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QUALITATIVE STUDY

The 70:20:10 framework and the transfer of learning

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The capacity of an organization to innovate, change, and be effective depends on the skills and abilities of employees, highlighting the importance of developing individual capabilities. The 70:20:10 framework is used by practitioners to guide them when developing effective learning and development programs. Although the framework has been adopted globally in both private and public sectors, its effectiveness has not been assessed in relation to the transfer of learning. Using qualitative data from the Australian public sector, this study explores how the framework is being implemented and whether it facilitates the transfer of learning to build middle management capability. Results showed that despite middle managers' awareness of, and willingness to take part in, ongoing skill development, attempts to develop capability through learning transfer by implementing the 70:20:10 framework were not achieving the desired outcomes. The research suggests that learning transfer and managerial capability development was hindered through four misconceptions regarding the framework's implementation. These are: an overconfident assumption that unstructured experiential learning automatically results in capability development; a narrow interpretation of social learning; the expectation that managerial behavior would automatically change following formal training and development activities without the need to actively support the process; and a lack of recognition of the requirement of a planned and integrated relationship of all three aspects of the framework. We suggest future research seeks to explicate the role of social learning in supporting the efficacy of both formal and experiential learning.

KEYWORDS

70:20:10, capability development, learning transfer, management development, public sector, qualitative research

The importance of developing individual capabilities is acknowledged (Huselid, Becker, & Beatty, 2005; Kirwan & Birchall, 2006; Nieves & Haller, 2014), as an organization's capacity to innovate, change, and prosper depends on employee skills and abilities (Ambrosini, Bowman, & Collier, 2009; Huselid et al., 2005; Teece, Pisano, & Shuen, 1997). This highlights the importance of investing in learning to enhance organizational performance (Park & Jacobs, 2011). Such an investment has traditionally occurred through formal training programs (Enos, Kehrhahn, & Bell, 2003). However, assumptions that formal programs will build managerial proficiency have been questioned (Awoniyi, Griego, & Morgan, 2002; Baldwin & Ford, 1988; Kirwan & Birchall, 2006; McCall, 2010; Rabin, 2014). This is partly ascribed to the challenge of transferring skills and learning back into the workplace (Baldwin & Ford, 1988; Enos et al., 2003; Holton III, Bates, Bookter, & Yamkovenko, 2007; McKeough, Lupart, & Marini, 2010).

Learning transfer challenges relate to trainee characteristics, training design and work environment (Baldwin & Ford, 1988). Work environment aspects include the workplace transfer climate, that is, the degree to which individuals believe that their workplace supports or inhibits the transfer of learning (Burke & Hutchins, 2008; Enos et al., 2003; Lim & Morris, 2006; Martin, 2010; Rouiller & Goldstein, 1993). This article focuses on work environment aspects commonly raised as problematic: a lack of workplace support from supervisors, senior managers, and peers; few supportive resources; limited opportunities to apply new skills; insufficient rewards for applying new skills and knowledge; and high workloads (Brockman & Dirckx, 2006; Brown, Warren, & Khattar, 2016; Burke & Hutchins, 2008; Enos et al., 2003; Lim & Morris, 2006; Martin, 2010; McCall, 2010; Rouiller & Goldstein, 1993).

Multiple theoretical models have been derived from scholarly research to identify and reduce learning transfer problems. There are tools to diagnose factors that enhance or inhibit workplace learning transfer (e.g., The Learning Transfer System Inventory) (Holton III et al., 2007; Holton III, Bates, & Ruona, 2000) and frameworks of ideal transfer processes (Baldwin & Ford, 1988; Burke & Hutchins, 2008). In parallel, practitioner frameworks independent of scholarly research have been developed to overcome transfer challenges, but few have been empirically tested (Blume, Ford, Baldwin, & Huang, 2010; Clardy, 2018). In this article, we explore the implementation of the "70:20:10 framework,"¹ because it has been widely adopted by human resource development (HRD) practitioners, particularly in the Australian public sector who believe it has potential to improve management development and learning transfer. Its popularity is such that it "has gained significant momentum, and organizations are increasingly subscribing to [its] principles" (Kajewski & Madsen, 2013, n.p). This is despite its atheoretical nature and the lack of empirical evidence to support its effectiveness (Clardy, 2018). The framework presents three types of learning: experiential, social and formal and is based on the premise that training interventions combining these three types of learning are particularly effective in management and leadership development (Jennings, 2011; Lindsey, Homes, & McCall Jr, 1987; McCall Jr., Lombardo, & Morrison, 1988; Rabin, 2014). While each element of the framework has theoretical underpinnings, there is little empirical research on how the framework is implemented and its effectiveness in building capability or supporting the transfer of learning (Kajewski & Madsen, 2013). In this article, we address a gap in empirical research on the effective implementation of the 70:20:10 framework and the lack of research into learning transfer in public sector environments (Awoniyi et al., 2002; Kirwan & Birchall, 2006; McCracken, Brown, & O'Kane, 2012).

First, we present the 70:20:10 framework. We then use the literature to explain the transfer of learning and highlight challenges relating specifically to management development and transfer in the public sector, where this framework has been widely adopted in Australia. Third, we outline the methodology and data analysis. Fourth, findings demonstrate how the framework has been implemented in the Australian public sector, highlighting a range of problems that are occurring. Fifth, we identify misconceptions in the framework's implementation, which may explain the challenges being found in effective learning transfer. Finally, implications for both theory and practice are considered.

1 | THE 70:20:10 FRAMEWORK

The 70:20:10 framework originates from empirical research undertaken by McCall Jr. et al. (1988) comprising four separate studies of over 200 successful executives from six major corporations. Their research identified that

significant executive management development was gained through challenging on the job experiences and relationships with senior managers and peers. Their data showed that challenging work experiences made up 70% of an executive's learning; 20% of their development occurred through relationships with other people and executive's bosses, and the remaining 10% of development occurred through formal training (McCall Jr. et al., 1988). The 70:20:10 framework was popularized through the book, "The Lessons of Experience: How Successful Executives develop On the Job" (McCall Jr. et al., 1988), and through promotion by the Centre for Creative Leadership (Clardy, 2018). Since the 1980s, practitioners have distinguished between formal and informal learning, with claims that informal learning occurs through 70% to 80% of on-the-job experience. However, despite acceptance of the significance of informal learning in the workplace, empirical evidence supporting its effectiveness is lacking (Clardy, 2018).

Reflecting the work of McCall and his colleagues, the 70:20:10 framework identifies three integral types of learning: experiential, social and formal. Experiential learning is described as occurring through challenging work-based assignments and makes up 70% of development; social learning takes the form of peer support, managerial support, mentoring and feedback and makes up 20% of development; and formal learning takes place through structured training programs and makes up 10% of development (70:20:10 Forum, 2015a; Jennings, 2011; Lindsey et al., 1987; McCall, 2010; McCall Jr. et al., 1988; Rabin, 2014). Reflecting that learning must be tightly coupled with work to enable capability development and learning transfer (70:20:10 Forum, 2015b), HRD practitioners are encouraged to develop complex training programs that combine formal training with on the job training (experiential learning) and opportunities for peer and supervisor support (social learning) (Enos et al., 2003; McCall, 2010).

Advocates of the 70:20:10 framework highlight its strength as the emphasis on combining different forms of development to build capabilities effectively; it enables "greater awareness that significant development also happens outside of a formal learning event" (Kajewski & Madsen, 2013, p. 8). Based on research supporting the importance of workplace learning (Easterby-Smith & Lyles, 2011), social learning (Bandura, 1977), and experiential learning (Kolb & Boyatzis, 2000), the framework has been widely championed (e.g., 70:20:10 Forum, 2015a; Rabin, 2014; Training Industry, 2015) and adopted in both the public and private sectors (e.g., Australian Public Service Commission [APSC], 2014; Kajewski & Madsen, 2013; Swanwick & McKimm, 2012). Many HRD practitioners, particularly in the Australian public sector,² have adopted the framework to guide an organizational approach to capability development and overcome the challenges of learning transfer.

1.1 | Transfer of learning

Capability development can only be realized when the transfer of learning takes place, meaning that new behavior is generalized to the job context, is applied in the workplace, and is maintained over time (Baldwin & Ford, 1988; Ford & Weissbein, 1997). The effective transfer requires, among other things: a supportive work environment allowing trainees to apply new skills and knowledge (Baldwin & Ford, 1988); trainee self-efficacy; the motivation to learn; and the modeling of appropriate behavior in the workplace (Grossman & Salas, 2011). Actual challenges with transfer of learning, referred to as the "transfer problem," are well documented (Baldwin & Ford, 1988; Blume et al., 2010; Enos et al., 2003; Holton III et al., 2007; McKeough et al., 2010; Michalak, 1981). As well as workplace environment challenges (Baldwin & Ford, 1988), transfer is affected by the type of capability being transferred and the workplace sector (Awoniyi et al., 2002; Blume et al., 2010; Laker & Powell, 2011; McCracken et al., 2012). Soft, or open, skills, central to effective management and leadership, are considered harder to transfer (Laker & Powell, 2011). Furthermore, their transfer is impacted more by work environment and senior management support (Blume et al., 2010). Transfer in the public sector is particularly challenging due to: high turnover in government, poor succession planning, few opportunities to practice new skills, weak links between training activities and organizational skill requirements, continuous structural change, insufficient resources, and a prioritization of task output over skill development (McCracken et al., 2012). Such challenges have resulted in calls for more research into learning transfer in government sectors (McCracken et al., 2012; Watkins & Marsick, 2014).

1.2 | The 70:20:10 framework and the transfer of learning

The principle underlying the 70:20:10 framework that learning takes place through combining formal, social, and experiential means, reflects the premise that for learning transfer to occur, individuals also need social and experiential support (Awoniyi et al., 2002; Baldwin & Ford, 1988; Holton III et al., 2007; Kirwan & Birchall, 2006; McCall, 2010). Social support occurs through working with, and gaining support from, peers, as well as coaching and mentoring opportunities (Burke & Hutchins, 2008; Chiaburu & Marinova, 2005; Fecteau, Dobbins, Russell, Ladd, & Kudisch, 1995). Experiential support emerges from creating space to apply new skills and knowledge at work, with supervisory encouragement and feedback building employees' confidence to continuously apply the learning (Bandura & Cervone, 1983; Sparr, Knipfer, & Willems, 2016). As it combines three types of learning, the 70:20:10 framework could guide HRD practitioners to design learning and development programs that overcome transfer problems by ensuring that programs include structured experiential and social learning experiences (Baldwin & Ford, 1988; Holton III et al., 2000; Sparr et al., 2016). Thus, it is possible that implementing the 70:20:10 framework could help foster a supportive work environment, increasing organizational support to overcome some challenges that undermine capability development and learning transfer.

Recognition of the popularity of the framework and its potential to overcome challenges with development and transfer led to the focus of this study and the research question: "Do current implementations of the 70:20:10 framework support learning transfer?" In this study, we specifically focus on implementation of the 70:20:10 framework to support learning transfer designed to develop middle managers in the Australian public sector. We do this because of the lack of empirical investigation of the 70:20:10 framework (see Clardy, 2018; Kajewski & Madsen, 2013). We also do this because of the important role that middle managers play in organizations (Currie & Procter, 2001; Embertson, 2006), their essential role in supporting the learning and development of the majority of an organization's employees, including their role in supporting the transfer of learning (70:20:10 Forum, 2015a; Enos et al., 2003; Lancaster, Di Milia, & Cameron, 2013) and because of claims that transfer of learning is more challenging in management development and government sectors (Awoniyi et al., 2002; Blume et al., 2010; Kirwan & Birchall, 2006; Laker & Powell, 2011; McCracken et al., 2012).

2 | METHODOLOGY

In the Australian public sector, the 70:20:10 framework was first espoused by the APSC in 2011 when it actively encouraged Commonwealth government agencies³ to implement the framework. It was expected that this would guide effective management and leadership capability development (APSC, 2011 as cited in APSC, 2014). The framework was then promoted for use across the Australian public sector, including state level government departments (see for example APSC, 2014; Public Service Commission, 2013; Queensland Government, 2016). This study draws from the experiences of two groups of Australian public sector managers: senior managers responsible for implementing the 70:20:10 framework within their organization; and middle managers who have undergone management capability development aligned to the 70:20:10 framework. All managers were drawn from the Commonwealth, Victorian, Queensland, and Northern Territory governments.

The aim of this study was to gain insights into whether the implementation of the framework led to public sector managerial capability development through learning transfer. A constructionist methodology was adopted that enabled a focus on how middle managers made sense of their experiences with becoming a manager in general, and their perceptions of the support required and offered to achieve this (Crossan, 2003). The need to understand how managers made sense of their experiences within their context, thereby creating a new meaning, led to the adoption of a qualitative approach (Creswell, 2013; Crossan, 2003; Denzin & Lincoln, 2008; Merriam, 2009). A qualitative approach was also appropriate given the atheoretical nature of the 70:20:10 framework and the lack of theory or evidence to provide a research framework (Merriam, 2009). The fully anonymized, qualitative research design enabled

the collection of rich, descriptive data (Corbin & Strauss, 2008) concerning managers' development experiences in organizations that had adopted the 70:20:10 framework. To establish qualitative research rigor (Anderson, 2017; Moon, Brewer, Januchowski-Hartley, Adams, & Blackman, 2016), we have ensured that our methods, sampling strategy, interview protocol, methods to compare across collection methods, deidentification of participants, and the sequencing of analysis, are all clearly set out.

2.1 | Data collection methods

Data were collected in three phases. Phase one was designed to confirm that the 70:20:10 framework was adopted in a Commonwealth government organization and to explore senior managers' perspectives on the framework's implementation. A small group of five senior managers from one Commonwealth government organization took part in phase one. Phase two sought to explore the experiences of middle managers from the same Commonwealth organization, who had undertaken management development in line with the 70:20:10 framework. This phase sought to identify and establish key themes relating to middle managers' capability development experiences. Eighteen middle managers took part in phase two. Given the low number of middle managers who took part in phase two, we undertook a third phase to expand data collection beyond one government organization and beyond the federal level of government. Gaining access to government departments for research purposes can be difficult. In anticipation of this, we approached all Australian state and territory Public Service Commissions to seek their support and assistance; Queensland, the Northern Territory, and Victoria agreed to take part.

Phase three resulted in the collection of data from a further 122 middle managers. This large sample size enabled the achievement of data saturation whereby analysis showed no new themes were emerging in the latter group interviews (Corbin & Strauss, 2008). The research team deemed that a large sample size was desirable because it provided a valuable opportunity to hear from middle managers in different locations across different levels of government; more importantly, it allowed for comparable data analysis should differences have been identified across locations and government levels. Moreover, the three Public Service Commissions taking part in the study expected that we would hold every group interview that they had assisted to arrange.

2.1.1 | Participant sampling

A purposive sampling technique was adopted, selecting participants who had specific knowledge of, and experience with, middle management capability development in line with the 70:20:10 framework (Palinkas et al., 2015). Participation criteria for the small group of senior managers were that they: (a) worked in a government organization that had recently adopted the 70:20:10 framework and (b) had accountability for developing middle managers and, as such, were central to middle managers' capability development. This ensured that they had some responsibility for implementing the framework and were a core part of the work environment; as such, they influenced learning transfer. Participation criteria for middle managers were that they: (a) were at the middle management level of the hierarchy; (b) were responsible for managing employees; (c) had been on a formal middle management development program; and (d) worked in a government organization that had adopted the 70:20:10 framework. The Public Service Commissions encourage all middle managers to undertake management capability development in the Australian public sector (see APSC, 2016; Queensland Government, 2016). As such, and because the focus of this research was on middle management capability development, identification of further demographics (i.e., gender, ethnicity) was not undertaken. To identify and approach potential middle manager participants, the research team worked with the Public Service Commissions in Queensland, the Northern Territory and Victoria as there was a risk that correspondence received directly from the research team would be ignored. In contrast, correspondence from the Public Service Commission was more likely to generate interest in our research, assure legitimacy, and give consent to take part. To avoid a bias in sampling, the Commissions were asked to invite all middle managers with at least 5 years' experience who had undertaken a middle management development program. The Commissions had databases holding this information, comprising potentially hundreds

of middle managers. Each Commission emailed all potential participants with information explaining the scope and goals of the research project,⁴ inviting them to participate and providing consent forms. The email also encouraged people to attend the group interviews and provided permission to do so during work time. The Commissions then assisted the research team to organize group interviews in participating locations by forwarding responses from interested middle managers to the research team and, in one location, providing premises to hold the group interviews. All other correspondence was directly between the research team and the participant. This helped eliminate the risk of these organizations acting as gate keepers (Miller & Bell, 2014) and, as such, blurring the lines of consent (Creswell, 2013). The overall sample was 145 participants.

2.1.2 | Semistructured individual interviews

Semistructured interview protocols were adopted to ensure consistency across interviews and adherence to the area of interest, while allowing sufficient flexibility for participants to respond (Bryman, 2004). The protocols were developed as a research team, with discussions occurring before data collection that focused on ensuring consistency of the interviewing approach. The senior manager interviews undertaken in phase one used the same protocol as the middle manager interviews undertaken in phases two and three (see Appendix 1 for the protocol). This was with the exception of asking middle managers, "how are you supported," and asking senior managers, "how are middle managers supported," to gain both perspectives. No direct questions regarding the mechanics of the 70:20:10 framework were asked; however, experiences with the framework were generally raised in discussion as it was a prominent feature of capability development in each context. If it was not raised, probing questions generated discussion about participants' experiences with capability development within the 70:20:10 framework.

During phase two, semistructured individual interviews were undertaken by one researcher with 18 middle managers who had experienced management capability development under the 70:20:10 framework. Participants did not receive any prebriefing about the topic, aside from the information package emailed to them with their invitation to participate. These interviews resulted in the identification of consistent key themes. On average, individual interviews took 1 hour.

2.1.3 | Semistructured group interviews

Phase three consisted of 13 semistructured group interviews⁵ with a total of 122 public sector middle managers, which allowed access to a wide range of middle management perspectives within limited time and with minimal impact on the workplace; this met the access conditions. As with the individual interviews, participants did not receive any prebriefing about the topic, aside from the information package emailed to them with their invitation to participate. The themes identified in the first three group interviews of phase three were compared to themes identified in phase two. Themes were deemed to be sufficiently similar and consistent to show that group interaction in the group interviews did not affect individual participant responses (Catterall & Maclaran, 1997; Hesse-Biber & Leavy, 2006). After analysis demonstrated that the semistructured individual and group interviews were eliciting similar themes, the research team proceeded with the additional 10 group interviews held in phase three of the project.

In phase three, 10 of the 13 groups included 12–14 participants and three of the groups included only five to eight participants. The variation in the group size reflected the challenges middle managers experienced leaving the workplace to take part in group interviews. Each group comprised male and female participants of similar middle management levels who worked in government organizations in Australian capital cities. Researchers sought participant responses to questions from all group participants to ensure equal contributions. On average, group interviews took 2 hours.

Semistructured group interviews were held instead of focus groups because focus groups explicitly use group interaction and facilitated discussion as part of the method and data collection to generate collective views (Gill, Stewart, Treasure, & Chadwick, 2008; Kitinger, 1995; Morgan, 1997; Neuman, 2011). In contrast, with group

interviews the emphasis is on gathering individual perspectives and experiences rather than collective views (Gibbs, 2012; Gill et al., 2008). In this study, the focus was on individual perspectives and experiences and, as such, semi-structured interviews were appropriate as they allowed for greater insights into individual experiences and avoided collective insights.

Participants in this study were deidentified during the data transcription process. To maintain confidentiality, we have labeled participants as follows: individual interviewees are indicated by a participant number and their management level, being either a senior or middle manager. A senior manager is identified as such through the acronym SM (for "senior manager"). Likewise, a middle manager is identified with the acronym MM. Thus, a participant referred to as P1:SM is "Participant 1: Senior Manager". Likewise, P2: MM refers to "Participant 2: Middle Manager". The small number in some groups led to only the allocation of a group number so we use the acronym G for group interview and a number to identify which group interview they attended. For example, participant labeled G1 refers to a participant from the first group interview. Likewise, G2 indicates that the participant took part in the second group interview held. As all participants who took part in group interviews were middle managers, group interview labels identify only the group the participant came from and not their managerial level.

2.2 | Data analysis

Interviews were recorded, transcribed, and loaded into NVivo11. Each transcript was coded using open, axial, and selective coding, with emergent patterns, themes, and inter-relationships identified (Patton, 1990). For consistency, one researcher took the initial lead with open coding, which involved line-by-line data analysis, breaking the data into discrete parts, comparing the data for similarities and differences and then grouping it into categories based on this comparison (Corbin & Strauss, 2008). This inductive, open-coding process revealed participant-identified themes,⁶ including the importance of mentoring, peer learning, and on-the-job learning. A stronger focus emerged in relation to mentoring and peer support as elements of social learning and this is reflected in the findings. Themes identified also related to impediments to capability development, such as ineffective training courses, low senior management support for development, inability to apply learning after undertaking training, and budgetary cuts.

Once the open coding was complete, the researchers discussed the initial findings and then axial coding was undertaken to put data together in meaningful ways to establish associations between themes (Corbin & Strauss, 2008). During this process, the research team met to discuss and refine the axial codes, with areas of divergence discussed at length to come to an agreement regarding the final codes used. This enabled identification of connections between management capability development and learning transfer (see Table 1). The open and axial coding processes were inductive, with data analysis concentrating on emergent themes. After following this process, it was clear that capability development was largely ineffective, with learning transfer failure a key reason for this.

The final stage of the coding process combined inductive and deductive analysis, where selective coding was undertaken to delimit the coding process around a central theme or story (Walker & Myrick, 2006). All researchers were involved in this process where, in line with the core research question, the research team selectively analyzed the data to examine how elements of the 70:20:10 framework influenced issues of learning transfer failure (see Table 2).

In this analysis stage, categories were related to subcategories to form more complete explanations (Corbin & Strauss, 2008) regarding managers' experiences with capability development in organizations that implemented the framework. This analysis revealed that many of the learning transfer challenges concerned issues with the work environment. It also enabled analysis regarding the relationship between middle management capability, learning transfer effectiveness, and the integration of the framework elements. We present the results of analysis of the selective coding in the following section.

TABLE 1 Open and axial coding

Open coding	Axial coding
Skills MMs need	MM inadequate capabilities
MMs lack skills	
MMs unclear about their role	
MMs struggle to manage time and workload	
MMs expected to “sink or swim”	
Low management confidence	Challenges faced by MMs
Proving yourself as a manager	
Lack of MM influence	
Increasing scope of work	
Excessive change	
Lack of MM role clarity	
Unrealistic expectations of MMs	
Time and workload challenges	
MMs feeling isolated	
MMs in “survival mode”	
Low MM morale	MMs expected to learn on the job
Poor job-person fit	
Unexpected and unplanned promotion to MM	
Lack of prepromotion development	
Workers promoted to MM on technical capability	
MMs learning through others	
Lack of development and succession planning	
Formal training mostly technical	
Formal training under valued	
MMs expected to develop self	
Acting in senior management roles	MMs seek more formal development
Earlier MM development opportunities	
Need more formal courses	
Need more people on courses	
Need more senior executive support for training	
Need more opportunities for formal tertiary training	
Need more generous training budgets	
MMs need to be released from work to attend training	MMs need more social learning experiences
Need tailored, individual approaches to development	
Need more mentoring	
Lack of mentoring	
Peer mentoring sought	
Effective informal mentoring	Learning transfer problems
Positive mentoring experiences	
Being a mentor to others	
Need additional development—other than formal courses	
Skills lost following formal training	
Low senior management support for development following training	Learning transfer problems
Performance feedback insufficient or ineffective	

TABLE 1 (Continued)

Open coding	Axial coding
High senior management turnover	
Poor senior management capability	
Poor communication with senior managers	
Inability to apply learning after training	
Lack of follow through after course attendance	
High workload	
Ineffective HR staff	Ineffective training and development
Difficult L&D processes	
Ineffective training courses	
Irrelevant formal courses	
Courses too theoretical	
Ineffective online training	

HR, human resource; L&D, learning & development; MM, middle manager.

TABLE 2 Selective coding

Selective code	Axial code
Experiential learning ("70")	<ul style="list-style-type: none"> • MMs expected to learn on the job • Challenges faced by MMs • MMs inadequate capabilities
Social learning ("20")	<ul style="list-style-type: none"> • Learning transfer problems • MMs need more social learning experiences
Formal learning ("10")	<ul style="list-style-type: none"> • MMs seek more formal development • Ineffective training and development

MM, middle manager.

3 | FINDINGS

We present each framework element considering how it was adopted and its efficacy in learning transfer.

3.1 | Experiential learning

Senior managers indicated that one reason for adopting the 70:20:10 framework was that the dominant element of 70% development achieved through experiential learning reflected their expectation that employees should learn on the job. However, when talking to the middle managers themselves, it was not clear how such learning was being supported. Participants suggested that one problem was a leadership perception across senior managers that middle managers could automatically transition into middle management roles without a great deal of support or development: "You move into those roles and there's an expectation that you'll just fit in and there's probably a delay ... we should be developed to fit into that role, not get into that role and then have to develop" (G1). This view was widespread, with many managers stating they would benefit from enhanced support through more structured experiential development opportunities: "I got some feedback the other day from a Deputy Secretary who said, 'oh we really put you out on a high wire and you know, sometimes you've shined on that high wire but a couple of times you've fallen', and that's frowned upon ... we probably throw people in [to acting roles or promotions], if they go really well then it was great, 'oh that was a good decision'. If they don't go really well we go 'oh gee, we made a bad decision about that'" (P4: SM).

When employees were provided with opportunities for experiential learning prior to being promoted, the primary means for developing managerial capabilities was undertaking short-term "acting" positions at a higher level,

usually to cover for a senior manager's absence. However, serious doubts were expressed about using acting positions to develop managerial capabilities, partly because of a tendency to thrust people into the role without adequate preparation: "Acting is or can be just expanding workload ... Question is, are we pushing people into positions they haven't been prepared for?" (G6). Moreover, during acting opportunities, many managers would juggle both technical and managerial roles due to insufficient resourcing: "Often people are acted up and there is no one to backfill their position and no one to support them in their role" (G7). Consequently, managers were unable to focus on performing managerial responsibilities while acting in more senior roles and had insufficient time to develop capabilities during or prior to acting periods.

Managers were open minded and creative about experiential development activities, recognizing that training courses are not the only form of development: "Courses are not the panacea, they're not the only solution" (G1). This reflected the senior manager perspective that "There are generic training courses that we do but they pay no attention to the fact that everybody is different... I would think that the biggest difference you could make would be to have a very focussed one-on-one [activity]" (P3:SM); this move to tailored solutions was offered as one of the reasons for the actual 70:20:10 framework adoption. Overall, it was suggested that individually determined, experiential learning activities would be beneficial: "Focus on making sure it [development] happens ... [and recognize people] all need something different so I would hate to see a cookie cutter approach, a uniform approach to say you will all do this course" (P6:MM).

The most common concern, however, was that experiential learning efficacy was challenged because managers were acquiring inappropriate behaviors on the job based on what they saw around them every day: "... people are learning really bad behaviors on the job...we actually have no capability or capacity to direct that learning in the direction we want it to be" (P4:SM). This was ascribed to poor managerial capability dominating the workplace, thereby limiting strong role models to guide and support on the job learning or provide valuable feedback: "Most of the roles that I've been in, the people at higher levels haven't necessarily been good managers, they've been brilliant subject matter experts" (P2:MM); "Executive management teams don't necessarily walk the walk and talk the talk they expect of their middle managers" (G5). Overall, it seemed that there was acceptance of the potential offered by experiential learning but concerns as to the real value add in current implementation systems.

3.2 | Social learning

The discussions about experiential learning implied that it was being potentially undermined because the social learning was emerging from inappropriate role models. This was serious as, for some, the role of social learning was considered to be more valuable than formal learning: "I think it's more about when you get involved in it and having those people above you from a mentoring perspective probably has more impact than what you can learn in a theory situation" (G5), particularly for soft, or open skills: "I think I'd probably honed the people management skills by then ... but as I say, probably from on-the-job and mentors as opposed to having found any structured training that was useful" (P5:MM). There was a strong emphasis on the importance for management capability development to emerge from forms of social learning, particularly from superiors through mentoring, as well as peers.

Mentoring was consistently highlighted by middle and senior managers as being important for both supporting a middle manager's current job and for building future capacity: "I've come through some organizations where mentoring was a key element that occurred before someone was able to actually do the work that we were employed to do" (G3); "I think that's how I've got through the whole time, there's always been someone mentoring me" (P13: SM). Mentoring was seen as particularly important for building managers' confidence that they have the capabilities necessary to fulfill current responsibilities and transition to the next level: "I think probably for me getting a mentor and learning from them [was beneficial] because I don't have any kind of experience at the next level. I think it's a pretty big jump from [one middle management level to the next]... [an issue] for me, it's all about self-doubt, about whether I'm capable of doing it" (P5: MM). Mentoring was also recognized as important for ongoing development: "I like the idea of having one on one

mentoring in the future, that's very good. If the public sector offers that for certain levels of people that would be a good opportunity for the continuous development of skills" (G5).

Despite mentoring being consistently raised as the most favored form of development, it was not always formally supported by the organization, meaning that, in many instances, mentoring was lacking for middle managers: "The thing that is uniquely missing from moving from the work I did into sort of management [is mentoring]; it's just like, 'there you go, learn how to do it'. There are no opportunities to be able to speak with other people that have been in similar roles who understand, possibly, some of that other political or process stuff that occurs as a manager, and use that as a mentoring-type relationship" (G3). When mentoring did occur, it was often informally from employees' line managers, rather than from an organizationally derived program. Consequently, the efficacy of mentoring was attributed to "luck": "The mentoring system is beneficial, but...if you're lucky enough to get a good line manager who is going to help you move forward and learn some stuff, that's invaluable and will beat any classroom scenario, any paper based qualification by a long way" (G4).

A lack of systemic approaches to mentoring meant it was fragile and often temporary: "I was very, very fortunate when I first came into the public service that I had an excellent mentor. Sadly, he's retired so now I've got somebody else and a whole different management style ... it makes a big difference on how you can actually perform" (G5). Mentoring was also sought out by managers themselves from time to time: "I've always found it [informal mentoring] to be available to me in some form when I've needed it but I haven't had it consistently through all the roles I've had, probably because I've not sought it out" (P6:MM).

Another form of social learning commonly relied on for capability development and learning transfer was supported learning from experienced peers: "if you've got somebody else that's also done the course that you can network with and say, 'I've tried this, have you tried the same, has it worked for you?' It's having access to somebody else that's on a similar journey to you" (G2). It was argued that peer networking and development enabled a context where social learning could be implemented and supported in the workplace: "The focus is about the network and your colleagues and peers providing you [with] that support and encouragement, building lasting relationships broader than internally which is something which is quite valuable" (G2).

Peer support and networking encouraged middle managers to adopt a broader perspective and engage in a community of practice to develop ideas regarding implementing new skills: "being part [of a network of middle managers] reminds you to look up from your desk and it also gives you a greater understanding of what's going on around you ... it does feel good to know that everybody is going through the same challenges" (G2). However, despite managers agreeing that networks and peer support would assist them to build capability and transfer learning to the workplace, there appeared to be few organizationally supported peer learning opportunities. It was largely up to individuals to actively seek out and join their own networks: "It's much more about those informal networks and discussions than any kind of formal learning group or network or anything else that might have been set up" (P6:MM).

Overall, participants welcomed the potential of social learning, which could help them make sense of their context, enabling both sense making of new knowledge acquired and reinforcing what was appropriate both in, and for, their organization. However, they made it clear that, despite apparent organizational awareness of the value of social learning, it was predominantly dependent upon the preferences and working styles of individual managers, rather than being supported systematically through organizationally designed learning programs. Consequently, it was apparent that social learning was not being utilized in the way intended in the 70:20:10 framework in that it was not usually integrated with formal or experiential learning.

3.3 | Formal learning

Formal learning programs were recognized by middle and senior managers as important forms of capability development. Attendance was often encouraged for new middle managers: "One of the first things that was available to me when I first got interested in a supervisory role was a week-long intensive management course and it was fantastic" (G7). Managers gained confidence from attending formal courses: "It was a boost to my self-esteem because I realized that

hey, I wasn't doing such a bad job and others were having similar difficulties" (G7), and identified the benefit of formal tertiary education: "I'm actually surprised how useful my postgraduate work has been" (P7:MM). However, not all experiences with formal training programs were positive, with both senior and middle managers reflecting on their ineffectiveness: "I did those generic training courses but never got much out of them" (P3:SM); "I've been at training courses that from the description sound like they're going to be what you need and what you're expecting but when you get there, the training that's delivered is not hitting the mark" (G6).

The mixed experiences with formal training programs were also reflected in participants' challenges with transferring learning: "I think this Department has really good courses...I think it's just when you get back into the workplace and actually apply that it becomes quite difficult" (P5:MM). It was clear that many managers lacked the confidence or ability to apply learning: "So you can do all the training, but you'll never be able to really apply it" (G2).

For the most part, participants reported finishing formal development programs with little to no follow up: "I've just finished the PSM (public sector management) course, and yeah, like it's done and that's it ... Nothing more's been said [or done]" (G2). There was a lack of both social and experiential support for embedding this learning. The lack of social learning support partly revolved around the high workloads of managers and the lack of time devoted to development activities: "I think part of the course, you were supposed to discuss it with your manager but he's so busy that he never really has time" (P14:MM). The lack of experiential support and senior management feedback meant that many middle managers did not have the opportunity to practice and further develop their new skills, despite their initial enthusiasm: "I was quite inspired [after attending the leadership development program], but again, afterwards it kind of waned off; you go back into the office and back into the same routine" (G7). A key issue with this was the lack of direct and clear guidance provided by their line managers: "I was hearing a lot of things second-hand through other people and I didn't actually get any guidance from my supervisor" (P2:MM).

A further issue with formal learning was that it was often designed generically for groups of participants: "We have this sort of one rule for all...how do you get the balance right about recognizing skills on an individual basis rather than a cohort basis?" (P3:SM). The need for specificity also related to the lack of explicit, individualized feedback provided by their line manager to reinforce and embed learning: "...feedback is really hard to get because generally they'll just go, yeah, you're doing fine...which doesn't give you anything" (P5:MM). Managers suggested that there would be better learning transfer where professional development was less focused on group or cohort needs and more individual pathways developed.

Our findings suggest that, unsurprisingly, as the participants came from organizations that had adopted the 70:20:10 framework, all elements of the model were present in each case. However, they also demonstrate that, despite a great deal of rhetorical support for management capability development and the implementation of the 70:20:10 framework, in many areas of the Australian public sector, work environment challenges with the transfer of learning remained apparent. In the next section, we use the outcomes of the axial coding process to demonstrate four misconceptions in the framework's implementation that are currently preventing fully effective learning transfer.

4 | DISCUSSION

Participants recognized that for effective transfer of learning of managerial skills into everyday work practices, the formal, experiential, and social elements of the 70:20:10 framework should work together and not be undertaken in isolation: "Sitting in a classroom doing a course is one thing, but - you know, it's those other avenues, whether it's through TED talks, whether it's through reading, whether it's through coaching, executive coaching or mentoring, there's multiple layers. It's not just, 'We'll send you off to a course and you'll become an expert leader'" (G2). This highlights the importance of organizations understanding how each element of the 70:20:10 framework develops capability, and why their integration is critical for the effective transfer of learning. However, our results revealed that learning transfer was hindered due to four misconceptions regarding the framework's implementation. First, there is an overconfident assumption that unstructured experiential learning will automatically result in capability development. Second, there

is a narrow interpretation of social learning and a failure to recognize the role social learning has in integrating experiential, social, and formal learning. Third, there is an expectation that managerial behavior would automatically change following formal training and development activities without the need to actively support the process. The fourth and, in terms of theory most important, is a lack of recognition of the requirement of a planned and integrated relationship between experiential, social and formal learning for there to be effective learning transfer.

4.1 | Experiential learning

The first apparent challenge to the effectiveness of learning transfer relates to an overconfident assumption that unstructured experiential learning will automatically result in capability development. Our data indicate that senior managers expect middle managers to develop managerial capability by learning from experiences through the ongoing practices of their job or while acting in more senior roles for short periods of time. However, as Clardy (2018) has recently suggested, the “70” rule, reflecting experiential learning, actually relates to the gamut of learning experiences that occur in adulthood; it does not specifically relate to the development of complex managerial skills. Consequently, it is a misconception that on-the-job learning and experiential learning are synonymous. Thus, for experiential learning to lead to effective capability development, it needs to be structured and overtly managed through regular and effective feedback, supporting ongoing personal reflection. It also requires the opportunity to repeatedly apply new skills to ensure capability is maintained (Awoniyi et al., 2002; Baldwin & Ford, 1988; Ellinger, 2005; Facticeau et al., 1995; Holton III et al., 2007; Kirwan & Birchall, 2006; McCall, 2010).

However, we found that experiential learning, as it is currently being implemented, is predominantly unstructured and unmanaged, that is, systems are not put in place in the work environment to support learning. It was anticipated that managers would learn on the job, without adequate preparation, additional support, or resourcing to facilitate effective learning. Thus, we posit that it is the unstructured nature of experiential learning that reduces the effectiveness of the 70:20:10 framework to support learning transfer. Moreover, this may explain the particular challenges of learning transfer faced by public sector organizations (Awoniyi et al., 2002; Kirwan & Birchall, 2006; McCracken et al., 2012); a context where unstructured experiential learning and an over focus on task is common (McCracken et al., 2012). Thus, we suggest that it is not surprising that there is a lack of effective learning transfer.

4.2 | Social learning

The data suggest two possible explanations relating to problems with learning transfer from social learning. First, there is a narrow interpretation of social learning and how it occurs in the workplace and, second, the role that social learning plays in linking experiential and formal learning. We will address the first aspect of social learning here and the second aspect in our discussion on the necessity to integrate all three elements of learning.

Our findings indicate that, within these Australian public sector organizations, social learning is seen as occurring predominately through coaching, mentoring and networking activities. However, it has long been established that social learning also occurs outside of these activities through everyday observations, imitation and modeling (Bandura, 1977), such that managers will learn their role by observing and modeling other managers. Consequently, incongruence may develop between observed behaviors and those being taught in formal development programs or discussed in mentoring or coaching sessions. When this occurs, the transfer of learning will be compromised due to managers adopting the behaviors observed in the workplace, rather than the desired behaviors espoused in formal training programs. This often occurs because they perceive managerial behaviors currently exhibited by other managers as more effective, especially if they are observed in managers they believe to be successful (Bandura, 1977).

Our findings demonstrate that this understanding of social learning is not recognized; instead, those implementing the 70:20:10 framework see social learning only as an outcome of networking, coaching or mentoring. There is an assumption that if these activities are available in the workplace, then learning transfer will occur and appropriate managerial capability will be developed. While coaching, mentoring and networking are legitimate forms of social

learning, which can support learning transfer (Burke & Hutchins, 2008; Chiaburu & Marinova, 2005; Facticeau et al., 1995; Hawley & Barnard, 2005), we found the effectiveness of the 70:20:10 framework is undermined by a lack of recognition of social learning as occurring through every day behavioral observation and role modeling of other managers.

4.3 | Formal learning

The third challenge to the effectiveness of the 70:20:10 framework to develop managerial capability through learning transfer relates to insufficient opportunities for managers to practice new skills and apply new knowledge in the workplace following attendance on formal development programs. The literature review highlighted that the effective transfer of learning is most apparent where the workplace environment is one in which workloads are managed, space is made to practice new skills or apply new knowledge, networking or mentoring opportunities are provided, and performance feedback is given regularly (Awoniyi et al., 2002; Baldwin & Ford, 1988; Ellinger, 2005; Facticeau et al., 1995; Holton III et al., 2007; Kirwan & Birchall, 2006; McCall, 2010). However, our findings indicate that there is an expectation for managerial behavior to automatically change following formal training and development activities without the need to actively support the process. They also indicate that there are insufficient opportunities to practice new skills and apply new knowledge learnt through formal training, therefore, reducing the effectiveness of the 70:20:10 framework to transfer learning and develop managerial capability. The responsibility to gain and use the learning is expected to lie with the manager who is being developed, rather than being seen to be a core part of the senior managerial role. The concept of taking ownership of one's own learning is widely advocated (Burke & Hutchins, 2007; Burke & Saks, 2009; Longenecker, 2004), but our study suggests that the lack of an appropriate work environment seriously undermines the capacity of the manager to self-manage formal learning transfer.

4.4 | Integration of experiential, social, and formal learning

The fourth challenge to the effectiveness of the 70:20:10 framework relates to the lack of integration of the three forms of learning. Our results clearly show division across these elements of learning. Firstly, experiential learning takes place without structure or support, which could be provided through social-learning activities. Secondly, social learning is not recognized as providing a potential link between formal learning and the workplace through the consistent modeling and discussion of espoused behaviors. Finally, formal programs are not supported by opportunities in the workplace to practice new skills and apply new knowledge, both of which could be achieved through structured experiential activities and increased social support.

When related back to the original practitioner literature and 70:20:10 implementation guidelines (70:20:10 Forum, 2015a; Jennings, 2011; Jennings, 2015; Lindsey et al., 1987; McCall, 2010; McCall Jr. et al., 1988; Rabin, 2014), this separation is hardly surprising. The necessity for all three types of learning to be present in any implementation plan is advocated, but the need for relationships between them is not discussed. From our findings, we propose that for the 70:20:10 framework to support effective learning transfer and result in management capability development, the three elements need to work together in a coherent, designed way. Results from the axial coding suggest that structured social-learning activities such as coaching, mentoring and networking as well as role modeling of those managerial behaviors espoused in formal programs offer a way to put structure around experiential learning and provide a working environment that supports learning transfer.

5 | CONCLUSION

Responding to calls for studies into practitioner approaches addressing learning transfer challenges (Blume et al., 2010) and effective transfer of learning and management development within the public sector, this study aimed to

gain insights into whether the implementation of the popular, practitioner developed 70:20:10 framework has led to improved public sector managerial capability development through learning transfer. Using a large qualitative data set that enabled the exploration of participant perspectives and experiences of using the 70:20:10 framework in situ, we found that, despite many Australian public sector organizations implementing the framework, to date it is failing to deliver desired learning transfer results. This failure can be attributed to four misconceptions in the framework's implementation: (a) an overconfident assumption that unstructured experiential learning will automatically result in capability development; (b) a narrow interpretation of social learning and a failure to recognize the role social learning has in integrating experiential, social and formal learning; (c) the expectation that managerial behavior would automatically change following formal training and development activities without the need to actively support the process; and (d) a lack of recognition of the requirement of a planned and integrated relationship between the elements of the 70:20:10 framework. We conclude that the social aspect of the framework is the "glue" that integrates formal and experiential learning and fosters a conducive work environment. The 70:20:10 framework has the potential to support public sector capability development, providing it is implemented with all elements of the framework fully integrated.

5.1 | Implications

This research has implications for both theory and practice. We have undertaken the first empirical study of a widely adopted practitioner framework, consequently creating the opportunity for theoretically informed progress in this aspect of HRD practice. In undertaking this study, we contribute to the literature by highlighting the role of social learning as a mechanism that potentially integrates formal and experiential learning, thereby enabling learning transfer. This extends Clardy's (2018) work by recognizing that not only does experiential learning need to have structure to be valuable, but also that such value develops by connecting it directly to formal learning via social learning.

In terms of implications for practice, the 70:20:10 framework has the potential to better guide the achievement of capability development through improved learning transfer in the public sector. However, this will only occur if future implementation guidelines focus on both the types of learning required and how to integrate them in a meaningful way. Actively addressing the impact that senior managers and peers have in how learning is integrated into the workplace through both social modeling and organizational support (Burke & Hutchins, 2008; Chiaburu & Marinova, 2005; Fecteau et al., 1995; Kirwan & Birchall, 2006; Watkins & Marsick, 2014) will also need to become a core part of any effective implementation.

5.2 | Limitations and future research

Future research could extend our contribution to the literature through addressing our study's limitations. Our findings may have been limited by our reliance on group interviews as a data source from one context. Although the group interview process added a dynamic to the conversation and helped individual participants make sense of their experiences, individual accounts may have been impacted by the contribution of other group members. In addition, the depth and richness of responses may have been impeded due to the group process. To address these issues, this study could be replicated using individual interviews alone, with results compared to see if individual and group interviews generate different findings.

While generalizing from this article is limited by its application to the public sector in Australia, it seems probable that the specific challenges of integrating the learning elements in the 70:20:10 framework, and more general issues with the application of social learning, as depicted in this article, could be experienced more widely. Future research should consider multiple contexts. More importantly, research needs to look at where there is integration of the types of learning to establish whether this increases effectiveness in the workplace. Ideally, a managed intervention and evaluation would be undertaken.

NOTES

¹In the literature, 70:20:10 is referred to as a framework, a model and a rule. In this article, we use the term, “framework,” as it reflects the objective to act as a guide to practice.

²The context for this study.

³Australia was established as a federation comprising a national level of government, called the Commonwealth and six state governments—New South Wales (NSW), Queensland (Qld), South Australia (SA), Tasmania (Tas.), Victoria (Vic.), and Western Australia (WA). It also comprises two territories—the Australian Capital Territory (ACT) and the Northern Territory (NT); and local government. There is a division of powers between the Commonwealth and state governments (see Buick, 2012).

⁴The information package and consent forms were prepared by the research team.

⁵Undertaken by two researchers.

⁶Due to the large data set, only those themes relevant to this article are presented.

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APPENDIX 1: INTERVIEW AND GROUP INTERVIEW PROTOCOL

1. What is your current role and what management experience do you have both with your current agency or the public sector more generally?

Objective: To establish the participant's experience with management development more generally and to gain a fuller picture of attitudes to management development within the Australian public sector.

2. We are particularly interested in the transition that occurs when an employee goes from having no, or only 1 or two, direct reports to supervising a team. Can you tell us what you think are the critical issues that occur for the (a) the individual and (b) the organization, at this time?

Objective: To gain thick descriptions of the transition itself and the issues that arise from the corporate support perspective.

3. What has the agency done to support managers and/or supervisors as they make this transition? How well do you think this has been working?

- a. A sub question if necessary will be—*what are the specific skills required for managers at this time and how well are they being developed and supported?*
- b. A sub question if necessary will be—*are people management and other transferable skills being considered at times of recruitment (including drafting the advertisements) or promotion? If so how and if not what are the implications of this?*

Objective: To identify what has been done and its likelihood of success. There should be a conversation about L&D offerings, their content, as well as the skills and behaviors needed and what changed if anything. The wider human resource issues of recruitment and development of skills should emerge.

4. In your view what has not been provided that should have been?

Objective: To explore areas that the interviewee thinks are lacking at the current time.

5. If you had the opportunity to influence upcoming management development strategy to support supervisory transition into the next decade what would you like to do and why?

- a. A sub question if necessary will be—*What skills do you think the managers will need that they do not have now and how will these be developed?*

Objective: To establish even more clearly what they think has worked, or not worked, and what they think managers will need in the next 10 years.
