*. Boston, MA.: Harvard Business School Press.
- Kaplan, R., and Norton, D. P. 2001, Transforming the balanced scorecard from performance measurement to strategic management: Part I. *Accounting Horizons*, March: 87-104.
- Kaplan, R. S. 2012), The balanced scorecard: Comments on balanced scorecard commentaries, *Journal of Accounting and Organizational Change*, 8(4), 539-545.
- Kim, D. H. 1993, The link between individual and organizational learning. *Sloan Management Review*, 37-50.
- Kling, R., and Gerson, E. M. 1978, Patterns of Segmentation and intersection in the computing world. *Symbolic interaction*, 1(2), 24-43.
- Kloot, L. 1997, Organizational learning and management control systems: Responding to environmental change. *Management Accounting Research*, 8, 47-73.
- Kober, R. O., Lee, J. and Ng, J., 2010, Mind your accruals: Perceived usefulness of financial information in the Australian public sector under different accounting systems. *Financial Accountability and Management*. 26(3), 267 - 298.
- Kober, R., Lee, J. and Ng, J., 1 Jan 2020, Australian not-for-profit sector views on the conceptual framework, accounting standards and accounting information. *Accounting and Finance*, Accepted/In press.
- Kravchuk, R. S., and Schack, R. W. 1996, Designing effective performance measurement systems under the government performance and results act of 1993. *Public Administration Review*, 56(4), 348-358.
- Lam, Y.L.J 2001), 'Toward reconceptualizing organizational learning: a multidimensional interpretation', *International Journal of Educational Management*, 15(5), 212-219.
- Lebas, M. J. 1995. Performance measurement and performance management. *International Journal of Production Economics*, 41, 23-35.

- Lee, B. and Humphrey, C. G. 2017, Case Studies in Accounting Research (chapter 10). In Hoque, Z, Parker, L.D., Covalski, M. A. and Haynes, K. (eds.), *The Routledge Companion to Qualitative Accounting Research Methods*, London: Routledge.
- Levitt, B., and March, J. G. 1988. Organizational learning. *Annual Review of Sociology*, 14, 319-340.
- Llewellyn, S. 2003, What counts as "theory" in qualitative management and accounting research? *Accounting, Auditing and Accountability Journal*, 16(4), 662-708.
- Lounsbury, M. 2008, Institutional rationality and practice variation: New directions in the institutional analysis of practice. *Accounting, Organizations and Society*, 33(4-5), 349-361.
- Lukka, K. and Modell, S. 2017, Interpretive Research in Accounting: Past, Present and Future (chapter 3), In Hoque, Z, Parker, L.D., Covalski, M. A. and Haynes, K. (eds.), *The Routledge Companion to Qualitative Accounting Research Methods*, London: Routledge.
- Mahama, H and Khalifa, R. 2017, Field Interviews: Process and Analysis (chapter 19). In Hoque, Z, Parker, L.D., Covalski, M. A. and Haynes, K. (eds.), *The Routledge Companion to Qualitative Accounting Research Methods*, London: Routledge.
- Mazutis, D., and Slawinski, N. 2008, Leading organizational learning through authentic dialogue. *Management Learning*, 39(4), 437-456.
- Messner, M., Moll, J. and Torkel Stromsten, T. 2017, Credibility and Authenticity in Qualitative Accounting Research (chapter 25). In Hoque, Z, Parker, L.D., Covalski, M. A. and Haynes, K. (eds.), *The Routledge Companion to Qualitative Accounting Research Methods*, London: Routledge.
- Miles, M. B., and Huberman, A. M. 1994, *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, California: Sage Publications.
- Modell, S. 2001, Performance measurement and institutional processes: A study of managerial responses to public sector reform. *Management Accounting Research*, 12, 437-464.
- Morgan, G., and Smircich, L. 1980, The case for qualitative research. *Academy of Management Review*, 5(4), 491-500.
- NCC (National Competition Council), 2002, *Assessment of governments' progress in implementing the National Competition Policy and related reforms*, Volume one, Assessment. Canberra: AusInfo.
- Neely, A., and Bourne, M. 2000, Why measurement initiatives fail. *Measuring Business Excellence*, 4(4), 3-6.
- Nuxoll, A.M. 2012. Episodic Learning. In Seel N.M. (eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA.
- OECD. 1993. (Organisation for Economic Co-operation and Development). *Public management developments: Survey 1993*. Paris: OECD.
- OECD. 1994, *Public management developments: Survey 1994*. Paris: OECD.
- Osborne, D., and Gaebler, T. 1993, *Reinventing Government*. New York: Penguin Books USA Inc.
- Otley, D. 1994, Management control in contemporary organizations: Towards a wider framework. *Management Accounting Research*, 5, 289-299.
- Ozdil E, and Hoque Z. 2019. Accounting as an engine for the re-creation of strategy at a university. *Accounting and Finance*.
- Pallot, J. 2001, Reporting and auditing performance in the public sector. *Australian Accounting Review*, 11(3), 2-3.
- Patton, M. Q., 1990, *Qualitative Evaluation Methods*, Beverly Hills, CA: Sage.

- Popova-Nowak, I.V. and Cseh, M. 2015, The Meaning of Organizational Learning: A Meta-Paradigm Perspective, *Human Resource Development Review*, 14(3), 299-331.
- Rana T., Hoque Z., and Jacobs K. 2019, Public sector reform implications for performance measurement and risk management practice: insights from Australia. *Public Money and Management*, 39, 37-45
- Rashman, L., Withers, E., and Hartley, J. 2009, Organizational learning and knowledge in public service organizations: A systematic review. *International Journal of Management Reviews*, 11(4), 463-494.
- Rebelo, T. M., and Gomes, A. D. 2008, Organizational learning and the learning Organization. *The Learning Organization*, 15(4), 294-308.
- Rouse, P., Putterill, M., and Ryan, D. 2002, Integrated performance measurement design: Insights from an application in aircraft maintenance. *Management Accounting Research*, 13, 229-248.
- Sanger, M. B. 2008, From measurement to management: Breaking through the barriers to state and local performance. *Public Administration Review*, S70-S85.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects, *Education for Information* 22, 63–75.
- Simons, R. 1995, *Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal*. Boston: Harvard Business School Press.
- Simons, R. 2000, Performance measurement and control systems for implementing strategy. New Jersey: Prentice-Hall, Inc.
- Shrivastava, P. 1983. A typology of organizational learning systems. *Journal of Management Studies*, 20(1), 7-28.
- Strauss, A. 1978, A Social World Perspective. In Norman Denzin, N. (ed.), *Studies in Symbolic Interaction*, 1, pp. 119-28, Greenwich, CT: JAI Press.
- Strauss, A., and Corbin, J. 1990, *Basics of Qualitative Research*. Newbury Park: Sage Publications, Inc.
- Van Maanen, J. 1979, The fact of fiction in organizational ethnography. *Administrative Science Quarterly*, 24, 539-550.
- van Helden, G. J., Van der Meer Kooistra, J., and Scapens, R. W. 2001, Co-ordination of internal transactions at Hoogovens steel: struggling with the tension between performance-oriented business units and the concept of an integrated company. *Management Accounting Research*, 12, 357-386.
- Widener, S.K. 2007, An empirical analysis of the levers of control framework, *Accounting, Organizations and Society*, 32, 757-788.
- Wilson, J. M., Goodman, P. S., and Cronin, M. 2007, Group learning. *Academy of Management Review*, 32(4), 1041–1059.
- Wrzesniewski, A., Dutton, J. E., and Debebe, G. 2003, Interpersonal Sensemaking and the Meaning of Work. *Research in Organizational Behavior*, 25, 93-135.