

**Evaluating the Experience of Middle-Managers
towards the Competency-Based Self-Assessment in
the Malaysian Public Service**

By

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Abstract

Recognizing the critical role of civil servants in leading the public sector, the Malaysian Public Service (MPS) is examining ways in which it can ensure appropriate skills, knowledge, and attitudes are in place to lead the public service while also remaining responsive to socio-technical and economic changes. In keeping, the MPS has recently introduced a sector-wide training policy focused on competency development and self-regulated learning, which devolves responsibility for competency development to individual public service employees. One approach under consideration is competency-based self-assessment (CBSA) which is regarded as an appropriate tool to support civil servants acquire and develop competencies, and enhance public service productivity and delivery.

Drawing on Schön's (1983) reflection-in-action (RIA), and Killion and Todnem's (1991) reflection-for-action (RFA) framework, and Cheetham and Chivers' (1998) model of Professional Competence, this study examines middle manager's experience of CBSAs, with a view to informing future implementation in the MPS. Findings reveal that a holistic competency model with an embedded CBSA, alongside reflective practices, could be a useful tool in helping civil servants determine their development plans. This study also found a strong relationship between RIA and RFA in the self-assessment exercise, suggesting CBSA tools enable middle managers to understand their strengths and weaknesses towards professional growth and build connections with their work environments. Recommendations are offered for future workplace practices and research, noting the importance of ensuring close alignment with the MPS organizational culture and context.

Dedication

Buat Ayahanda dan Ibunda

*Doa-doamu senantiasa menemani dan merahmatiku
Semangatmu adalah pendorong dan tunjang kekuatanku
Cinta dan kasih sayangmu kekal diliang-liang romaku*

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List of Abbreviations

ADS	Administrative and Diplomatic Services
APS	Alberta Public Service
BEI	Behavioral Event Interview
BLKK	Training and Career Development Division
CBA	Competency-based Assessment
CBS A	Competency-based Self-Assessment
CIPD	Chartered Institute of Personnel and Development
CP	Contextual Performance
DLPPK	Government Officers Training Hall
DLS A	Public Service Human Resources Training Policy
DPMS	Human Resources Development Policy
HR	Human Resources
HRD	Human Resources Development
HRM	Human Resources Management
HRMD	Human Resources Management Division
HRMS	Human Resources Management System
ICT	Information Communication Technology
INTAN	National Institute of Public Administration
IWP	Individual Work Performance
IWPQ	Individual Work Performance Questionnaire
JPA	Jabatan Perkhidmatan Awam (Public Service Department)
LSP	Leadership Success Profile
MAMPU	Malaysian Administrative Modernisation and Management Planning Unit
MCS	Malaysian Civil Service
MMPS	Public Service Human Resources Development Council
MPG	Management and Professional Group
MPS	Malaysian Public Service
MRS	Malaysian Remuneration System
NEP	New Economic Plan
NOS	National Occupational Standards
NPAS	New Performance Appraisal System
NPM	New Public Management
NRS	New Remuneration System
NVQ	National Vocational Qualification
OECD	Organisation for Economic Co-operation and Development
PSCNZ	Public Service Commission New Zealand
PSD	Public Service Department
RFA	Reflection-for-action
RIA	Reflection-in-action
ROA	Reflection-on-action
SMD	Service Management Division
SSG	Support Staff Group
TP	Task Performance
UK	United Kingdom
US	United States of America
3E	Educate, Exposure, and Experience

Chapter 1 : Introduction

In the '12th Malaysia Plan' agenda¹, the Malaysian government set out a plan to become an innovative, market-driven, collaborative economy with highly skilled talent, an entrepreneurial community, strong governance, and sustainable development to ensure a decent standard of living for all Malaysians. The MPS, as government machinery, has a key role to play in coordinating, mediating, and implementing the 12th Malaysia Plan. To ensure the success of this plan, the MPS is tasked with transforming itself into a faster and more agile administration so it can respond to future challenges and meet the demands of its public (MAMPU, 2014). According to Deloitte (2018), agile administrations have an embedded culture and possess characteristics such as strategic thinking, innovations, adaptability, proactivity, and cross-functional team that enable them to respond to market demands and adjust to changing trends and challenges. An agile administration is one in which technological advancement is understood, disruption is expected, and better solutions are sought (Turqieh, Aoun, & Nasr, 2018). Additionally, in an agile public sector, public servants are expected to work within cross-functional teams, collaborate and leverage each other's skillsets. As they work in a team, each member retains their autonomy in their respective area, setting their own work pace and supervising their development activities (Turqieh et al., 2018).

The mandate for a more agile administration places a focus on the abilities of the MPS' workforces to respond to dynamic changes – for example, it asks, "is the MPS ready and does it have the abilities and skills to meet these demands?" and "what can be done to ensure MPS has the skills and knowledge necessary to meet changing demands?". In response, the MPS has tasked employees to independently take stock of their abilities and skills. Competency-based self-assessment (CBSA) is one mechanism currently being considered by the MPS to help public servants identify their strengths and weaknesses, address those gaps, and help them determine their development plans. Recognizing the need for adaptability and proactivity, the MPS has shifted towards a self-regulated learning training policy, with CBSA tools pivotal to

¹ The 12th Malaysia Plan is the 5-year national strategic socio-economic development plan for 2021-2025 focused on towards a prosperous society. The development plan revolves around three main dimensions; social re-engineering, economic empowerment, and environmental sustainability, which collectively enhance living standards of all Malaysians (MEA, 2019).

facilitating public servants to take ownership of their work and development activities. Within this framing, this research explores middle managers' experiences of using CBSA tools to help inform its future use and implementation in meeting future organizational skill demands of the MPS. More specifically, the research addresses four research sub-questions: (1) What were participants' reflections upon completion of the CBSA exercise? (2) What were participants' views with regard to the future implementation of CBSA? (3) What areas of competency were identified as requiring improvement? (4) What did the participants learn from the reflective practices incorporated in the CBSA exercise?

The research questions if CBSA should be applied alongside the new MPS training policy, and more importantly, it explores its impact on a sample of Malaysian public servants drawn from across various schemes, grades, and services.

In order to assess the organizational value of CBSA, it is important to examine the experience of middle managers. The rank of middle managers was chosen for two reasons. Firstly, research shows that middle managers' experiences and views are valuable in maintaining organizational effort continuity and contributing to policy-making (Koene, 2017). Their position in the organization (located below the top managers and above the first-tier supervisors and support staff), direct involvement in implementing changes, and getting first-hand feedback from staff and stakeholders contribute to the successful implementation of government policies. Secondly, middle managers' distinctive demands and challenges have molded individual employees to function and thrive in public organizations. Thus, their capability to function as middle managers has allowed them to operate and perform their ever-changing roles successfully while facing organizational and administrative challenges in the workplace.

This study contributes to our understanding of CBSA of how middle managers might utilize this tool in the MPS. This study draws on Schön's (1983) theory of reflection, which was further developed by Killion and Todnem (1991), and assimilated with the model of Professional Competence developed by Cheetham and Chivers (1998). The use of Schön's theory and Cheetham and Chivers' model provides an understanding of how the reflection processes can enable individual cognition in determining and developing future competencies development plans for middle managers. In terms of management practice outcomes, this study

provides knowledge for Human Resources Development (HRD) researchers and practitioners in helping to understand how CBSA tools can be included in assessment systems in a manner that helps managers independently assess their existing competencies and skills and help them determine their own development plans. The findings contained in this study advocate for employee training programs and formulating remedial intervention programs towards a self-regulated training policy.

This study provides crucial information for policy development in creating a faster and more agile MPS that potentially saves costs as budgets are carefully allocated to the most needed areas for competency improvements. The findings enable human resources practitioners (HRs) to develop policies and procedures that focus on improving the work of practices of the Management and Professional Group (MPG), particularly in the Administrative and Diplomatic Services (ADS). The implementation of CBSA alongside the self-regulated training policy will potentially save costs as it will eliminate duplication of HR standards and practices. CBSA would be an informed self-assessment for HRM and HRD to plan the MPS training programs and succession planning. At the individual level, CBSA will assist civil servants in identifying their own ability and capability, areas for improvement, and ultimately enabling them to plan for their development towards organizational success.

Chapter 2 : Literature Review

2.1 Introduction

This chapter reviews the theoretical underpinning and empirical evidence of CBSA. It is divided into three sections: first, an overview of self-assessment, second, an assessment of self-assessment as a tool in a competency-based approach, and finally, an assessment of the role of middle-managers. As the study seeks to understand the middle-managers experience of introducing and implementing a CBSA model, this study drew on Schön's (1983) reflection-in-action, Killion and Todnem's (1991) reflection-for-action framework, and Cheetham and Chivers' (1998) Model of Professional Competence in formulating the research framework – the rationale for which will be outlined in the research methods chapter.

2.2 Historical overview of self-assessment approaches

The origin of self-assessment goes several millennia back to during the Socrates (470-399 BC), Euclid of Megara (450-380 BC), and Antisthenes of Athens (445-365 BC) era. However, only in the 1930s was the notion developed and recognized as formal self-assessment (Brew, 1999; Sedikides & Strube, 1997). Despite the debate surrounding the notion of self-assessment, many scholars argue that self-assessment is still not widely used (Leach, 2012). Notwithstanding this, the concept of self-assessment has expanded and been defined in various ways (Eva & Regehr, 2008; McMillan & Hearn, 2008). Self-assessment is defined in a variety of ways in the literature From the year 1989 until 2017; scholars defined self-assessment differently, where self-assessment was used to describe various thought processes, measurement, procedure, inquiry, pedagogical strategy, quality assurance, and continuing professional development (Eva & Regehr, 2008; Falchikov, 2013; Leach, 2012; Silver, Campbell, Marlow, & Sargeant, 2008). For instance, Eva and Regehr (2008) described self-assessment as a thought process in which an individual evaluates his/her personality. Meanwhile, some self-assessment research relies on educational interventions or performance indicators that are not necessarily related to assessing an individual's aptitude. In contrast, in pedagogical studies, self-assessment is defined as an evaluative and descriptive act carried out by individuals concerning their working abilities, performance, and progress by comparing it to explicitly stated criteria or standards (Andrade, 2019; Andrade & Valtcheva, 2009). Variations in defining the term self-assessment,

as outlined above, have led to ambiguity and misconceptions, notably when self-assessment is assimilated with a different form of research (for instance, measurement, procedure, inquiry, pedagogical strategy, quality assurance, and continuing professional development) but related concepts (Eva & Regehr, 2008; Silver et al., 2008). Therefore, Eva and Regehr (2008) set self-assessment into three distinct perspectives in defining self-assessment. First, self-assessment is defined as an ability, where it is a personal and unguided ability to reflect on performance for the purpose of generating an individual's skills, knowledge, and understanding in a particular area. Secondly, they differentiate the use of self-assessment as a pedagogical strategy, which involves self-directed seeking and reflecting on feedback to direct performance improvements. Finally, self-assessment is defined as awareness of the current situation. These three perspectives have helped disentangle self-assessment misconceptions, widening and deepening our understanding of self-assessment as more than just a general, personal, and unguided judgment of ability. Self-assessment is also considered as key to pursuing lifelong learning and professional development, resulting in improved effectiveness and quality learning based on specific standards (Brown & Harris, 2013; Tillema, 2010). For instance, Boud (1995) defined self-assessment as an act of evaluating oneself and deciding on the next course of action involving learners to determine what is good work by meeting the appropriate standards in any given situation. Another definition provided by scholars, self-assessment, evaluates the worth of one's performance and identifies individuals' strengths and weaknesses, hence determining their own learning needs and finding resources for them to improve one's learning outcome (Davis et al., 2006; Klenowski, 1995; Ross, 2006). Defined this way, self-assessment is perceived as not just measuring one's ability but also for educational, developmental, and formative purposes. The conceptualization must incorporate internal and external data, standards, and resources to inform and judge performance (Sargeant, 2008). Because of vast development in the field of self-assessment, it is therefore essential to consider the historical overview concerning self-assessment, particularly when scholars note the essence of reflective activity and meta-cognitive skills in defining self-assessment (Brown & Harris, 2013; Sargeant, 2008). According to Eva and Regehr (2005), self-assessment is beneficial if learners are exposed to Schön's reflection-in-action phase of his reflective learning cycle, where they learn what they do not know while performing tasks and find out how to resolve it (Silver et al., 2008). Over time, the understanding of self-assessment has broadened from just a general ability judgment to using reflective practices in a self-assessment activity. Therefore,

the following paragraph will explain how reflection practices would advance and can be integrated into self-assessment activity and adapted into the working definition of self-assessment for the purpose of the study.

2.2.1 The role of reflection

Scholars posit that the self-assessment field will be further advanced if reflective practices are integrated with pursuing lifelong learning and professional development plans by defining, understanding the importance, and learning how to perform effective reflections within a given context (Eva & Regehr, 2005; Silver et al., 2008). The beginnings of reflective practice can be traced to Dewey (1933), who described the concept and how it could help individuals develop thinking and learning skills. Dewey defined reflection as “the active, persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further consideration to which it tends” (Dewey, 1933, p. 118). Drawing on Dewey’s work, Schön (1983), further identified reflection as a way for practitioners to question the tacit understandings and make sense of the situation of uncertainty or uniqueness. He introduced reflecting on experiences in gaining knowledge and developing skills professionally (Schön, 1984). Indeed, Dewey (1933) and Schön (1982) are amongst the early reflective scholars who introduced and led towards the development of ways and means to perform effective reflective practices (Bubnys & Zavadskienė, 2017; Desjarlais & Smith, 2011). As the interest in reflective practices continues to grow to new theories or practices in the 1990s, the ultimate goal of reflective practices is to understand an experience or situation better, hence improving the quality of performance. Therefore, reflection can be defined as a mindful, continuous process of focused, systematic thinking and meaningful learning process from direct experience, analyzed, and the insights gained are used to understand better and adjust actions (Bubnys & Zavadskienė, 2017; Chalikandy, 2014; Desjarlais & Smith, 2011; Zwozdiak-Myers, 2009). Reflection is also a process where people review their past behaviors and generate new ideas, thus fulfilling a purpose and achieving some anticipated outcome (Juan, 2012). In doing so, we also need to understand what characterizes a successful reflective practice.

According to Eyler, Giles, and Schmiede (1996), successful reflection is characterized as continuous, challenging, connected, and contextualized practices (Collier & Williams, 2005). They argue, firstly, that the reflection process should be continuous, practiced before, during,

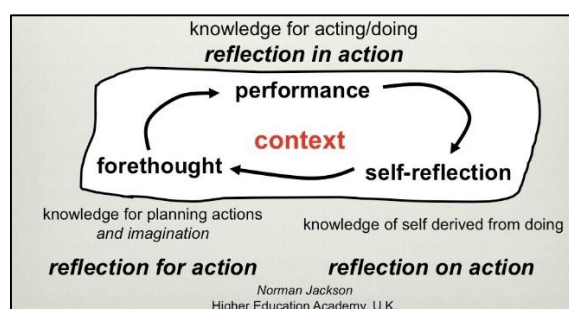
and after an experience of performing tasks, so that the insights gained can be more useful. Secondly, reflection should be challenging. At the individual level, based on experiences, reflective practices allow individuals to become a self-grower going beyond their comfort zones in search of significant discoveries or insight about oneself, one's behaviors, and value or knowledge gained, thus improving performance (Collier & Williams, 2005; Desjarlais & Smith, 2011). As Dewey (1933) argued, to understand an experience, one should understand how he or she is connected or affected by the experience. Therefore, it is crucial to challenge and place yourself in the process of connecting current situations and experiences or knowledge to achieve the desired goal. Thirdly, successful reflection could serve as a link between what individuals have learned and what they are experiencing in the community, hence modifying actions towards growth—this aligned with Raelin (2002), who posited that reflective practice is a public and open process. According to Raelin (2002), the experiences that transpired are not just individual experiences but also to others in our immediate environment. Finally, reflection is contextualized, in which it is practiced in its utmost manner for the context that takes place. Based on these characteristics, it is vital to recognize the need for reflection as it will determine the most appropriate reflection process that will be undertaken within a context. For instance, in the professional working environment, to avoid biases and errors and have a successful reflection, the individuals' continuous interpretations, evaluations, and assumptions are subject to the review of supervisors, which should also be aligned to the organization's goals and missions. Nevertheless, whether it is an individual or collective experience when one understands its importance, reflections provide learning opportunities to a certain extent; in other words, reflection is to gain clarity and fully learn from experiences, thus providing directions to their growth (Amulya, 2004; Bubnys & Zavadskienė, 2017; Dewey, 1933).

Dewey (1933) identified five phases of systematic reflection, including problem, suggestions, reasoning, hypothesis, and testing (Bubnys & Zavadskienė, 2017). Similarly, Zeichner and Liston (1996) propose five levels of reflection, including rapid reflections, repair reflections, discussing issues with colleagues, taking action, and making conclusions for future plans. Although there are differences in terms of the terminology used to describe the levels or phases of reflections, the systematic reflection process posited by Dewey (1933) and Zeichner and Liston (1996) is to solve problems (Chalikandy, 2014; Hébert, 2015). In contrast, Schön's reflective theory highlighted two types of reflection processes used by reflective practitioners

as a tool to revisit experiences: reflection-in-action (RIA) and reflection-on-action (ROA). He characterized RIA and ROA, primarily by when the reflection occurs (Reagan, 1992). The RIA is a reflection on spontaneous acts while doing or performing a task. The RIA is somehow opposed to the notion that reflection is not a spontaneous activity. People spontaneously reflect when facing a significant life crisis, or something has gone wrong, or fear of failing (Chalikandy, 2014). However, according to Schön (1982), in becoming a reflective professional, one should practice RIA as it allows professionals to explore their experiences and responses as they occur. In contrast, ROA is referred to as thinking after the event or practice is completed in which professionals consciously review, describe, and evaluate their experience, thus improving future practices (Bubnys & Zavadskienė, 2017; Desjarlais & Smith, 2011; Killion & Todnem, 1991; Schön, 1983). In a nutshell, Dewey's reflection is a logical method for making sense of situations, particularly difficult-to-explain scenarios of events or experiences and asks questions to better understand why things happened the way they did and what actions might have resulted in a different outcome. Schön, on the other hand, saw reflection as a tool for practitioners to enhance their work and become more skilled at what they do. Reflective practices that are repeated allow practitioners to develop a large repertoire of rehearsed interventions based on previous experiences and scenarios. Conceptualized this way, the theory holds that over time, practitioners will become experts at what they do and ready for new challenges as these repertoires enable them to act and react appropriately.

Building on Schön's theory as a foundation, Killion and Todnem (1991) recognized reflection in three directions. They recognized both RIA and ROA types of reflections as sources of the experienced metacognitive process. At the same time, they proposed reflection-for-action (RFA) as the third type of reflection to guide future action (Juan, 2012; Reagan, 1992). According to Killion and Todnem (1991), RFA reviews what has been accomplished and identifies constructive guidelines to succeed in the given task in the future. Figure 2.1 explains how the process of reflective practice works in a circular activity. According to Juan (2012), a practitioner should possess basic knowledge on reflecting that focuses on a specific issue, allowing them to reflect on their own behaviors, and make new action plans. Indeed RIA and ROA are central for improving behavior and performance in future tasks. However, RFA demonstrates the forward-looking nature of both RIA and ROA, which promotes revitalization and ongoing professional development.

Figure 2.1 *Process of Personal Theory Building*



Source: Killion, J. and Todnem, G., 1991

In pursuing lifelong learning and professional development, reflection allows us to begin and see ourselves, hence understanding where we have been, what we have experienced, and where we go from here. As scholars have generated and experimented with ideas and techniques of becoming reflective practitioners, this self-understanding process encourages individuals to conduct non-judgmental observations to discover, analyze, and select the development plan with their own self-projected values and impositions. Indeed, the concept of reflective practice, particularly described by Schön (1983) of RIA and ROA, and the RFA by Killion and Todnem (1991), supports the notion posited by Eva and Regehr (2005) that self-assessment will be more beneficial if learners were exposed to and can conduct this self-understanding process. However, as Desjarlais and Smith (2011) noted, one should not be confused with both self-assessment and reflection, as they have different purposes, motivations, and goals in practice. People are internally motivated to reflect to gain insights, and the process could be kept private in practice. In contrast, self-assessment is often motivated by others (mentors, colleagues, or supervisors) and used as a tool to identify areas for improvement, where the results should be shared with others for development purposes.

Despite the differences, self-assessment and reflection share some similarities, such as structured, sequential, and targeted in process, that describes what, why, and how it should be conducted, which lead to meaningful processes of improving quality of life (Desjarlais & Smith, 2011). Indeed, variations of self-assessment definitions and their related concepts (particularly reflection) may have contributed to current ambiguity and misconceptions. However, as Lingard and Haber (1991) remind us, this imprecision can be overcome with terminology and language that is used to describe or define self-assessment since it shapes the

ideas and practices that follow from them (Lingard & Haber, 1999). Despite the variations of definitions, terminology, and language used, and field of studies, the notion of self-assessment of the modern days is akin to how Socrates, Euclid, and the Antisthenes initially viewed self-assessment in so far as self-assessment is referred to as accurate knowledge of oneself, which should be sought and attained through intense self-examination, regardless of its favorable or unfavorable implications (Sedikides & Strube, 1997). According to Sedikides and Strube (1997), self-assessment is used as a motive in which people select self-relevant information, gauge its authenticity, draw conclusions about themselves, and make plans for the future. Inspired by this ancient philosophy and its developments, and banking on the benefits of reflection, as people are motivated to acquire a consensually accurate evaluation of the self, self-assessment could be a valuable tool in identifying an individual's strengths and weaknesses and as a source to reflect and determine their development plans. Therefore, building on the definitions of self-assessments as provided by Eva and Regehr (2005), Davis et al. (2006), Silver et al. (2008), and Desjarlais and Smith (2011), the working definition for self-assessment applied in this study is:

Self-assessment is an act of evaluating the value of individuals' performance and identifying their strengths and weaknesses to determine learning needs and development plans.

2.3 Self-assessment and competency-based approaches

Despite evidence to suggest that self-assessment is a reliable assessment technique and its accuracy can improve task familiarity over time, many have noted that self-assessment is an ineffective assessment technique when performed in isolation (Fitzgerald, White, & Gruppen, 2003; Holmboe, Sherbino, Long, Swing, & Frank, 2010). In the competencies studies, self-assessment is tightly integrated into the assessment system that is embedded in the competency model across the professional development continuum to improve organizational and individual performance (Leigh et al., 2007). As a result, self-assessment is typically included as part of the assessment systems in the organization's business models, quality excellence model, or competency model. Hence, it is helpful to explore the origins of competency and competency management, particularly the competency-based assessment (CBA) of how it

expanded and benefited individuals and organizations towards growth and improvement in performance, specifically public organizations.

2.3.1 Historical developments

According to Horton (2006), the concept of competency began to expand during the industrial revolution. As the world transitioned from an agrarian and handicraft economy to industry and machine manufacturing, new jobs started to emerge, and new skills and knowledge were needed to do these jobs. In response to this changing nature of works, decision-makers need to understand, educate, motivate and prepare people on how to organize for their assigned jobs and workplace (Council, 1999; Horton, 2000). The origin of the industrial revolution may have started in the United Kingdom (UK). However, the concept of competency started to rise in the United States (US) when social efficiency became a dominant social idea in the US in the 1900s. In pursue of economic efficiency, the living standards have also risen dramatically, where people (including employees) have become more sophisticated and demanding. In order to maintain business and employees' efficiency, Frederick Winslow Taylor, known as the father of scientific management, introduced procedural quality standards documentation and believed that employees should be rewarded for increased productivity and incentivized any suggestions of task improvement in the workplace (Wilcox, 2012). Indeed, all of these elements were associated with the rise of the concept of competence, particularly in the US.

In the US, new emerging jobs (due to the industrial revolution) and the lack of definition of the existing job requirements (particularly in the civil service) led the US Government to initiate occupational analysis to improve the selection, recruitment, and placement processes (Council, 1999). Occupational analysis was introduced to understand the structure of work, characteristics of jobs and identify skills and knowledge needed to effectively do these emerging manufacturing and existing jobs (Council, 1999). As a result, the occupational title dictionary, which identified knowledge and skills, was published in the 1930s under the Roosevelt administration (McLagan, 1997). The occupational analysis concepts and methodologies were further elaborated and refined in the 1950s and 1960s (Council, 1999; Fine & Cronshaw, 1999). In the 1970s, the competency movement efforts became more apparent in the US as there were national skill gaps and a decline of competitiveness in the working context (Horton, 2000). The focus was on comprehending the foundations of excellence of individuals

that matched society and the economy's needs, thus enabling them to perform effectively. Henceforth, national skills standards were established and replicated across all occupations focusing on developing individuals' potentials for a high-quality, high-skilled, and high-performing workforce. In the early 1980s, the US had already moved towards strategic management as the a cornerstone to competitive success, where tangible and non-tangible resources were strategically managed and coordinated for desirable outcomes. By then, Prahalad and Hamel (1990) had advanced the US competency movement efforts from recognizing individuals' potentials to managing organizational competencies by introducing the concept of core competencies. As a result, organizations started to identify, establish, apply, and share their core competencies amongst the employees (Prahalad & Hamel, 1990). Their work has made learning in organizations possible as employers and employees begin to collaborate and learn to find similar interests, discuss common issues, and leverage both parties' competencies.

Meanwhile, in the UK, the competence movement only started in the 1980s and can be traced back to the UK government-sponsored youth training programs using a competency-based approach in response to growing skill gaps, rising unemployment, and poor economic performance in the country (Horton, 2000; Lester, 2015). Additionally, the mid-decade National Vocational Qualification (NVQ) review revealed an urgent need for more flexible training programs focusing on outcomes. Hence, large-scale research and functional job analysis were undertaken to identify abilities required to perform a role that could be observed, assessed, trained, and developed. As a result, competency-based youth training programs were developed to improve the existing industrial training programs to train and prepare young people for the workforce. Consequently, the National Occupational Standards (NOS) were also established as guides in implementing competency-based approach training programs. However, since the first inception of the competence-based framework in various UK training programs, it was reported that the new standards were meant for higher-level occupations and insufficiently flexible to carry out in various workplace contexts (Lester, 2015). However, on a positive note, the new approach is practical when work practices standard is needed, such as assessments or performance management.

2.3.2 Defining competency and competence

The UK movement concentrated more on the output, thus uses the term of competence to describe a person's proficiencies demonstrated within an occupation or job function. Unlike in the US, the term competency is used as it focuses on the input, a person's abilities, and attributes that enabled them to perform the job. Due to these differences in perspectives, driving forces, and practices in the UK and US, scholars have no consensus in defining those terms. According to the Chartered Institute of Personnel and Development (CIPD), there were attempts by researchers and HR professionals to differentiate the terms competency and competence (CIPD, 2021). Distinctions between the two terms were made as competency focuses on the inputs. In contrast, competence focuses on a broader concept of the performance output. Over the years, competency and competence have been defined differently, and there is no consensus on these definitions in the literature. The words competency and competence are found to be synonyms and used interchangeably in competencies studies, yet have differences in perceptions and approaches to competency.

To date, there are substantial definitions for both competency and competence in the literature ever since White coined the concept of competence in 1959, and it was McClelland (1973) who made a breakthrough in competencies studies. Competency and competence are often associated with the individual, behavioral characteristics, ability to perform tasks, and job performance. However, most of these definitions are defined either in general or explicit terms following three different approaches that were developed independently: the behavioral approach, functional approach, and holistic approach (Prifti, Knigge, Kienegger, & Krcmar, 2017). First, the behavioral approach focuses on the inputs or attributes that an individual brings to perform the job effectively, which can be observed in most *competency* definitions as a collection of attributes (Dante & Ignacio, 2012; Prifti et al., 2017). For instance, McClelland (1973) highlighted personal traits, and Boyatzis (1982) and Dubois (2002) explicitly listed the behavioral characteristics (such as knowledge, skills, mindsets, social roles, and others) that an individual has that leads to effective job performance. These individual attributes are either possessed or can be acquired through learning and development (Boyatzis, 1982; Spencer & Spencer, 2008). Secondly, the functional approach focuses on the know-how and the must-haves competencies for successfully performing the tasks by outlining the set of competencies required for the task. This second approach can be seen in the competence definitions, mainly

focusing on the demonstrable performance output prescribed to a minimum standard to perform effectively (CIPD, 2021; Fletcher, 1991). Finally, the holistic or multidimensional approach regards competency as a collection of individual and organizational competencies to achieve the desired results or outcome. This final approach can be observed in the more recent definitions found in El Asame and Wakrim (2018) and Sudirman, Siswanto, Monang, and Aisha (2019). To summarize, competency is a combination of skill, knowledge, performance, and context that an individual possesses or is required to do an activity appropriately within a specific context (El Asame & Wakrim, 2018; Sudirman, Siswanto, Monang, & Aisha, 2019). Although this definition does not explicitly mention the organizational competencies, the term “specific context” could be referred to as the organizational competencies.

According to Prifti et al. (2017), these three competency approaches developed independently, resulting in differences in perspectives, driving forces, and practices. For instance, the behavioral approach may be effective in US organizations, while functionalizing the job know-how works better in the UK (Dante & Ignacio, 2012; Prifti et al., 2017). However, despite the differences, the aim is to instill, develop skills standards and enhance the level of knowledge needed to perform work-related duties successfully. Additionally, it also helps understand the history and development of competency, as competency is often associated with job performance and exists in a degree of proficiency that differentiates performance levels; today, we are able to identify what and the level of knowledge, skills, and behavior are expected from employees to perform jobs effectively (Krampen, 1988; Woodruffe, 1993b). As the understanding of competence and competency grew, scholars began to view competency from a holistic standpoint as related concepts by assimilating how organizations thrive by leveraging individuals' inputs (relevant competencies) and what is expected from job performance, hence creating collaboration and learning opportunities. Furthermore, according to Woodruff (1993b), if there is no clear definition of job performance, there is no technique that can be employed in identifying competencies. Hence, job analysis techniques were developed to measure human intellectual capabilities in performing jobs or tasks (Hoge, Tondora, & Marrelli, 2005). To name a few, Job-element Approach (Primoff, 1958), Position Analysis Questionnaire (McCormick, Jeanneret, & Mecham, 1969), and the Behavioral Event Interview (BEI) that distinguished outstanding and average performers (McClelland, 1973; Shippmann et al., 2000; Spencer, McClelland, & Spencer, 1994). These job analysis techniques focus on

how jobs are effectively and successfully performed and assess current competencies, hence determining future job performances (McClelland, 1973). In addition, these techniques also address criticisms of the usage of credentials and academic tests in the selection and promotion processes that were found biased against subgroups such as gender, racial, and socioeconomic status (Marrelli, 1998; Shippmann et al., 2000; Spencer et al., 1994). Therefore, today competency and competence are no longer seen as different approaches but related concepts where organizations and employees thrive, learn and leverage both parties' competencies (Prahalad & Hamel, 1990). Although this study focuses on the individual (middle manager) professional competencies and development, one will not reach his maximum potentials if those competencies are irrelevant or not aligned with the public organizations' strategies and priorities. Furthermore, self-assessment will be an ineffective technique when performed in isolation. Hence, instead of defining the word competence or competency, this research employed the holistic approach standpoint as posited by El Asame and Wakrim (2018) and Sudirman et al. (2019). For the purpose of this study, the definition of competency is a combination of skill, knowledge, performance, and context that an individual possesses or is required to do an activity appropriately within a specific context.

2.3.3 Competency-based management

CBM involves a system of identifying and determining competencies required for jobs, hence ensuring organizational success (Skorková, 2016). Similar to the approach applied to defining competency, scholars characterized competency management by how competency is approached, namely individual and organizational approaches. As competency is widely characterized by knowledge, skills, and ability, Van Sluijs and Kluytmans (1996) developed a framework to differentiate CBM approaches (Hondeghem & Vandermeulen, 2000). According to Hondeghem and Vandermeulen (2000), the first approach focuses on the individual approach to competency. They define competency as an individual characteristic, potential, knowledge, and skills in general. An individual needs to have competency or competencies for life survival. It could be anything as long as it helps a person complete tasks, bring them from one point to another, or achieve their goals. However, not all individual competencies are relevant or aligned to organizations as they have their unique mission or vision that distinguish them in the industry. These unique missions or visions often spell out the core competencies of the organizations. The second approach popularizes the concept of core competency that Prahalad

and Hamel first introduced in 1990. Here, organizations with integrated and applied knowledge, skills, and ability, tend to hire individuals with the same core competencies or values as they believe in making significant contributions and have potential access to a broader and variety of business opportunities. In contrast, the third approach refers to the organizational approach to competency as a collective of organizational characteristics that delivers a sustainable competitive advantage that combines knowledge, skills and ability, administration systems, and technologies. In this context, competency management is best defined as developing individuals and organizational knowledge, abilities, and attitudes (Hondegheem & Vandermeulen, 2000; Van Schaardenburgh & Van Beek, 1998). As defined by the Income Data Services (1997), if combined, the individuals and organization competencies shall create a unique framework and foundation for HR management activities such as recruitment, assessments, and training and development (De Beeck & Hondegheem, 2010a). As the study employs a holistic view of competency, defining competency management will employ how scholars approach competency management, which holistically combines individual and organizational competencies. In other words, the organizational-competency or macro-competency (Horton, Hondegheem, & Farnham, 2002). Individuals are born with different and unique personalities, thus different in the level of competencies. Individuals, being part of the societal organizations, these unique personalities, and competencies, support the existence and build organizations' core competencies, creating more opportunities for organizational success. As the business grows, people will also grow, they will learn new knowledge, and there is a need to enhance their current skills and knowledge. Therefore, to pursue a more sustainable competitive advantage, organizations should consider the macro-competency approach and integrate HR policies and practices with the organizations' business strategy (Vakola, Soderquist, & Prastacos, 2007).

2.3.4 NPM and CBM in the public service

CBM practices were only formally established in the US public organizations during the 1980s, while in the UK, a decade later. The adoption and implementation of CBM practices in public organizations were largely driven by the governments' reaction to political challenges, globalization, and the increased international competition. At about this time, UK governments introduced NPM that changed the functions, roles, and management of the public sector (Ferlie, McLaughlin, & Osborne, 2001; Hondegheem, Horton, & Scheepers, 2005; Horton, 2006;

Horton et al., 2002; Hyndman & McGeough, 2008). In response to these global changes in public sector, NPM prompted public services to embrace the importation of ideas and management techniques developed in the private sector, changing traditional public service by introducing new market-based accountability and result-oriented administration to improve overall efficiency, effectiveness, and trust in public organization (Ferlie, 1996; Hyndman & McGeough, 2008; Pollitt, 1990). As a result, new organizational forms, natures of work, responsibilities, and work cultures emerged that fragmented public service sectors into autonomous or semiautonomous agencies, resulting in different priorities and management approaches (Flynn, 2005). Consequently, public sector organizations began to focus on identifying and developing civil servants' skills and competencies while keeping professionalism and ethical commitment (Ferlie, 1996; Horton et al., 2002; Shikova, 2020). The introduction of NPM significantly influenced how public organizations function, including their HRM practices, and the skills and competencies needed by civil servants. Indeed, NPM led to the rise of CBM and the development of competency standards, frameworks, and models in public organizations in order to produce high-performing and accountable government.

Driven by global factors (politics, economy, and social), NPM has become a generic language to describe public sector reforms worldwide, as has CBM as a tool to produce high-performing and accountable government. At the end of the 1990s, CBM had become an international phenomenon. Many governments, including the Netherlands, Germany, France, Italy, Finland, Sweden, Belgium, Poland, Korea, Australia, New Zealand, and Canada, have adopted competency management as part of their modernization of public administration strategies to create a high-performance workplace that responds well to wider social, economic, political, and technological changes. However, as an OECD (1996) report notes, NPM strategies are highly context-specific, determined by cultural and institutional elements that influenced CBM in practice (Abdul Ghani Azmi, 2010; Bach & Kessler, 2007; Horton, 2006; Horton et al., 2002). Therefore, given distinctive cultures and contexts, competency management in practice has yet to be implemented holistically, frequently resulting in a more fragmented or ad-hoc adoption (Horton et al., 2002). For instance, the UK, Belgium, Poland, and the Netherlands are amongst the countries that benefited from managing people to identifying required competencies as public servants. However, it was also highlighted by Hondeghem and Parys (2002) in their competency management study in Belgium that the cultural context does limit

the transfer of people management from one country to another. Similarly, in Germany and France, cultural, legal, structural, and complex administrative are amongst the factors of resistance in adopting the practice of competency management in those countries. In summary, despite the challenges and differences in the approach to competency-based management, the convergence of private and public employment practices has led public organizations worldwide to valuing the workforce in concentrating on employees' skills and competency development and creating a high-performance workplace, which competent and professional public servants can only ensure. As public servants are the key factor of the success in creating modern and flexible public organizations, it is important to consider the unique organizational environment, cultures, and contexts to gain their acceptance of any plans of competency-based approach strategies.

The shift to CBM transformed traditional HR personnel management into strategic HRM. Additionally, it complemented the performance-based approach in NPM whereby performance is measured based on the effectiveness of the use of inputs or resources (employees, money, and equipment) to produce outputs (including activities, products, and services) to achieve the desired results or outcome in line with the organization's objectives (or targets) (Horton et al., 2002; Hyndman & McGeough, 2008). As cited by De Beeck and Hondeghem (2010), some scholars considered that the shift is a change from a work-based to a competency-based organization, which places a greater focus on people's traits and organizational performance rather than set occupations. For instance, a job's profile only describes what is done and what knowledge, skills, and responsibility are required for the job. Meanwhile, a competency profile describes the job and explains why and how the job is done. Additionally, besides knowledge and skills, the competency profile also highlights personality, attitude, values, and norms required for the job, and the incentives upon accomplishing the job.

CBM views a job or an occupation as work and a career beyond just monetary benefits. Work and career involve efforts and progress towards work satisfaction and self-worth, thus increasing public servants' employability, leading to fulfilling professional goals and greater organizational performance. Hence, competency management is found in various HR processes: recruitment and selection, training and development, succession planning, remuneration, performance management, and career development (De Beeck & Hondeghem,

2010a; Draganidis & Mentzas, 2006; Marrelli, 1998). These HR processes identify competencies required for effective performance and develop those competencies. Although competency management has been accepted in the public service, adopting and implementing competency-based approaches are very selective in strategic HR practices attracting and retaining competent public employees. The use of competencies is found mainly in recruitment and selection officials, training and development programs, workforce planning, talent management, and career development, while performance evaluation and remuneration remain limited (de Beeck & Hondeghem, 2010b; Skorková, 2016). The main reason for the selective usage in HR practices is the difficulties in identifying competency, constructing the framework and integrating with policies and strategies, and the commitment of the public management leaderships (de Beeck & Hondeghem, 2010b). According to De Beeck and Hondeghem (2010b), today, competency management is well integrated into the government's (referring to the OECD countries) HR systems designed in a framework or a model, despite the difficulties and challenges in implementing competency management in the public sector, potentially to be improved further.

Competency frameworks or models help public organizations take a more coordinated approach to improve government quality and competitiveness, making competency management an essential HRM tool (Vathanophas, 2007). There are numerous competency models depending on the competency approach, type, and purpose of implementing competency-based management. Dante and Ignacio (2012) suggested five types of competency models based on the workplace, behavioral, business strategy, cognitive and motivational, and the holistic approach. Each competency model has its strengths and limitations based on the distinctive culture and context of the public organizations.

The workplace-based model emphasizes the business itself as the objective and functions are formulated based on the job, market, technology, and social institutions. On the other hand, the behavioral-based model highlights the employees' abilities and capacities established by the excellent performers in pursuit of organizational success. This model highlights individuals' abilities, but the abilities are only confined to what is described in the job description, not what they really can do. Meanwhile, as the business strategy model focuses on the core competencies and requires certain competencies from employees, organizations appear to be objective in

managing their employees as judgments made are based on concrete justifications. However, in the process of managing employees objectively, organizations may neglect the most significant aspects of the employees' characteristics, such as virtues, personality, and others that could also contribute to organizational success, whereas the cognitive-motivational models only mentioned individuals' capability and readiness for action and interpretation. These still do not explain how an individual learns in his job or how an organization might generate integration between employees and the core business.

Finally, the holistic approach-based competency model highlights the intricacy of integrating knowledge, abilities, and skills as an approach to competencies. It recognizes that the individual's ability to learn and re-learn, combined with his ethics, values, and reflective practices, allows him to succeed or not, thus developing themselves for organizational success (Dante & Ignacio, 2012). In a nutshell, regardless of the types and diversity of competency models, little evidence shows that implementing one particular competency model compared to other models results in higher success rates as it depends on the purpose of the establishment of the competency model in the organization (Bradley et al., 2008). As a standardized requirement to carry out jobs, an organization's competency model should be easily understood, visible and applicable, future-oriented, aligned, and reflect its goals and strategies, thus benefiting the stakeholders (including employees, managers, and organizations) (Woodruffe, 1993a, 1993b). Apart from providing a common language amongst stakeholders and improving public organizations' competitiveness, the benefits of the competency model stated in the literature include helping create a culture of continuous self-development and conceptualizing values and ethics in more concrete terms (de Beeck & Hondeghem, 2010b).

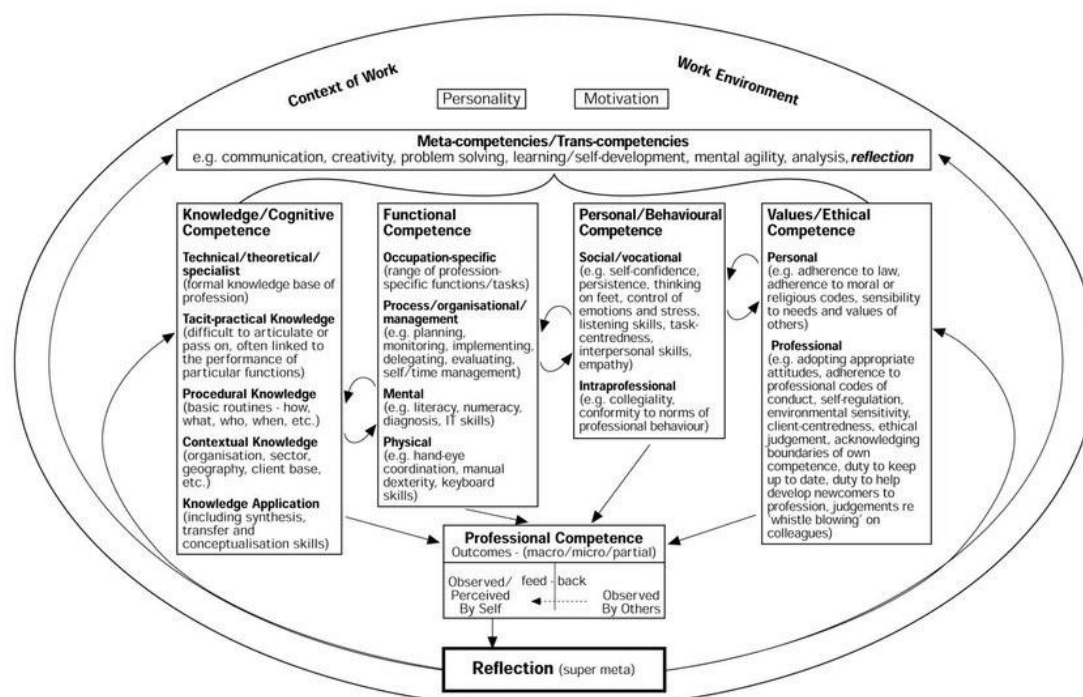
Maintaining a distinctive public sector brand is important as these require a sense of working in the public interest, service-oriented, mission-driven management, with strategic planning and political wisdom (Page, Kolb, & Wilson, 1994). Public servants also have to manage and lead in a highly politicized environment, making their jobs more ambiguous and challenging than their private-sector counterparts (Mau, 2015, p. 7). The particularity of being a public middle manager is being able to operate successfully in the ever-changing politics, economics, social condition, trends, and keeping abreast of technology innovations, yet maintaining professionalism. Hence, it is recommended that a competency model be integrated with core

public service principles like integrity and loyalty, as well as other specialized competencies (political knowledge, and public service managerial and professionalism) that support the growing emphasis on public governance (de Beeck & Hondeghem, 2010b). Furthermore, according to Skorková (2016), managerial competency receives greater attention than specific or technical competencies required for the position because the quality of managerial work substantially impacts the organization's success. Thus, a competency model ought to be the result of the competency identification process that determines and explains the behavioral competencies and specific abilities (comprises of knowledge and skills) needed for a specific job, ensures successful work delivery in the organization, and promotes labor mobility (Dante & Ignacio, 2012; Rothwell & Lindholm, 1999; Skorková, 2016; Woodruffe, 1993b). Additionally, Skorková (2016) argued that the competency model should have a clear definition of each competency and measurable, as it would help individuals evaluate, improve and develop themselves. Therefore, from the aforementioned competency models and based on what public service's specificity ought to be, it can be concluded; that the holistic approach competency model permits its direct application on how they acquire and maintain their professional competencies as public middle managers. However, no single competency model fits all, as differences in culture, context, legal system, and structures need to be considered in establishing a competency model. Therefore a competency model should not just be a list of competencies needed to perform jobs successfully or have all the necessary characteristics of a holistic model aligned with the organizations' mission and vision.

The aforementioned holistic competency model can be referred to as the empirically tested holistic model of professional competence based on the work of Cheetham and Chivers (1998), as shown in Figure 2.2. In creating a holistic model of professional competence, the model combines reflective practices with the strengths of various competency-based approaches, including functional, behavioral, cognitive, ethical, and meta-competence (Chivers & Cheetham, 2000). The reflective practices in this model are based on Schön's (1982) reflective theory of how professionals operate and solve problems using their formally learned specialties and technical knowledge (Cheetham & Chivers, 1998). Cheetham and Chivers (1996) further explained that the various competency-based approaches incorporated into the model are functional, behavioral, cognitive, and ethics. First, the functional competency-based approach or job competence model mainly follows the UK occupational standards, equipped with the

specification of knowledge, skills, and understanding for effective performance. Secondly, the US-influenced behavioral competency-based approach focuses on personal abilities in performing a range of work-based tasks towards effective performance, as posited by McClelland (1959) and Boyatzis (1982). Thirdly, the cognitive competency-based approach highlights a particular profession's underlying technical and tacit knowledge and the ability to use that knowledge in a related context (such as organizations, workplaces, or industry). Finally, the ethical competency-based approach focuses on having suitable personal and professional values and making informed judgments in work-related situations. Indeed, these four core components are interlinked, and to some extent, dependent on each other that spell out occupational standards, individual competencies (skills, knowledge, and attitude) and provide professional guidelines in performing work-related tasks effectively. However, these four core components are incomplete in function without the overarching meta-competencies, such as communication, self-development, mental agility, and reflection. These meta-skills are important as they are pre-requisite skills needed to acquire other skills and produce outcomes observed either by oneself (reflection) or others in feedback forms (Cheetham & Chivers, 1998; Hall & Mirvis, 2013).

Figure 2.2 *Model of Professional Competence*



Source: Cheetham and Chivers, 1998

A competency model should assist employees in conceptualizing and operationalizing competency, establishing individual and team accountability, and motivating and positively impacting employee performance, which can be viewed in the holistic Model of Professional Competence by Cheetham and Chivers (1998) (Darbi, 2012). Based on research, professionals in practice often refer to the basic theory that they have been exposed to and improvised, particularly when facing unique situations (Chivers & Cheetham, 2000). According to Chivers and Cheetham (2000), competency models are useful for employees to analyze development needs or plan professional programs. In addition, the models aid in understanding and providing fresh insights into various approaches to competency both in work and work environments. Although the Chivers and Cheetham model did not explicitly highlight the use of self-assessment as a tool, it is conceptualized in the form of reflective practices. For instance, professionals use reflection against any of the core components at any stage of professional activities to reflect on past behavior or experience. This may lead to behavior modification and improvement in professional competence within both work and work environments (Cheetham & Chivers, 1998). Consequently, the reflection's outcomes were depicted as feeding back into the fundamental components and meta-competencies. Therefore, this model could potentially be replicated, modified, and implemented as a tool in guiding civil servants to self-assess and reflect on themselves in identifying areas of improvement and determining professional development plans to maintain their professional competence.

2.3.5 Competency-based assessment

As the competency model facilitates HR practices, CBA, on the other hand, is the essential tool in conceptualizing, managing, and implementing competency models in organizations. In other words, competency standards of a particular job are conceptualized and operationalized in assessment procedures (Masters et al., 1990). Apart from optimizing HR management and training activity, Russo (2016) explained that CBA is also used to analyze business processes, assess employees to better use and distribute business resources, and promote the mobility of employees and organizations. The CBA approach is popular in medical training, education, and other fields governed by professional bodies as it provides useful alternative time-based models and constructing training programs for preparing professionals (Bradley et al., 2008; Gruppen, Mangrulkar, & Kolars, 2012). As the approach has proven its success in assessing and improving academic programs, teaching, and learning methodologies in those fields, many

public organizations are starting to embrace the approach, particularly HR management and development, to enhance service delivery and increase public satisfaction (Dunning, 2014; Russo, 2016). For instance, according to OECD 2010 and 2019 reports, numerous countries² have adopted and implemented CBA in their HR practices in order to recruit talent and upskill civil servants to prepare them for new tasks and address challenges that are becoming increasingly difficult (de Beeck & Hondeghem, 2010b; OECD, 2019b). Employees, in general, need a certain level of competencies to perform jobs, are infinitely adaptable and able to learn and develop their abilities, and should be given opportunities to develop all competencies (Lawler, 1994; Woodruffe, 1993a). Thus, employees need to be assessed on all competencies relevant to their jobs as it helps identify the employees' strengths and weaknesses and possibly help plan for future development (Woodruffe, 1993a, 1993b). Hence, organizations should possess assessment data that serves as informed information for employees to develop personal development plans acquired from CBA methods (Woodruffe, 1993b).

Russo (2016) defined CBA as a systematic method of gathering data, comparing and grading an individual's current and potential competencies to a competency model that describes the specified or appropriate level of knowledge, qualification, and potential. Besides gathering evidence and making judgments based on the assessment criteria, CBA also helps decide and confirm whether a person has achieved or performed to the standard of competence in the workplace (NCVER, 2021). In gathering assessment data, there are many assessment approaches that organizations could opt to assess employees from a traditional assessment through a self-assessment, depending on the assessment's purposes. According to Woodruffe (1993a), an assessment is traditionally conducted for selection purposes that mostly require an assessor's role in assessing employees or future employees. Employees also must allot time to attend structured training and development programs to acquire skills and knowledge. However, due to the rapid techno-economic development and changing HR roles, many organizations, including public organizations, have opted for other assessment methods for development purposes, such as peer assessment and self-assessment.

² OECD countries that have adopted and matured competency management includes United Kingdom, United States, Korea, Japan, New Zealand, Australia, Belgium, Canada, Austria, Belgium, Denmark, France, and the Netherlands. Meanwhile, out of nine of the SEA countries, only six countries (including Indonesia, Malaysia, Lao PDR, the Philippine, Singapore and Thailand) had given competency management as a high priority.

A single assessment or combination of assessment techniques or methods could provide the organization with the information needed. However, organizations should be cautious in determining the assessment methods. This is because a competency model comprises and combines a list of competencies from different areas of competence. These competencies require different skills, knowledge, and behavior, leading to different evaluation methods and techniques that may contribute to complexities and difficulties implementing such an approach in the workplace (Lurie, 2012; Prescott, Norcini, McKinlay, & Rennie, 2002). Scholars have suggested that different ways of its usage could have different implications. For example, the evidence from a summative assessment is used to inform the organization of the employees' performance. Thus, the organization may allow them to opt for independent practice for those who have mastered the required competencies while paying attention to the reskill or upskill of employees who have not. On the other hand, formative assessment provides feedback on employees' performances that drive learning and improve performance. Due to these differences, both summative and formative assessments should be treated as separate entities as the use of formative assessments for summative purposes would damage the relationship between the employers and employees (Masters et al., 1990). However, another school of thought acknowledged that summative and formative assessments should be qualitatively incorporated if organizations want employees to meet a specific level of standards and have all-around capabilities.

Therefore, regardless of the type and purpose of assessment, CBA should be designed and linked to the HR strategies and provide clear conceptualizations of competence to ensure organizations meet their objective by having competent people (Masters & McCurry, 1990; Woodruffe, 1993a). As CBA aims to establish whether the employee has mastered or not the enlisted skills, it is necessary to provide precise skills conceptualizations. A lack of clarity in relation to competency standards may lead to difficulties in evaluating or assessing the intangible aspects of competency. In doing so, assessment techniques are designed to help employees do their present job better while choosing future jobs and developing their competencies. However, identifying and anticipating the needs and requirements are always tricky and often delay the training and learning process. As assessment drives learning and is often linked to lifelong learning commitment, a holistic assessment system should be in place where possible assessment methods are used to achieve all-around competencies that require

precise planning and experienced experts to implement the approach (Prescott et al., 2002). As scholars envisioned, the approach should be implemented based on clear and appropriate competency standards, realistic and complex workplace problems (Boyatzis, 1982; Lawler, 1994; Lurie, 2012; Masters et al., 1990).

Indeed, establishing a holistic CBA system is a continuous effort from both organizations and employees. In doing so, relying on organizations to establish and complete the system and train experts alone is not enough. Therefore, to produce “experienced experts,” perhaps by focusing the ability of individuals (in this context, thus referring to public middle managers) to conduct self-assessment with an emphasis on demonstrated skills, knowledge, and behavior in performing jobs will add to the richness of CBA. Therefore, self-assessment will help individuals to understand themselves and what is expected of them, hence influencing others and organizations in seeking alignment with the differentiation in strategies and organizational priorities towards organizational success. In line with CBA's primary objective in creating workforce empowerment, setting a skill or knowledge to master at their own pace, time, and understanding to increase competitive advantage and achieve outstanding outcomes, self-assessment will be the most appropriate tool to facilitate a joint approach for employees to make career and development plans (Draganidis & Mentzas, 2006; Hellström, Kemlin, & Malmquist, 2000; Woodruffe, 1993a).

2.3.6 Competency-based self-assessment

Based on the working definition of the study, indeed, self-assessment is relevant to be adapted in competencies development studies because the process of developing competency is a lifelong series of repeated behavior and reflective practices. Thus, people used self-assessment to evaluate themselves against the established set of competencies and evaluation scale to seek accuracy (Russo, 2016). In this context, the pre-determined evaluation scale can be referred to as the competency model and the assessments established by organizations. The competency model is developmental in nature; therefore, self-assessment aims for employees to explore and understand their strengths and weaknesses, reflect and determine their development plan to improve job performance, or prepare them for career mobility. Self-assessment can also be considered a competency in which people have a realistic view of themselves (Boyatzis, 1982; Brown & Harris, 2014). Having accuracy in self-assessment allows them to demonstrate self-

assessment to test their skills and judgment about themselves against some other view. People, in general, admit their strengths and identify and seek remedies to their weaknesses which could be observed in people who have both accurate self-assessment and proactivity. Nevertheless, in this study, self-assessment is not defined as a competency but rather an assessment technique used in the competency model to assess and determine current and future skills and knowledge.

2.3.7 CBSA tool in public service

Many governments have begun implementing CBM approaches in their leadership, administration, and management. Table 2.1 lists the competency models implemented in the United Kingdom, Canada, and New Zealand. These countries are often seen as exemplars of best practices in the professionalism, knowledge, and ethical commitment of their civil servants (Shikova, 2020). Although to a certain degree, it is tricky to replicate and implement these competency models elsewhere because of differences in the cultures and political systems, unique goals to achieve, and terminologies used, it is worth working from these existing models. These are among the models adopted in Western industrialized democracies, which have mature competency management systems, and use self-assessment as a tool in the assessment system (de Beeck & Hondeghem, 2010b; Mau, 2015; Shikova, 2020). Taking each separately:

Table 2.1 *Characteristic of Competency Models within the UK, Canada, and NZ*

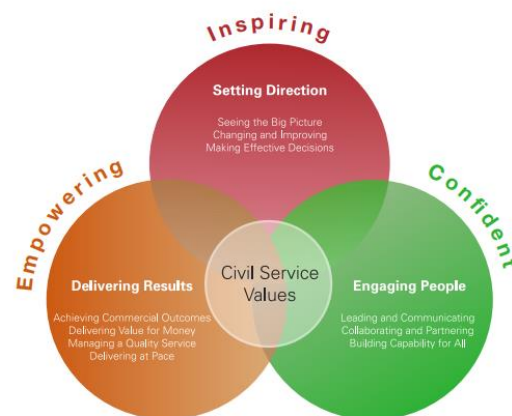
UNITED KINGDOM Civil Service Competency Framework (2012)	CANADA Alberta Public Service Competencies (2013)	NEW ZEALAND Leadership Success Profile (2015)
Setting Direction (Strategic Cluster) (Seeing the Big Picture, Changing & Improving, Making Effective Decisions)	Achievement (Agility, Drive for Results)	Strategic Leadership (Leading Strategically, Leading with Influence & Engaging Others)
Engaging People (People Cluster) (Leading & Communicating, Collaborating & Partnering, Building Capability for all)	Relationship (Develop Networks, Build Collaborative Environments, Develop Self & Others)	Talent Management (Enhancing People Performance, Developing Talent & Enhancing Team Performance)
Delivering Results (Performance Cluster) (Achieving Commercial Outcome, Delivering Value for Money, Managing Quality Service, Delivering at Pace)	Thinking (System Thinking, Creative Problem Solving)	System Leadership (Enhancing Organizational Performance, Enhancing System Performance & Leading at the Political Interface)
-	-	Delivery Management (Achieving Ambitious Goals, Managing Work Priority & Achieving Through Others)

(1) Competency model in the UK

In the early 1980s, the government was committed to restructuring government departments using the idea of the NPM. In doing so, the British civil service became amongst the first civil services to use a competency approach to HRM. The British civil service had introduced and improved over time the Civil Service Competency Framework that outlines the skills and behaviors required for each post held by civil servants applicable across the civil service. To date, aligned with civil service values, the framework consists of 10 competencies categorized under three clusters, namely strategic, people, and performance (Figure 2.3). Apart from bringing an organizational and cultural change to the British civil service, research by the CIPD in 2005 and again in 2007 confirmed that the competency framework benefits civil servants by incentivizing them to take responsibility for their own learning and development. In doing so,

all civil servants are required to keep professional, academic, skills, experiences, and vocational records in the Human Resources Management System (HRMS) for workforce and development planning. An online self-assessment is used to assess and identify civil servants' strengths and development needs in constructing the skills profile. The tool has five levels of assessment tightly linked to the pay band and grade in relation to the tasks and level of responsibility within a role. Upon completing the self-assessment, the civil servants are asked to demonstrate evidence against these competencies for development and performance management review purposes.

Figure 2.3 *British Civil Service Competency Framework*



Source: Civil Service Competency Framework UK, 2015

(2) *Competency management and NPM in New Zealand*

As NPM and economic reforms became well entrenched in 1990, the New Zealand public sector progressively moved away from daily issues towards a more strategic whole-government approach, including organizational capacity building, human resources, and re-instilling public service ethical standards (Chapman & Duncan, 2007). To cope successfully in the changing environment requires individuals with a whole new way of thinking and skills to lead public organizations. Hence, allowing free labor market practices to be implemented in assuming job roles in the New Zealand public sector. Those individuals with the necessary skills shall be hired based on merits, and their performance will be evaluated against individual outputs in line with organizational performance (Chapman & Duncan, 2007; Page et al., 1994).

The first competency model was established in 2004 with a set of five common and unique New Zealand public service competencies, which covers whole-of-government efforts in servicing the public, acting ethically within the government and legislative frameworks, and upholding the Treaty of Waitangi (MBIE, 2009). Over the years, the competency model has been refined and improved with a great emphasis on leadership. Hence, an inclusive view of the leadership, a Leadership Success Profile (LSP) competency model, has been designed. The LSP highlights, *Strategy*, and *Delivery* as the key aspects of the profile, while *Talent Management* and *System Leadership* reflect the new demands of the leadership landscape (PSCNZ, 2017). In supporting civil servants to learn and practice LSP, an online resource, myLSP, was created, consisting of information on role profiles, self-assessment and development tools, career paths, and interview pack information.

The self-assessment allows civil servants to reflect on their current capability in performing leadership aspects in a particular role in government agencies, which can be categorized as Strong, Sound, or Developing³. Upon completion, the self-assessment results can be downloaded, including development suggestions and a plan for growing three selected areas of civil servants' capability.

Figure 2.4 *Leadership Success Profile*



Source: Public Service Commission New Zealand, 2017

³ Strong – this is the strength for you, Sound – you have a solid foundation of skills and experience, and Developing – you are growing your expertise

(3) *Competency model of the Government of Alberta, Canada*

The government of Canada has been using competency models since the 1970s, motivated by the government's human resources needs and strategies, the adoption of NPM policies, and the prevalent private sector interest in CBM (Ingraham & Getha-Taylor, 2005). With the emphasis on people management, the use of the competency model has made the employees more aware of their responsibility for their careers and professional development, including conducting self-assessment, requesting support, and seeking feedback. The use of the competency model has also been expanded and replicated by the provinces, for instance, the Government of Alberta. The Alberta Public Service (APS) competency model has three main competencies that highlight more observable and measurable effective behaviors: thinking, relationships, and achievement, which apply to all civil servants. To unleash the civil servants' capability, self-assessment is used as a tool to help them identify their strengths and weakness, thus providing learning guidance and supporting their career development plans. The self-assessment tool has five levels of to what extent civil servants demonstrate the behavior while performing a job; one depicts a minimal extent, and five shows that the behavior is demonstrated all the time. The behavior-based Canadian model proved to be an effective tool for fostering excellence and ensuring consistency throughout the public service within organizations (de Beeck & Hondeghem, 2010b).

Figure 2.5 *Alberta Public Service Competency Model*



Source: Alberta Public Service, 2016

Despite the global challenges and different contexts, these three competency models (UK, New Zealand, and Canada) share common characteristics. All three countries have introduced NPM in their public administrations, particularly moving from traditional HR practices to a more people management-based administration. Indeed, the NPM has influenced the modernization of public administration in all of these countries, particularly in the area of HRM, since it was first introduced in the 1980s worldwide. Apart from having mature competency models covering their entire civil service, these competency models share a common theme in the intended behavioral competencies that can be clustered into three: the ability to think and act strategically, engage and build relationships with people, and deliver results. With values and ethics as foundations, these models are not merely developing future leaders by fast-tracking their progress up the ranks. It aims to expand and develop their experience and knowledge. In doing so, all these three competency models have included online self-assessment tools as part of the evaluation system, yet they differ in terms of implementation. For instance, the UK and Canada self-assessment models use the five-level assessment, unlike the New Zealand model, which has three-level in their rating scale. Indeed, the validity and reliability of self-assessment will increase when the number of scale points increases, and studies suggest that the seven-rating scale is the best response scale for surveys and questionnaires (Taherdoost, 2019). The UK and Canada's rating scales could thus be more reliable and valid than New Zealand's self-assessment rating scale. Nevertheless, self-assessment is not just about the rating scale. The quality of reliability and validity can be improved over time by developing the individuals' capacity to evaluate themselves, but what is most important is how honest individuals could be and understand their own capabilities. In relation to the use of reflection in the self-assessment tool, none of these models explicitly mentions their application as an assessment tool. However, both elements of Schön's RIA and Killion and Todnem's RFA are evident in those models, as civil servants have to evaluate their strengths and weaknesses and determine their own learning needs and development plan.

2.4 The public sector middle-manager

Public sector middle managers can be defined as managers who lead a function, team, or office and supervise daily operations that deliver services to the public. They are located below top managers and, in large organizations, are typically distinct from first-tier supervisors (Chen, Berman, & Wang, 2017, p. 2). Middle-managers are often described as human routers: tracking project status, moving information across teams, and serving as intermediaries between junior employees and senior leaders (Elliott, 2021, p. 3). With rapid economic-technological development, the increasing complexity of the public organizational environment, and the implementation of NPM strategies for modernizing public services, the role of public middle managers have begun to change, as they now hold a significant share of roles and responsibilities in the organization's long-term development. Apart from initiating and implementing NPM change, the increasing internationalization of the workforce, flexibility, and more inclusive workplace practices are among the expanding responsibilities of the effects of NPM-related change on public middle managers (Blackman, Johnson, Dickinson, & Dewey, 2019; Dewe & Cooper, 2012; Farrell & Morris, 2013; Mollick, 2011; Pick & Teo, 2017; Quirk, 2019). Research suggests that middle-managers become the essential players in the process of organizational performance and reforms, despite having little power to act strategically and stereotype phrases that describe middle-managers as just intermediaries and do not add value to organizations (Aninich & Hirsh, 2017; De Brouwer, 2009; Harding, Lee, & Ford, 2014; Huy, 2001; Sudirman et al., 2019). Because of that, today, public sector middle-managers are no longer recognized as human routers; they are now starting to be empowered to focus on forging connections, build relationships and a sense of belonging among diverse employees, and develop talents (Elliott, 2021).

Given the fact that the roles and responsibilities of middle managers have a greater impact on organization performances and reforms, middle managers are often considered the most important people in the organization (Mollick, 2011). Therefore, this study has specifically identified public sector middle managers as key to understanding the value of using CBSA as a tool to help inform its future use and implementation in meeting future organizational skill demands of the MPS. Two main reasons explain why middle managers were chosen: first, the demand of work and challenges as middle managers that have molded individual employees to

function and thrive in public organizations. Middle managers may come from all walks of life with varying gender, ages, experience, and education (Qi, 2005). Despite the differences in demographic, as middle managers, they face and share similar challenges in public service delivery, including implementing strategy and delivering results, leading, motivating, and inspiring people to perform exceptionally, managing and developing talents, building relationships, and building, leading and participating in teams (Blackman et al., 2019; Booth & Farquhar, 2003).

Apart from organizational support (e.g., structure, values, strategy, and leadership), the challenges above also require strong and committed public sector middle managers equipped with the necessary competencies and skills to ensure organizational success. Research shows that individual employees' talents and abilities are found to have a significant impact on the rise and fall of the organization or its ability to be innovative, flexible, and adaptable to change (Blackman et al., 2019). Therefore, employers have included a list of skills and competencies (e.g.: leadership, managerial, technical, agility, system thinking, ethics, and problem-solving) needed in recruitment and skills development activities for middle managers to confidently operate and perform their roles, responsibilities and face the challenges as public servants.

Previous studies have shown that public sector middle managers possess the expertise, experience, knowledge, and essential cognitive competencies to further develop in pursuing outstanding performance at work (Boyatzis, 2008). However, what differs from an outstanding and average middle manager is the level of competencies, what drives their performance and how they are developed. According to Boyatzis (1982), maximum performance occurs when a person's capability is aligned with the job demands and the organizational environment. Indeed, humans in nature are born with abilities and are capable of making the human way of life possible. However, the combination of both capable individuals and the characteristics of becoming public middle managers have molded individual employees to function as middle managers and thrive in public organizations.

Secondly, as Alamsjah (2011) posited, their positions as middle managers (between the top management, support staff, and stakeholders) allowed them to balance the pressure between continuity and change as they are involved and work throughout the entire change process. In

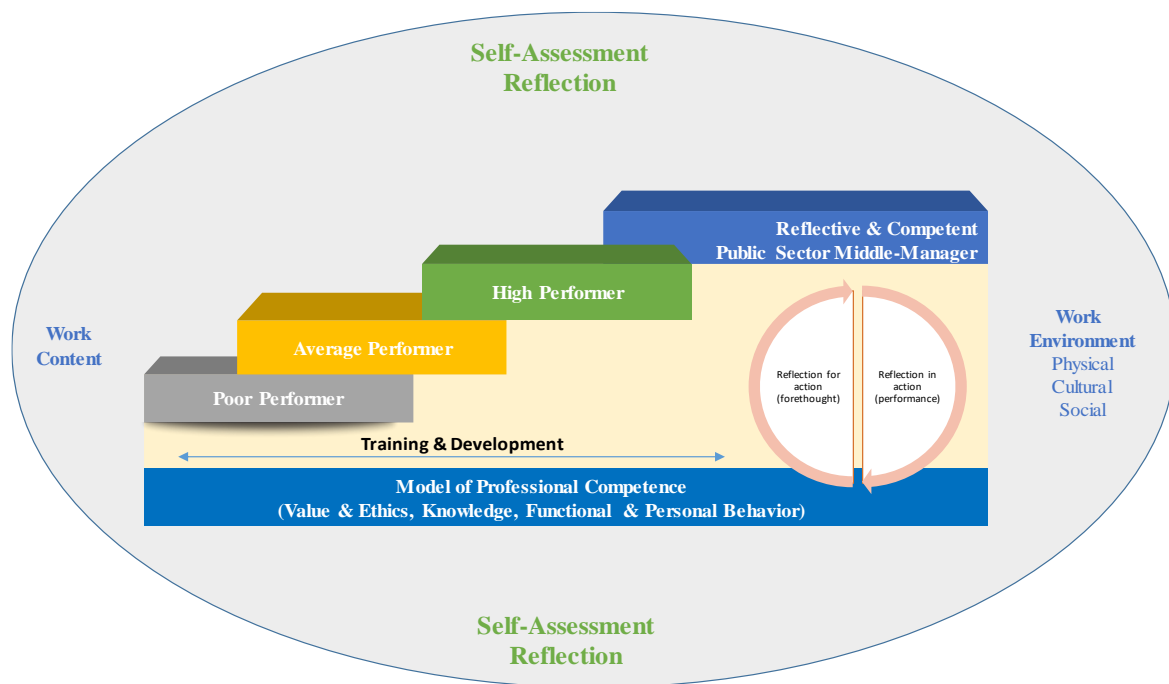
the public sector reforms process, while top management deliberates on the effectiveness of reforms initiatives, middle managers actively engage themselves in managing and provide meaning in the reforms process (Koene, 2017). According to Koene (2017) (p.4), middle managers “*explore the idea and help to test, refine, and adapt it over time, carefully leading the organization to a future that is different from what it could envision before.*” Even though middle managers may have little power to strategically make decisions or become subjects for reform experimentations, studies have established that middle managers do play their part and contribute to public policy development (Morgan, Bacon, Bunch, Cameron, & Deis, 1996; Saguin & Palotti, 2020). As cited by Chen et al. (2017), public organizations frequently face complex demands and incomplete information because many stakeholders participate in policy-making processes, leading to information overload (Rainey, 2009). Therefore, the experiences, commitment, and direct involvement as middle managers in noticing changes and getting first-hand feedback from staff and stakeholders allow top management to lay the best plans for implementing government policies.

Realizing that people do have the ability to reflect on their experiences that can be developed and strengthened, and they are also capable and motivated in assuming the social role of public sector middle managers, and self-assessment is a learnable skill, researchers and practitioners have worked on techniques and strategies to guide individuals (including learners and employees) to mitigate the over-rating self-assessment, and thus enhance learning (Fitzgerald et al., 2003). According to Mollick (2011), middle managers deal with daunting tasks on a daily basis with limited power and virtually possess no control over everyone’s actions. However, recognizing their complex and multilayered roles and middle managers' capability to build relationships, influence, connect, and bring people (civil servants and stakeholders) together would increase the organizational success rate. Therefore, middle managers would be the most appropriate respondents to share their experiences of how self-assessed tools can be useful to identify the development needs of public middle managers in meeting future organizational demands.

2.5 Reflective leaders in the making

Based on the discussion of the reflective theories by Schön (1983) and Killion and Todnem (1991), and the professional competence model by Cheetham and Chivers (1998), this research developed a framework to explore the public sector middle managers' experience of using CBSA to identify areas of improvements and determine the development plan (Figure 2.6).

Figure 2.6 *Theoretical Framework of Reflective Leaders in the Making*



Source: Adapted from Schön (1983), Killion and Todnem (1991), and Cheetham and Chivers (1998)

The key feature of this framework concerns the interlink between the use of CBSA as a tool (in relation to reflective practices) and how it might aid professionals to determine and develop a competency-based plan of action. The framework is guided by the reflective theory and its three categories of reflection, namely RIA, ROA, and RFA. However, for the purpose of this study, RIA and RFA were utilized. RIA has a strong relationship with RFA as individuals should know and understand what they would reflect on (while they are doing the tasks) to better or make adjustments, therefore creating their development plans (Olteanu, 2017). In

relation to the context of this study, RIA is used to examine middle managers' experiences of using CBSA. It allows us to focus on the relativity of the situation based on knowledge and experience, thus leading us on how to pursue it (Schön, 1984). Apart from providing understanding on areas of improvement, the spontaneous insights gained from RIA may suggest the benefits of using CBSA as an assessment tool, leading to intervention strategies for improvement and future development. Therefore, RFA is used to guide future actions in determining a professional development plan. Correspondingly, the model of professional competence would be the basis of a holistic competency model, incorporated with the most important goals of values and ethics, knowledge, functional and personal competencies that ought to guide professional growth. The model's components are a combination of personal characteristics that complement and integrate with other factors connected to work environments (knowledge, skills, values, experience, etcetera). Considering these core components are formed in changing contexts and evolve over time (Dante & Ignacio, 2012). Thus professionals should be allowed to evaluate and reflect on themselves. The use of reflection in this model related to workplace and job execution can be thought of as accelerators for developing competencies.

Reasonably, the reflective theory and model of professional competence offer a strong argumentative platform that might explain the potential of using CBSA as an assessment tool to identify strengths and weaknesses, thus leading to future improvement. Despite its limitations, the reflective theory and professional competence model highlighted the significant contributions in becoming a reflective professional who finds joy in learning as a facilitating process to enhance and enrich development (Reagan, 1992). Therefore, the researcher believed that by adopting the reflective theory and model of professional competence would help answer the quest of the following research question: How do middle-managers evaluate their experiences related to the introduction of CBSA as part of competency-based training and performance management in the MPS?

2.6 Conclusion

This chapter has reviewed the key concepts in the literature that form the foundation of this thesis. Based on the review, the extent of the study has informed the researcher' understanding

of the reflective facet of self-assessment, the approach to competency development, and the nature and characteristics of being public middle managers, hence contributing to constructing the working definition of self-assessment and the ongoing development of the study's conceptual framework. In addition, a relevant competency-based self-assessment model was identified to provide the context of what skills, knowledge, competency, and attitudes were perceived in public service as needed by the participants and how they attempted to reflect upon themselves towards effective job performance.

Throughout the review, the researcher has identified how Schön's (1983) RIA, and Killion and Todnem's (1991) RFA framework, and Cheetham and Chivers' (1998) Professional Competence Model would help to understand the experience of middle managers in using CBSA as a tool to identify their strengths and weaknesses, and hence determine their development plans. Additionally, the review on the nature and characteristics of public middle managers provides insights on why it is pivotal to conduct this research, thus helping them effectively perform public service, particularly when the MPS is moving towards a more self-regulated training policy. This review has also allowed the researcher to identify three governments (the UK, New Zealand, and the Canadian Public Service) that have adopted and implemented CBSA in their assessment systems to improve their leadership, administration, and management. Relevant areas of the competency approach were discussed, and the visibility and simplicity of the self-assessment competency model in Alberta Public Service, Canada, were found to be most suitable to be utilized in this study.

Having established the relevant areas of literature and identified key concepts for the current research, the next chapter discusses the context of the research problem – the MPS, to understand further the interconnectedness between the identified key concepts and why it is pivotal to introduce and implement CBSA as part of the assessment system in the MPS. Therefore, the researcher is attempting to understand this phenomenon by asking broadly, "how do middle-managers evaluate their experiences related to the introduction of CBSA as part of competency-based training and performance management in the MPS?"

To help further understand this phenomenon, the study specifically addresses these three research sub-questions:

- (1) What were participants' reflections upon completion of the CBSA exercise?
- (2) What were participants' views with regard to the future implementation of CBSA?
- (3) What areas of competency were identified as requiring improvement?
- (4) What did the participants learn from the reflective practices incorporated in the CBSA exercise?

Chapter 3 : The Malaysian Public Service

3.1 Introduction

This chapter provides an overview of the MPS, outlining the history of the Malaysian Civil Service and key HRM developments that have led to the development of competency-based HR approaches and practices in government organizations. The chapter concludes with a problem statement that outlines the concerns and challenges experienced by MPS officials.

3.2 The history of the Malaysian Civil Service and development of public service HRM

Civil service in Malaysia (previously known as Malaya) began in the days of the Malay Kingdoms (in the 2nd – 3rd Century) when concepts of traditional governments, religion, and art were introduced, shaping political and cultural patterns. However, in the 19th Century, the traditional governments were replaced by the modern civil service administration systems through the British colonization, which influenced and impacted the development of today's Malaysian Civil Service (Ahmad Zaini & Samsuddin, 2015). As Malaysia gained its *Merdeka* (independence) in 1957, the MPS (formerly known as the Malayan Civil Service) inherited a legacy from the British Public Service. Since then, Malaysia has employed the federalism form, operating within a monarchy system and representative democracy of government with Malayan characteristics, administration style, and cultural values (Ahmad, Mansor, & Ahmad, 2003). With the aim of progressing towards self-determination after *Merdeka*, the MPS gradually grew to cope with the significant role of public service from a custodial role to a key player and eventually facilitated the country's economic and social development. The MPS progressed towards a centralized, well-organized, and professional civil service, responsible for formulating the national financial and economic policies, the public sector HR policies, and monitoring and supervising the implementation of these policies. Today, the MPS includes over 1.4 million employees divided into two levels, namely the Management and Professional Group (MPG) and the Support Staff Group (SSG). The MPS encompasses five services (Federal and State General Public Service, Joint Public Services, Education Service, the Judiciary and Legal Service, and the Armed Forces), 25 ministries, and 745 agencies.

Western and indigenous HR perspectives and ideology have become the legacy of the MPS (Abdul Hamid, Raja Mohamed Fauzi, & Juhary, 2011; K. M. Salleh, Sulaiman, Latiff, & Ahmad, 2016). According to Siddiquee (2010), public sector HRM in Malaysia has witnessed significant changes since independence in coping with government tasks' ever-increasing complexity, particularly in training and development, recruiting and selection, and managing performance. The origins of the Malaysian public sector HRM can first be traced back from Malaysianisation of the bureaucracy – a period when training and developing the Malaysian Civil Service (MCS)⁴ officers (currently known as ADS) to replace expatriates who had previously carried out administration functions (Abdul Khalid, 2008). This was a top priority as when Malaysia obtained independence, and the MPS was 67% staffed with expatriate officers. The Malaysianisation process took a prolonged period of time due to the limited number and lack of experience of local officers to assume the expatriates' jobs, particularly in the technical and professional fields (Ahmad et al., 2003). Henceforth, the development of the entire civil servants was regarded as national policy and given top priority (DAU, 1969). Numerous local and overseas sponsorship training programs were allocated for civil servants. *Bahagian Latihan dan Kemajuan Kerjaya*⁵ (BLKK or Training and Career Development Division) was established in 1959 to manage these sponsorships and train MCS with the necessary skills and knowledge to enable them to perform and eventually assume the expatriates' jobs during this extended period. By 1962, the number of expatriate officers had reduced to 9.2%, and today, the MPS' civil servants are 100% Malaysians.

Secondly, with the centralization of HR, MPS has streamlined the job functions with its recruitment and selection policy. The Colonial services (i.e., Medical, Education, Legal, Police, and others combined as Colonial Administrative Service) have become components with their own structure, functions, qualifications, and set of competencies in all branches (including administrative, scientific, professionals, technical and clerical). Thus, attracting equal or better-qualified candidates from different backgrounds (including education, culture, and ethnic) and

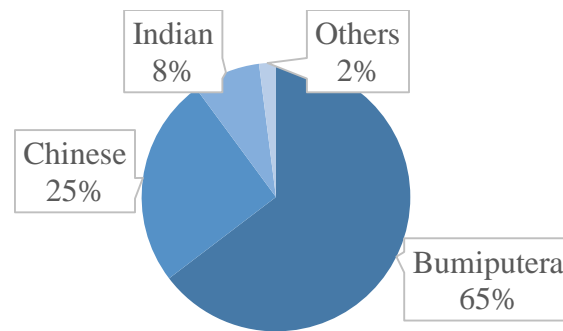
⁴ Malaysian Civil Service (MCS) and Administrative and Diplomatic Officer (ADS) are used interchangeably in this study.

⁵ BLKK (rebranded into Human Capital Development Division) was formed to formulate, plan, monitor and evaluate training policies and development programs conducted at the *Dewan Latihan Pegawai-Pegawai Kerajaan* (DLPPK or Government Officers Training Hall - now known as The National Institute of Public Administration (INTAN), the national training institute for the whole MPS, which focuses on continuous improvement of quality and productivity).

expertise to be appointed as administrative officers its own specialists, grades, and schemes. The streamlined recruitment policy includes a 25% employment quota allocated for the non-Malays, and academic qualifications became the main recruitment criteria (Ahmad et al., 2003; Siddiquee, 2010). The launch of the 1st Malaysia Plan in 1966 and the 1971 New Economic Plan (NEP) had significantly broadened the function and capacity of the MPS, from collecting revenues and maintaining law and order to active involvement in the economic developmental programs. New job roles were created, and various public agencies and enterprises were established to lead those developmental programs. This has led MPS to recruit more qualified Malaysians, including the Chinese, Indian, indigenous tribal groups (mainly in Sabah and Sarawak), and other minority groups to join the service. During the British colonization (1819-1957), only the elite Malays were recruited to work in the bureaucracy (Public Service) to legitimize British rule, while the Chinese dominated the trade and businesses, and the Indians worked as plantation laborers. Historically, the Chinese and Indians were brought to Malaysia by the British for commercial purposes, and there was no effort to integrate them into the local milieu (Chin, 2010). The colonial authorities' "divide and rule" policies have segregated Malaysians, eventually reflected in the ethnic demography in the MPS⁶, as shown in Figure 3.1. Indeed the streamlined recruitment policy has brought different people from different backgrounds together as more qualified Malaysians were recruited to join the service. As a result, the number of public sector employees rose from 139,476 in 1970 to nearly 530,000 in 1983 (Abdul Khalid, 2008, p. 4). However, it is also argued that because the recruitment and selection practices entirely emphasized on academic qualifications rather than abilities and capabilities, this may have been a contributing factor to the problematic performance of public agencies and enterprises (Siddiquee, 2010).

⁶ Federal Constitutions of Malaysia (Article 153): Bumiputera - the Malay and the indigenous tribal, Non-Bumiputera - Chinese, Indian, and others.

Figure 3. 1 *The Ethnic Groups in Malaysia*



Source: PSD, 2019

Thirdly, as the country progressed towards economic development, diversifications, and industrialization, the MPS was also challenged with maintaining and managing its performance. Under the guise of improving the public agencies/enterprises' performance and reducing the government's financial and administrative burden, the government launched two crucial policies, the Look East Policy (1982) and the Malaysian Incorporated and Privatisation Policy in 1983. These policies prompted the MPS' role, function, and scope in facilitating the private sectors and general public (Abdul Khalid, 2008; Noruddin, 1999; Triantafillou, 2002). Concurrently, the MPS was quick to embrace the philosophy and values of NPM as means for transforming the traditional public service into a dynamic, customer-driven, and result-oriented organization (Sarji, 1996; Siddiquee, 2010). The implementation of private-sector practices in the MPS was improved when in 1991, Malaysia pledged and incorporated the Vision 2020 national agenda to shift Malaysia towards a high-income and developed nation. The effort to improve the quality and productivity of the MPS and develop its ability to acquire and retain the best talents in the service continued with the introduction of a New Remuneration System (NRS) in 1992. The NRS was created to streamline government personnel administration and to foster meritocracy in the civil service. Under the system, those who perform well (varies in level of performance) are eligible for salary movement. Subsequently, a New Performance Appraisal System (NPAS) was introduced to ensure the implementation of NRS is a fair and objective assessment. NPAS was the first standard of measurement in performance evaluation introduced in the MPS history that links individual performance and rewards. NPAS was also considered the essential management tool for career development, job assignment, counseling,

training, and merit career development (Ahmad et al., 2003). These eventful developments transformed MPS in various areas of public management. These include organizational restructuring, privatization, and corporatization of public entities, reengineering of rules and procedures, quality improvement drives, enhanced customer-focused and financial management (Abdul Khalid, 2008; Siddiquee, 2010). However, implementing policies and development programs focused on reforming the governance model was far from satisfactory as the administrative and political systems remained unaltered (Siddiquee, 2010). As a result, the underlying governance and accountability concerns have made little progress, obstructing MPS' search for a more efficient and effective delivery system.

The fall of the traditional Malay Empire government was because of its own internal weaknesses, concluding with the British colonization for hundreds of years. Malaya rose, claiming its *Merdeka* in 1957, and began its modest growth and development of civil service as the MPS. From a handful of MCS, the strength of the service grew to cope with the expansionary role mandated under the implementations of major policies and new development programs with the aim of shifting Malaysia towards a developed nation. Instead of only maintaining all public personnel and administrative problems, the MPS took a more strategic approach to forecasting demands and regularly monitoring and changing all systems. By the mid-1990s, Malaysia has launched seven series of Malaysia Plan to achieve national integration and national unity through ownership on various economic sectors, education, labor market, social and infrastructure development programs.

Although the implementation of NPAS attracted criticisms ranging from biased assessments, assessors lacking knowledge and skills, and subjectivity, NPAS offered some benefits to the MPS. Civil servants are seen as the talent of the public sector, no longer mere employees. Under the NRS, they are rewarded for their excellent performance, and upskilling and reskilling opportunities are provided throughout the services. At the same time, the recruitment and selection process had started considering other evaluation aspects, such as knowledge, skills, and personal traits other than just entirely based on academic qualifications. As NPM contributions remained debatable (particularly in the downsizing and decentralizing of the civil service), the outcome-based model has satisfactorily enhanced the public sector's transparency and efficiency. Throughout the years, the history of internal weaknesses seemed to be repeated

as the cultural shift may have proven to be difficult as the bureaucratic and political systems remained unchanged. However, this does not refrain the MPS leadership from managing its HR professionally and transparently. Realizing the vital role of civil servants in leading the Public Service, human capital development efforts in improving its HR received a new impetus under the 7th Malaysia Plan. The efforts continued in the subsequent 8th Malaysia Plan (2001-2005), where elements of competency and lifelong learning for personal development, mastery of knowledge, skills, creativity, and innovation were emphasized, with a view to enabling Malaysia to become a high-income and developed nation.

3.3 CBM in the MPS

Driven by various administrative reforms under NPM, in 2002, the Malaysian public sector HRM made another significant development and adopted a competency-based HR approach in public organizations. As Malaysia pledged to become a high-income and developed nation, the government initiated measures and projects assimilated with knowledge and technology to stimulate economic growth policy. Hence, it required public organizations and the workforce to be more adaptive, versatile, agile, and customer-focused in order to succeed (Ullah, 2012). Indeed, the adoption of competency-based HR practices was to ensure Malaysian civil servants kept abreast of related competencies to remain competitive and relevant in this new economic era. At the same time, the MPS was also bombarded with many public complaints regarding delays in public service delivery (Abdul Ghani Azmi, 2010). Thus, the adoption of competency-based HR practices was designed to improve the MPS' level of quality of service delivery. Although the literature indicates that multitasking or multi-role can increase productivity and enhance performance, it also could lead to more harm (Otto, Wahl, Lefort, & Frei, 2012). In the case of Malaysian civil servants, while implementing government policies, they have to multitask and play multiple roles as a facilitator, pace-setter, authority, and developer, which may have caused burnout amongst the civil servants, eventually affecting the quality of the service delivery (Cesare & Thornton, 1993; Ilhaamie, 2009). Since the adoption of competency-based HR, out of six competency-based HR practices, five are implemented in attracting, developing, motivating, and retaining performing civil servants in the Public Service. They are competency-based recruitment and selection, training, career development, performance, and reward (Abdul Ghani Azmi, 2010, p. 1). Among the strategies implemented

in the MPS utilizing the competency-based approach were introducing the improved remuneration system, CBA, and formulation of competency-based training policy. However, none of the strategies utilize self-assessment as part of the wider assessment system.

3.3.1 Competency-based pay system

After a decade of the implementation of the NRS, the merit-based system of salary had caused dissatisfaction amongst the civil servants due to problems in the structure and imbalances in practices (Jamaiudin, 2008). In response, the government introduced an improved Malaysian Remuneration System (MRS) in 2002, adopting a competency-based pay system with an aim to produce capable and responsive civil servants to environmental changes and customer demands by providing quality services (Azmi, Ahmad, & Zainuddin, 2009; PSD, 2002). The MRS has a comprehensive remuneration package designed to meet the public service requirement in the new economic era. Apart from restructuring benefits and compensation, improving the in-service provisions, and providing more career development and advancement opportunities, the new MRS has also introduced competency-based assessment. According to Salleh et al. (2016), under the new MRS, competency becomes the central element in determining the progression of careers and salary, emphasizing knowledge learning, skills advancement, and inculcating excellent personal values among public servants. Despite few underlying weaknesses in the implementation stage, research on the effectiveness of MRS shows that competency-based pay positively and significantly improved the service quality that MPS provided to customers, particularly reliability, promptness, and assurance (Azmi et al., 2009; Jamaiudin, 2008). First introduced in 2002, it has been 19 years of the implementation of MRS. However, the system should be reviewed to cope with today's rapid techno-economic development, boosting civil servants' motivation towards efficient public service delivery (Salleh, 2021).

3.3.2 The introduction of competency-based assessment

As the government began to adopt the competency-based approach in managing its HR, CBA was introduced alongside the annual performance appraisal (NPAS) to evaluate the competency level of the civil servants, mainly for career promotion purposes. According to the Public Service Department (PSD) (2002), the implementation of CBA was to encourage self-

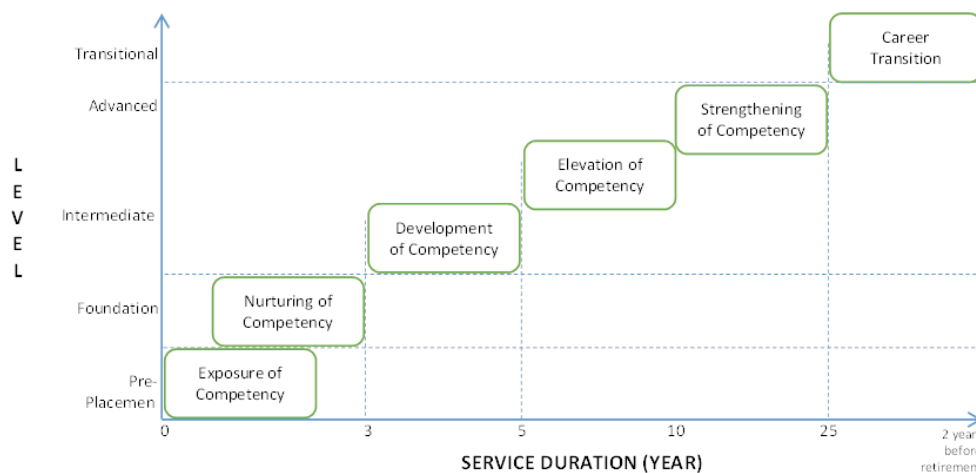
development among civil servants through lifelong learning and to cultivate a learning culture within public organizations. It was also introduced to reduce issues (such as biased assessments, assessors lacking knowledge and skills, and scopes of subjectivity) arising from the implementation of NPAS. CBA evaluates civil servants' level of understanding and competencies (includes knowledge, skills, attitude, values, and work ethics) in performing their tasks. However, the level of competency between the two service groups (MPG and SSG) is different due to the grade level, positions, and job functions. The higher the grade, the more aspects of competencies will be evaluated. The MPG are those who lead and manage the managerial and administrative affairs in the government machinery. Thus, the other competencies that will also be evaluated include leadership, synthesizing issues and problem-solving, affording advice and contributing recommendations, and effectively contributing to the organization. Meanwhile, the SSG's competencies evaluation will not be as complex as the MPG as their roles only require administrative support to support the other service groups. Evaluation or assessment is carried out either in the form of examination (including essay writing, multiple-choice or oral), practical training, observation, or attending courses that are designed to assess the level of competency. In determining the level of competencies, the syllabus or content of the assessment should include both the generic competency and functional competency based on the job analysis, task analysis, and gap analysis. The CBA is also used in the annual performance appraisal to evaluate the civil servants' job quality output and help identify their training needs. When CBA was first implemented, an initial study found that respondents from seven Malaysian public agencies admitted that the implementation of CBA had significantly improved their competencies level, particularly in terms of knowledge (Azmi, 2008). However, in 2011, the implementation of CBA was discontinued with a view to replace CBA with a more suitable assessment system (PSD, 2010). Although the CBA has been in existence for over a decade, it is not based on self-assessment but on management assessments that rely on the assessor's role in evaluating the tasks output and identifying training needs in the current MPS HR management practices particularly in training and the annual performance appraisal.

3.3.3 Training and development policy

Given the importance of competency-based practices in the MPS, the Training Division (now known as Human Capital Development Division) devised the *Dasar Latihan Sektor Awam*

(DLSA) or Public Service Human Resources Training Policy 2005. The policy's objective is to ensure every civil servant is equipped with the attitude, skills, and knowledge through structured competency and lifelong learning based on HR development programs throughout the service, as shown in Figure 3.2:

Figure 3.2 *The Training Structure*



PSD, 2005

Once a potential candidate is identified, a new hire learning plan based on competency gaps is put in place (Draganidis & Mentzas, 2006). A newly employed civil servant will be exposed to an onboarding training process that helps the employee learn the knowledge, skills, and behaviors needed to succeed and establish a lasting bond with the organization (Bauer & Erdogan, 2011; Snell, 2006). Over the years, civil servants' competencies will be nurtured and developed through the continuous inboarding training and development process. As civil servants change positions, get promoted, or are deployed to other ministries, the continuous inboarding process helps to elevate and strengthen their competency levels. Competency-based training and development are an effort to close the gap between existing demonstrated competency levels and the desired job profile levels. Individual employees must identify development needs that will influence performance to close the gap (PSDM, 2004). As a result, when training and required abilities are more closely aligned, workers become more competent and capable in the workplace (Holton et al., 2006). In doing so, apart from the yearly performance appraisals, every government ministry or agency is obliged to allocate 1% of the

emolument budget for training purposes. Therefore, every civil servant must at least attend a minimum of seven (7) days of training per year. The training methods range from providing sponsorships to acquire professional certifications to short term courses that serve different purposes of the training (including confirmation and passing bar salary, career development, updating knowledge and skills related to tasks, and a few others) provided by the federal or state level government according to the grade and scheme of services.

The DLSA is currently under review, and PSD plans to introduce an improved training policy, entitled the Human Resources Development Policy (DPMS). The DPMS is based on the HR principles in developing civil servants' skills and capabilities bounded on value and professionalism. DPMS aims to produce high-level and future thinking, agile, equipped with digital capabilities, and creative civil servants. Under the development of the new DPMS, competency-based training is being highlighted, which focuses on both functional and generic competencies and capacity building in reducing the competency gaps to ensure the return of investment of the government is worthwhile. The DPMS is currently moving towards an inclusive training concept adopting the mix of both centralized and decentralized (matrix) HR training and development management. At the central level, the Public Service Human Resources Development Council (MMPS) shall be responsible for determining, administering, and regulating the quality of the training and evaluation procedures and the role of the Public Training Institutes. At the organizational level, while managing and maintaining the 1% of the emolument budget for training purposes, ministries and agencies will be responsible for determining the competencies, conducting competency-based training, and evaluating their employees' training progress for career development. Meanwhile, each civil servant will be responsible for their own personal competency and career development at the individual level. Civil servants will be acknowledged with his or her competency gaps required as civil servants for further development. The matrix model of HR training and development function operates on a continuum of centralized for the consistent standards and regulations, while the decentralized services for the greater flexibility depending on what is needed within the ministries or agencies (SHRM, 2016).

3.3.4 The MPS competency model

In 2004, the MPS had developed a competency model based on the *iceberg model* (Figure 3.3) that reflects all critical behaviors, skills, and knowledge that affect success in a given role. In the model, skills and knowledge formed the tip of the iceberg, while behaviors are the underlying elements that are not visible. Indeed, skills and knowledge are essential to perform tasks, but behaviors are the critical determinants of one's effectiveness in a job.

Figure 3.3 *The Iceberg Model*

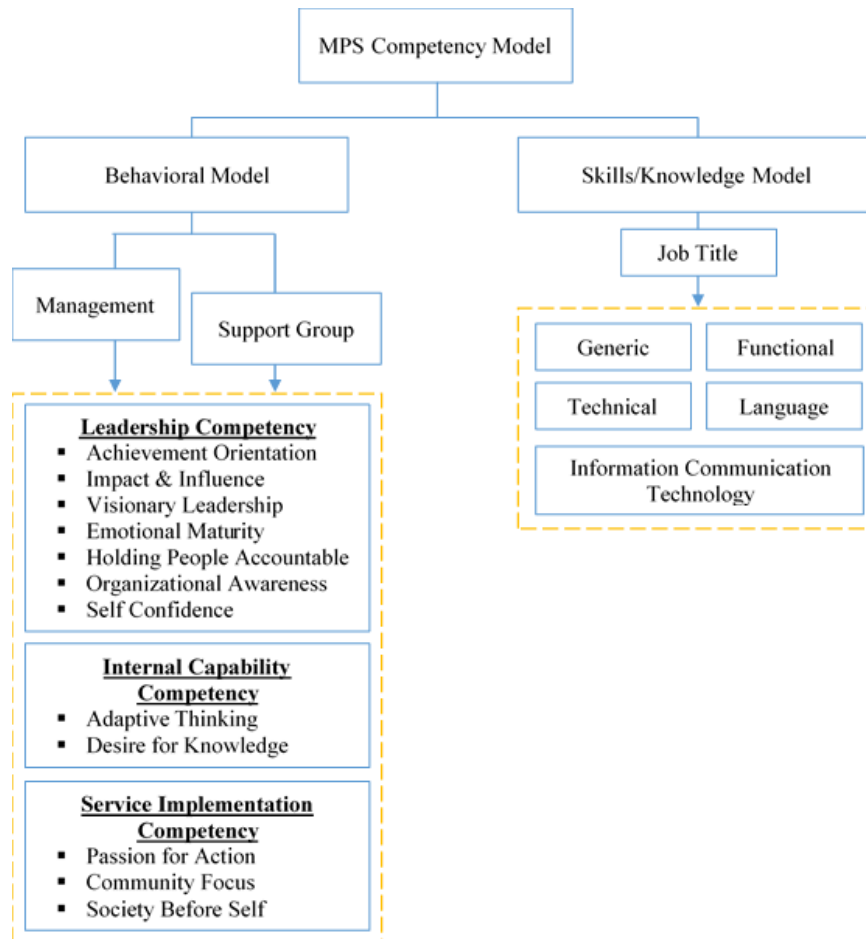


Source: Competency Dictionary PSD, 2004

The MPS competency model is divided into the behavioral and knowledge/skills dimensions, where the competencies are defined according to service groups and agencies (Figure 3.4). The model was developed based on the behavior and skills of “outstanding” civil servants in their day-to-day job. The competency model was used by civil servants to identify work requirements' strengths, areas for job performance improvement, and areas for continued learning and professional advancement (PSD & HayGroup, 2004). The behavioral model caters to both the management and support staff groups with different behavioral requirements for service groups and agencies. Meanwhile, the skills and knowledge model refers to five different competency areas: generic, functional, technical, language, and information communication technology (ICT). The skills and knowledge requirements differ with jobs, service groups, and agencies. The model was built to facilitate convenient and practical usage. Thus, the

terminology and language used in describing the competencies are simple and easily understood by civil servants at all levels.

Figure 3.4 MPS Competency Model



Source: Competency Dictionary PSD, 2004

The above-listed competencies were created based on and aligned with the MPS' value-based management ethos – loyalty, honesty, and integrity that were already incorporated in the MPS since the 1960s. The definition for these values according to the MPS are as follows:

<i>Loyalty</i>	<i>firm in one's allegiance in order to achieve organizational objectives</i>
<i>Honesty</i>	<i>truthful and trustworthy in his/her conduct of organizational activities</i>
<i>Integrity</i>	<i>act in a way that is consistent with what one says or values</i>

These values are regarded as a way of life and what it takes to be a civil servant in the MPS. Besides that, the values are driven by the behaviors outlined in the jobs. When these behaviors are practiced, the values can be seen in the individuals and their job performance (PSD, 2004). As a result, organizations are able to identify those high and low-performing individuals. To ensure the implementation of the MPS Competency Model a success, PSD had produced the “*Jabatan Perkhidmatan Awam (JPA) Competency Dictionary*” as the primary source in cultivating the competency-based HR management practices in the MPS. However, the competency model and dictionary are not available to civil servants. As predicted by Malek and Liew (2002), amongst the challenges of why this implementation of the competency model was not successful was due to the size of the MPS, poor communication strategies, and the lack of commitment by the leaders. First, the MPS consists of 239 service schemes, 25 ministries, and 745 public agencies at various government levels with different roles and functions, which was a huge challenge for the MPS to identify and develop different competency dictionaries. Each competency dictionary should include the importance of a role, service scheme, the scheme role, and the service at the respective agency. Secondly, the competency model was not well communicated to civil servants, thus leading to poor implementation of the initiative. Finally, it was due to the lack of full support from the management. As a result, in most cases, civil servants have only been undergone basic onboarding training before being assigned an undetermined set of responsibilities as federal servants. Many department officers are left to learn new duties, procedures, and outdated manuals, and some departments have fewer training programs (MAMPU, 2014).

3.4 Problem statement

In the 1970s, public service delivery declined due to public agencies' poor performance—agencies established to lead development programs under the NEP policy. Meanwhile, in the 1980s, the governing culture of the multi-cultural MPS workforce in invoking Islamic codes of self-conducts⁷ somewhat attracted protests as values that were propagated on its appropriateness to practice in the multi-cultural workforce, as there was an expectation also to consider values that attributed to all ethnic groups in Malaysia (Triantafillou, 2002). Failure to

⁷ The values are trustworthiness, responsibility, sincerity dedication, moderation, diligence, cleanliness, discipline, cooperation and gratitude (Noor & Mohamed, 1999).

do so is regarded as leading to commercial failure, which may have disrupted the service delivery efficiency (Abdullah & Low, 2001). In the 1990s, reports noted complaints about incompetent civil servants, corruption, abuse of power, and service inefficiency (Azmi, 2008). Although reforms have been made to address these complaints, the figures for public complaints had tripled in the 2000s and spread over different public agencies nationwide. Azmi (2008) further added that complaints were high in number due to civil servants' lack of knowledge and skills in performing their jobs, inappropriate attitude, bureaucracy, and lack of communication skills. According to Azmi (2008), the MPS took measures to improve public service delivery by introducing and implementing policies and service organizational development circulars. A total of 32 Service Circulars have been circulated since 1991. Remuneration systems were introduced and improved over the years. Research on effectiveness, identifying factors, and recommendations with regard to the public service quality was conducted, including establishing *Biro Pengaduan Awam* (Public Complaint Bureau) under the Prime Minister Department to manage and address the ever-increasing public complaints. To date, the MPS is still banking on reforms to improve public service efficiency and capability, particularly its HR (PSD, 2021).

Various reforms to structures, sectors, service regulations, productivity arrangements, and front-line service delivery have taken place in recent years (Mohd Saaid, 2020). Despite these reforms, service delivery has declined since *Merdeka*. In 2019, the World Bank reported on the government's efficiency – indicating that Malaysia's government's overall governance has been largely stagnant behind the Organisation for Economic Co-operation and Development (OECD) average for high-income and upper-middle-income countries. Subsequently, the local news in July 2019 highlighted corruption, lack of competition in appointment and procurement, and low openness level amongst the factors that hold back Malaysia's development and its public service efficiency. Furthermore, an article entitled "Deep State, Poor Leadership and Plain Incompetence," written by a former Malaysian civil servant and a political columnist, Dennis Ignatius, describes the MPS as a progressively corrupt bureaucracy and incompetent (Ignatius, 2019). Consequently, confidence towards the MPS has declined over the years, questioning MPS' leadership and how they effectively manage the competence of Malaysian civil servants.

3.4.1 Leadership roles of ADS officers

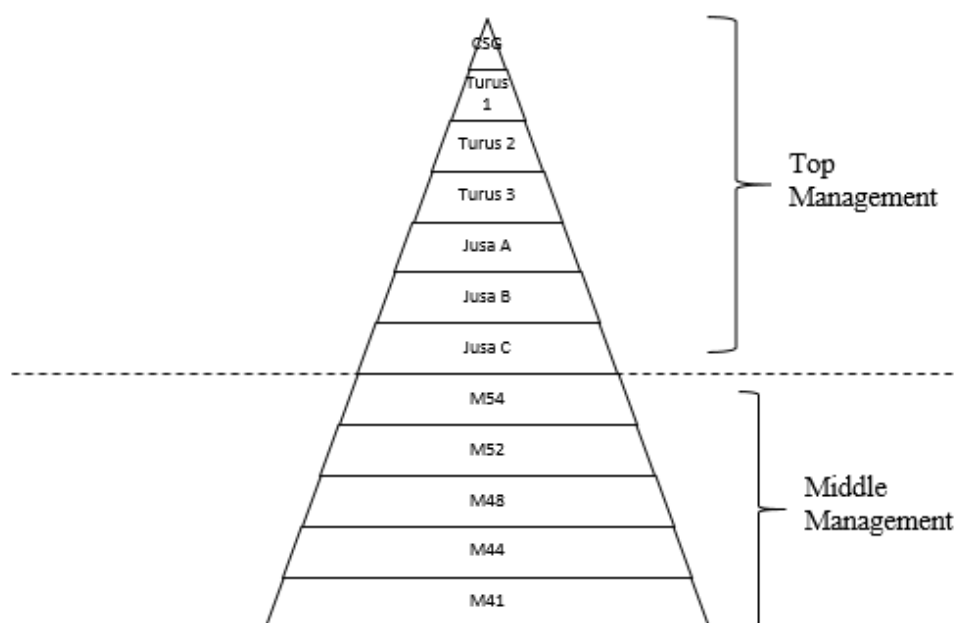
Although the problem statement outlined above refers to the MPS as a whole, similar issues have severely impacted the MPG⁸, particularly middle-managers of ADS officers' leadership, image, and capabilities. ADS is a premier service and is considered the elite corps that occupy most senior management positions in the MPS, including the highest position available for its civil servants, the Secretary-General (Lim, 2007; Norwawi, 2010). With ever-changing roles from "developmentalist" to facilitator and now innovator, ADS has been seen as leading the government machinery as administrators and implementers of public policies and actively involved in the international relations affairs in various government agencies or ministries in moving the country forward. Replicating the MPG's hierarchy, the ADS hierarchy is also divided into two levels: top management and middle-managers (Figure 3.5).

Middle managers may have a greater impact on organizational performance as they hold significant roles and responsibilities in sustaining the organization's development (Mollick, 2011). These middle-managers are often regarded as being in the frontline of managerial and administrative delivery at various government levels. As leading public service officials, ADS middle-managers should possess the required knowledge, skills, expertise, competencies, transcendental leadership, and strategic to bring changes and deliver extraordinary outputs (PSD, 2000). These officers are the standard-bearers of administrative excellence, hence displaying excellent work culture towards effective leadership, fulfilling the nations' needs, facing challenges and obstacles, and assuming higher positions in the MPS (Ismail, 2019; Norwawi, 2010). Given their high position in the organization and relevant competencies, any reforms would fail if middle-managers struggled to convert their strategic direction into outcomes and gain buy-in from their followers (Xavier, 2008). This could be why MPS is still bombarded with such complaints. Although we are now in the 21st century, civil workers, especially those on the front lines, are still focused on traditional operational and firefighting functions (Yusoff, 2005). The continuing reforms in the MPS necessitate a high level of public servant dedication. Thus, it is difficult for civil servants to fully commit when they need to concentrate on their evolving daily tasks thoroughly. According to Xavier (2008), the MPS

⁸ The Management and Professional Group (MPG) refers to a service group leading the MPS government machinery. The MPG is divided into two-level. (a) The top management level assumes the strategic and key positions. (b) middle-managers - frontliners of managerial and administrative at various government level.

leaderships have more challenges to contend with, unlike the private sectors. First, the list of stakeholders and customers amounting to the Malaysian population of 32 million requires greater transparency in service delivery and responsive governance. Second, the fast-changing role of the MPS leaves the leaders no option but to lead the consumerist world, where the private sector sets the benchmark. Third, leaders are now forced to double the efforts towards value-innovation leadership while contended with public bureaucracy at a reduced cost.

Figure 3.5 *The Hierarchical Grades in the Scheme of the Administrative and Diplomatic Service*



Source: PSD, 2019

3.4.2 Managing MPS competency

Adopting competency-based approaches has improved HRM practices, thus improving public service delivery quality. However, competency-based approaches have not been implemented holistically in the MPS HRM. It was reported that competency-based HR only was practiced to a high extent in training and development, career development, and performance management (Abdul Ghani Azmi, 2010, p. 1). In contrast, competency-based recruitment and selection and reward remain moderate due to the difficulties of implementing it. As the

implementation of the competency-based approach was not holistic in practice and given poor implementation strategies of the competency model, civil servants in the MPS are seen not as highly competent. Contributing to this view, the World Bank Report in 2019 suggested that the MPS should be investing in its HR management by developing and utilizing a competency framework. The report went on to state that there should also be a multi-layered reform strategy should be implemented to increase the quality of worker skills and learning outcomes.

3.5 Conclusion

Service quality is the key result of public service, and stakeholders and *rakyat* (citizens) hope for quality services as a return of investments (Azmi, 2008). In the consumerist world, civil servants must be proactive to prevent frustration amongst our stakeholders. Therefore, in gaining the *rakyat's* confidence, the need of the *rakyat* should be fulfilled, and efforts in improving service delivery should also be continuous. Failure to do so will disrupt the governments' efforts to invite foreign investments, affecting the country's economic stability. Hence, there is a call for holistic policy shifts in the MPS human capital development that emphasize high moral values, lifelong learning culture, and personality, knowledge, and skills development to produce a productive and relevant workforce with today's needs in the future (PMO, 2019). Over the years, efforts to improve public service delivery in the MPS focused more on the external reforms, including restructuring benefits and compensation, improving the in-service provisions, and providing more career development and advancement opportunities. These reforms are considered a control system to ensure coherence and uniformity in boosting human capital and accelerating productivity growth in the MPS. As the efforts continue and leverage on the shifts towards an inclusive self-regulated training and development concept, where each civil servant is becoming more responsible for their own personal competency and career development, this study intends to revisit the CBA approach but focus on individuals' self-assessment ability and capability in helping the MPS achieve its expectations and targets. Although the policy shifts in re-establishing the CBA approach will take some time to be formalized to ensure its success, the ADS middle-managers may lead the first step. This bottom-up approach may significantly improve MPS service quality as they mediate between the organization's top management and support staff.

Chapter 4 : Research Methodology

4.1 Introduction

The purpose of this study is to evaluate middle managers' experiences with CBSA tools to help inform their use and implementation in meeting future organizational skill demands of the MPS. The researcher believed that understanding this phenomenon would allow policymakers to plan and implement competency-related training and development programs. Hence, the main research question would be, “How do middle-managers evaluate their experiences related to the introduction of CBSA as part of competency-based training and performance management in the MPS?” The study addressed the four sub-research questions to understand this phenomenon: (1) What were participants’ reflections upon completion of the CBSA exercise? (2) What were participants’ views with regard to the future implementation of CBSA? (3) What areas of competency were identified as requiring improvement? (4) What did the participants learn from the reflective practices incorporated in the CBSA exercise?

This chapter discusses the research methods and philosophy employed in this study. The discussion is organized into seven subsections: (1) rationale for post-positivist research paradigm, (2) questionnaire design, (3) research population and sampling, (4) ethical considerations, (5) pilot study, (6) methods of data collection, and (7) analysis and synthesis of data.

4.2 The rationale for the post-positivist research paradigm

A research paradigm is a set of guiding beliefs and assumptions that influence and structure how researchers construct and perceive their field of study in response to the ontological, epistemological, and methodological questions (Johannesson & Perjons, 2014). The researcher is taking a post-positivist stance to learning about the nature and interactions between reality and entities, what knowledge is needed, and the know-how to obtain that knowledge. This is due to the nature of the research questions and the desire to obtain both some broad-based and in-depth understanding and that suitable theoretical frameworks existed to base the research on. The post-positivist paradigm does acknowledge, though, that (1) an attempt of in-depth

analysis, (2) the researcher's motivation and commitment towards change, and (3) theory and practice cannot easily be separated.

Quantitative research is grounded in an essentially positivist philosophical position, in the sense that human actions and experience can only be explained as being independent through cause and effect relationships (Johannesson & Perjons, 2014). However, in evaluating the experience of using CBSA, this research assumes that each individual can have different experiences and interpretations in self-assessing their skill, knowledge, and attitudes, which could create a data set that is difficult to present as a positivist study alone. Therefore, this research adopts a post-positivist stance as its principles allow the researcher to attempt an in-depth analysis of understanding the multiplicity and complexity of the phenomenon by advocating quantitative empirical confirmatory research (Ryan, 2006; Wildemuth, 1993). By doing so, this has allowed the researcher to collect both quantitative and qualitative data concurrently. Utilizing quantitative and qualitative data concurrently could allow for a more systematic and thorough examination of the interrelationships between variables in a more prosperous and meaningful context (Kober, Ng, & Paul, 2007).

The data will be parsed in patterns, categories, and themes in an inductive process (Patton, 2015). The inductive process refers to researchers working back and forth between the themes and database until they have established a comprehensive set of themes. After completing the inductive process, these themes or "voices of respondents" are used to construct theories, concepts, or hypotheses that contribute to the literature or a call for a change (Creswell & Creswell, 2013; Merriam, 2009). This is in line with the researchers' motivation and commitment to research, as it is hoped that the study results could aspire to improve and contribute towards an MPS holistic training and development policy. Additionally, the intent of post-positivist research is because the study is grounded on established theoretical frameworks drawn upon the work of Schön's (1983) RIA and Killion and Todnem's (1991) RFA framework, and Cheetham and Chivers' (1998) Model of Professional Competence. This means it could provide insights from a more holistic viewpoint in understanding middle managers' experience in using CBSA as a tool to identify their strengths and weaknesses, hence determining their development plans.

As a research paradigm is a set of beliefs about ontological, epistemological, and methodological considerations, based on the various elements noted above, the researcher believes that in order to gain a better understanding of how people make sense out of their life, a combination of quantitative and qualitative responses provides a strong basis for achieving this.

4.3 Questionnaire design

The research instrument used in the study is a structured survey questionnaire combined with a set of reflective questions that were adapted from the established instrument developed from studies conducted in Western countries. The questionnaire is outlined into four sections: individual work performance questionnaire, CBSA, reflective questions, and demographic information (refer to Appendix A). In order to allow the participants to reflect on their experience conducting the CBSA exercise and help develop a development action plan, participants were requested to answer all four sections of the questionnaire as follows:

4.3.1 Section 1 – Individual work performance questionnaire

The first section is a 7-point Likert scale productivity questionnaire developed by Koopmans et al. (2013) to assess the participants' Individual Work Performance Questionnaire (IWPQ), as shown in Table 4.1. Questions from the IWPQ were included in order to be able to evaluate if competency levels were associated with job productivity. The IWPQ is a generic instrument that is suitable for employees in all kinds of occupations (including blue, white, pink collar workers). Therefore, the IWPQ is a commonly used outcome metric in occupational studies in the field of management, occupational health, and industrial-organizational psychology that focuses on the behaviors or actions of the employees (Koopmans et al., 2014). Individual work performance (IWP) can be defined as behaviors or activities that are important to the organization's goals, which means that the behavior should be under the individual's control and aligned with the organizational context (Campbell, 1990; Rotundo & Sackett, 2002). IWP consists of three dimensions, namely, task performance, contextual performance, and counterproductive work behavior. According to Campbell (1990), task performance (TP) can be defined as the proficiency in which individuals perform the core technical tasks that are central to his or her job. Meanwhile, as cited by Koopmans et al. (2004), contextual

performance (Kirkman, Rosen, Gibson, Tesluk, & McPherson) is defined as the behaviors that promote the technological core's ability to perform in the organizational, social, and psychological environment (Borman & Motowidlo, 1993). Counterproductive work behavior (CWB), on the other hand, refers to behaviors or acts that are detrimental to the organization's success (Rotundo & Sackett, 2002). However, as the study is related to improving individual work performance, only questions associated with TP and CP dimensions were used in the first section of the questionnaire developed by Koopmans et al. (2013) to gauge the productivity level of respondents for the past three months. There were 17 questions of the IWP related to TP (7 questions) and CP (10 questions) used in the survey questionnaire. The questions were presented in random order, and both TP and CP scales had a 7-point rating scale ranging from never, rarely, occasionally, sometimes, frequently, usually, and every time. One particular item from the TP dimension, "I had trouble setting priorities in my work," was considered a misfit in measuring productivity and was deleted from the earlier version of IPWQ by Koopmans et al. (2013). This item was included in the study here because of the link between the ability to set priorities, making-decision to upskill, and the productivity level of employees (Andreassen, Torsheim, & Pallesen, 2014; Breugh, 1985). The item was scored in reverse order, with a low score indicating poor job performance and a high score indicating excellent work performance.

Table 4.1 *Job Productivity Item*

Construct	Dimension	Items	Respond Scale
Job Productivity	Task Performance	I managed to plan my work so that it was done on time	7 Likert-Scale “Never” to “Every Time”
		I kept in mind the results that I had to achieve in my work	
		I had trouble setting priorities in my work	
		I was able to perform my work well with minimal time and effort	
		I was able to meet my appointments	
		Collaboration with others went well	
	Contextual Performance	Communication with others led to the desired results	
		I took initiative when something had to be organized	
		I started new tasks myself, when my old ones were finished	
		I was open to criticism of my work	
		I tried to learn from the feedback I got from others on my work	
		I took on challenging work tasks, when available	
		I worked at keeping my job knowledge up-to-date	
		I worked at keeping my job skills up-to-date	
		I was able to cope well with difficult situations and setbacks at work	
		I recovered fast, after difficult situations and setbacks at work	
		I came up with creative solutions to new problem	

Source: Koopmans et al., 2013

4.3.2 Section 2 – CBSA

The second section is the competency self-assessment questionnaire modeled from the APS Competency Self-Assessment Questionnaire. It contains seven competencies: system thinking, creative problem solving, agility, develop networks, build collaborations, develop self and others, and drive for results that are considered critical success for employees. There are 13 questions on each competency domain, amounting to 91 questions all together rated on a 5-point Likert scale. In fulfilling the research goals, a review of the literature on self-assessment and CBSA models in public service was conducted by browsing through the search engine Google, government websites, and the university's library's electronic publication databases, Google Scholars, ResearchGate, Springer, and few others. These databases' choices were based on several factors such as containing reliable information, international publications, covering different fields, and the publications found being reviewed and indexed. Several records were found where most of the publications mentioned self-assessment as an assessment technique used in HR management and practices, cultivating organizational culture, learning, training, and development practices in both public and private organizations (Hopkins, O'Neil, & Williams, 2007; Rice, 2007). Substantial publications described the advantages and disadvantages of self-assessment as assessment techniques in various fields such as education, health, and in the workplace in general (Bromley, Boran, & Myddelton, 2007; Holmboe, Sherbino, Long, Swing, & Frank, 2010; Ross, 2006; Sargeant et al., 2010).

As this study aims to evaluate the MPS middle-managers' experience related to the introduction of CBSA as part of the training and performance management; therefore, this study needed to be based on the existing public administration competency model with access to the self-assessment questionnaires. The evaluation outcome will help determine the feasibility of introducing and implementing CBSA in the MPS training programs and performance management. In this case, only Canada's Alberta Public Service Competencies (APS) and the New Zealand model provide some information and access to self-assessment questionnaires from the search. For the UK model, the questionnaire is available online, but it is not easily accessible or publicly available as most portals require the employees' username and password. Because of the limitations mentioned above, the APS Competencies Self-Assessment Model and Questionnaire was the most appropriate CBSA model for this study. Despite the differences in the competency terminologies used in both APS and MPS models, the APS

competencies are relatable and relevant to the MPS public administration context and processes. Utilizing the common theme identified (ability to think and act strategically, building relationships and engage with people, and delivering results), Table 4.2 depicts how these two models are relatable. The APS model appears to tick all boxes of what and how a competency model should be. As suggested by scholars, competencies must focus on the level of generality as an individual can be strong in one factor yet weak in another. Therefore the competencies dimension must be visible, accurate, and kept within plain language boundaries (Mau, 2015; Woodruffe, 1993b). The APS model is deemed to be well-designed with its visibility and simplicity with only three core competencies and seven competencies. In comparison, the other models have more than ten competencies and may be harder to remember. However, the only downside of having a comprehensive competency dimension is that it will be difficult to make minor adaptations to the provided list. The MPS competency model was established in 2004. This needs to be revised and updated to continue driving Malaysian civil servants towards success and accurately upkeep the necessary skills and knowledge as the business of the public service has evolved.

Table 4.2 *The Alberta Public Service Competency and MPS Competency Models*

Theme	Canada Alberta Public Service Competencies (2013)	Malaysia Competency Model (2004)
Ability To Think & Act Strategic	System Thinking Creative Problem Solving Agility	Adaptive Thinking Desire for Knowledge Visionary Leadership Impact & Influence Emotional Maturity Self-Confidence
Building Relationship & Engage With People	Develop Networks Build Collaborative Environments Develop Self & Others	Community Focus Society Before Self Holding People Accountability Organizational Awareness
Delivering Results	Drive for Results	Achievement Orientation Passion for Action

4.3.3 Section 3 – Reflective questions

The third section is the eight reflective questions modeled from Van Vulpen and Moesker (2002), Desjarlais and Smith (2011), and Yan and Brown (2017), based on Schön's RIA and Killion and Todnem's RFA theories, as shown in Table 4.3. The participants had to rate these using the 5-point Likert scale, and optional explain in their words their experience of conducting CBSA. RIA was used to help participants describe their experience using CBSA as an assessment tool and whether or not the CBSA can help them identify their strengths and weaknesses. Meanwhile, RFA was used to guide them in developing their own professional development plan (Desjarlais & Smith, 2011; Van Vulpen & Moesker, 2002; Yan & Brown, 2017).

Table 4.3 *The List of Reflective Questions*

Source	Reflection In Action (RIA)	Reflection For Action (RFA)
Desjarlais & Smith 2011	Did the self-assessment exercise result in a clear and doable plan of action of competency improvement?	Did you derive value from conducting this self-assessment?
	Were the insights gained from conducting this self-assessment exercise valuable?	Did the self-assessment exercise help you to indicate the need for competency improvement?
	-	Are you motivated to address the identified competency gaps?
Vulpen & Moesker 2002	Do you like doing the things that you are good at?	-
	Are your strengths used to the fullest in your current job?	-
Yan & Brown 2017	Is there any kind of situation where you know how to rate yourself without having to think about it?	-

4.3.4 Section 4 – Demographic information

Finally, the fourth section is where participants provide demographic and service information. Participants were asked about their gender, age, ethnicity, education level, years of working experience, grade, and current job function.

The questionnaire was designed in such a way that each section would provide insights into understanding middle managers' experience of conducting this CBSA exercise. Section 1 – IWP was included to predict individual work performance. Meanwhile, the reflective practices of RIA and RFA (Section 3) were incorporated to capture the experience using CBSA (Section 2) as an assessment tool to identify strengths and weaknesses and further determine respondents' development plans. Finally, apart from just providing the basic information, demographic information allowed the researcher to understand any differences of the respondents of the targeted and potential MPS population.

4.4 Research population and sampling

“The results of this study should be a policy implication with respect to CBSA, which may apply to all public servants in the MPS.” This statement helps define the population, which refers to a broader group of people (referring to MPS’ public servants) to which the study intends to generalize its findings (Fisher & Willis, 2013). However, rather than aiming to use the entire population in research, which may come with challenges (including accessibility, costly and managing data), a sample or group of individuals was identified to participate in the study, and inferences would be drawn about the larger population concerning the study (Zikmund, Carr, & Griffin, 2013). A sample is used in research instead of the whole population because sampling can reduce errors in the data collection method (Sekaran & Bougie, 2019). Furthermore, it is cost-effective and allows the researcher to conduct the study with more manageable data and in a timely manner. When it comes to selecting a sample for post-positivist research, a range of purposes can be pursued (Koerber & McMichael, 2008). In this study, the findings will be informed knowledge relevant to a policy-making process; thus, a set of reliable and credible data is needed. The data should offer a “window-like” view on the subject under study; therefore, the researcher must find capable individuals (samples) to provide the information needed (Fisher & Willis, 2013; Giacomini & Cook, 2000; Richards &

Morse, 2013). Sampling is cost-effective and allows researchers to manage their research well; however, defining the population and understanding the purpose of sampling is an important element in the research process. This will help the researcher determine the most appropriate sampling technique when recruiting participants to partake in the study.

Within post-positivist research, multiple sampling approaches can be employed in conjunction with one another or independently when recruiting participants. Determining which sampling techniques to use depends on the nature of the research questions and the scope of the study (Koerber & McMichael, 2008). As the study aims to understand the experience of using CBSA as a tool to identify areas of improvement for the future development plan, the study sample is drawn through non-probability purposive and snowballing sampling techniques to obtain the data and information needed for this study. Purposive sampling is “based on the assumption that the researcher wants to discover, to understand and to gain insight from the sample so that he or she can learn as much as possible” (Goodson & Sikes, 2001)(pg. 24). The purposive sampling technique was chosen based on the capability of respondents to respond and provide the desired information (Silverman, 2017). The purposive sampling chose to focus on participants with particular levels of middle managers in the MPS with the invitation to participants distributed by MPS representatives. Meanwhile, snowball sampling is a technique for finding research subjects where existing study subjects help recruit future subjects amongst their acquaintances who may fit the criteria and be willing to respond (Sharma, 2017). Snowball sampling technique was also used in this research to reach potential participants who may not have received the invitation distributed by federal government offices/ministries’ representatives. Combining these two sampling techniques helped cover the “hard-to-reach” potential participants, thus generating a larger sample.

The pre-determined criteria for recruiting respondents were defined to guarantee that the study had an appropriate sample, including their role as middle managers, grade, and service scheme. The respondents recruited to participate in this study were the senior grades ranging from Grade 54, Grade 52, and Grade 48 of public middle managers from the ADS scheme. These criteria were chosen based on several reasons. First, these officers are the public middle managers who have hugely contributed to the policy-making processes. Secondly, they are also considered central players in the process of improved organizational performance and reforms. Thirdly,

they serve as intermediaries between top management and junior employees. Finally, they serve in ministries in different areas (e.g., human resources, finance, security, and foreign affairs). Based on these criteria, samples were drawn as presented in Table 4.4, and there are 3,910 ADS public middle managers (Grade 48-54) across the ministries.

Table 4.4 Distribution of Administrative and Diplomatic Service Officers Grade 48 –54

Grade	No. of ADS Officers
M54	708
M52	1,134
M48	2,068
Total	3,910

Source: Public Service Department, 2019

The public middle managers from the senior level range of middle management (Grade M54) are smaller in numbers (708 officers) as they are in line to assume the strategic and key positions at the top management level of the ADS scheme. These M54 public middle managers usually lead a sector, and they have at least two or three reporting Grade M52 and Grade M48 senior officers with a few junior officers and support staff. In contrast, apart from leading a unit/team, the M52 (1,134 officers) and M48 (2,068 officers) are much higher in numbers because these middle managers are located at the bottom of the MPS' hierarchy and still have to climb at least two or three grades of the promotion ladder to be part of the top management team. With the pre-determined criteria, the researcher was able to distribute the questionnaire to an appropriate sample from the large population who are capable of providing the desired information for this research.

4.5 Ethical considerations

In order to ensure that the study complies with the research ethics and academic integrity procedures, the Human Ethics (ID No.: 0000028796) approval was obtained from the Victoria University of Wellington's Human Ethics Committee prior to distributing the questionnaire. In

addition, participants were informed that the study's participation is voluntary, and all responses will be kept anonymous to avoid any violation of privacy.

4.6 Pilot study

A pilot study was conducted to determine the validity, reliability, and look and feel of the research instrument before employing a full-scale sampling process. The pilot study involved 15 randomly chosen respondents from the MPS public middle managers and Master of Commerce students from Victoria University of Wellington. Before commencing the pilot study, respondents were briefed about the purpose of the pre-test and encouraged to provide feedback for any ambiguities regarding the questionnaire for further improvement. Feedback from the pilot was evaluated and addressed prior to the main study.

4.7 Methods of data collection

The choice of data collection is determined by the availability of facilities, the level of precision, the researcher's ability, the amount of time spent studying, and other costs associated with data collection (Sekaran & Bougie, 2016). Therefore, when employing a large number of samples in different geographical locations, a structured questionnaire tends to be the most useful method (Samah, 2017). The study administered an online survey using Qualtrics, and it took approximately 15-20 minutes to complete the survey. The survey link remained open and available for over two weeks for participants to respond. A longer timeframe may have added responses but would have delayed the completion of the research. There were no constraints on the venue or the choice of time (within two weeks) that participants needed to complete the survey. The survey link was distributed and shared via email to the Service Management Division (SMD) and Human Resources Management Division (HRMD) at 25 federal government offices/ministries in Putrajaya, Malaysia. As a formality, the email sought permission to conduct the research at the respective ministries and sought assistance to distribute the invitation email inviting the senior grade of middle-managers to participate in the study anonymously and voluntarily. The research context, the importance of the samples' response, data collection and distribution procedures, and the assurance of anonymity and confidentiality of the respondents were all provided to the SMD and HRMD officials at the respective ministries. When collecting data on highly sensitive actions that may be illegal

and/or result in dismissal from their employment, it is critical to ensure complete anonymity and confidentiality of the participants (Bennett & Robinson, 2000). Therefore, research data was collected anonymously with invitations sent out indirectly via the SMD and HRMD at the respective federal government offices/ministries. Hence, the researcher did not have the opportunity to contact the prospective participants at any time. An example of the formal invitation to the respective SMD and HRMD can be found in Appendix B.

4.8 Analysis and synthesis of data

In addressing the research question, this study collected both quantitative and qualitative data concurrently. Therefore, the data were first analyzed separately to make sense of the collected data and identify significant patterns. Then, the results were compared for variations and corroborated to strengthen the findings.

Data were analyzed quantitatively based on responses acquired from the Likert-scale survey are both interval and ratio data. The data were analyzed using IBM SPSS Statistics. The formal data analysis process began with preparing the data to generate the descriptive statistics and perform other statistical analyses, including tests of difference to check for responses bias and correlations of items (questions) within and across questionnaire sections. As for qualitative data, data were taken from the collection of respondents who answered the open-ended questions of Section 2 (CBSA) and Section 3 (reflective questions). The data were descriptive in nature, and, therefore, statistical analyses could not be performed. The data were analyzed using NVIVO, computer software that helps organize, analyze, and find insights in unstructured or qualitative data like open-ended survey responses. Results from the open-ended questions were compared with the results obtained from the quantitative data to see if there were any patterns.

The data was then evaluated and synthesized to determine the questionnaire responses' acceptability, reliability, and validity. A content analysis of open-ended questions was used to determine acceptability. Item impact and Cronbach's alpha internal consistency were used to determine reliability. Pearson's inter-item correlations were used to determine discriminant validity, while regression analysis was used to infer the relationship between variables.

Chapter 5 : Findings and Analyses

5.1 Introduction

This research aims to understand middle managers' experiences of adopting and implementing the CBSA model. The researcher believed that CBSA could be a useful tool in identifying existing competencies and skill gaps to determine the training required for skill development. The researcher has obtained data through "detailed description" that learns more about how participants evaluate their experiences using CBSA as an assessment tool to find areas of improvement, determining their development plans. This chapter presents the findings obtained from 92 respondents who completed the questionnaire with additional information from 14 respondents who had partially completed the first section of the IWP questionnaire before exiting the overall survey – these shall be reported in the IWP descriptive statistics section. In brief, four significant findings emerge from this research:

- (1) most respondents noted that the CBSA exercise could be a useful tool to identify individuals' strengths and weaknesses and determine areas of improvement, hence guiding them to determine and develop their individual development plans;
- (2) respondents identified four pre-requisites that they believe would ensure successful implementation of CBSA, including:
 - (a) a full commitment from the leadership and management;
 - (b) a guided and informed CBSA;
 - (c) CBSA is to be considered a periodic assessment for best results; and
 - (d) a simplified CBSA questionnaire and providing the opportunity for individuals' feedback.
- (3) findings point to three specific competencies identified by respondents as areas for further development, including creative problem solving (analytical techniques), develop self and others (creating learning opportunities), and develop networks (managing complex relationships), and finally;

- (4) both the CBSA exercise and associated reflective practices increased respondents' self-awareness and the need for personal growth. Additionally, reflective practices made them realize the importance of growing with others.

In outlining these findings, this chapter is arranged accordingly; respondents' demographic and service information, descriptive statistics for IWP, CBSA questionnaire, and the reflective questions, followed by an analysis of the findings.

5.2 Sample size

The most common rule of thumb for determining sample size in research studies is to consider the study's aim. Understanding the purpose will determine the detail of data collection and analysis (Saunders, Lewis, & Thornhill, 2009). Furthermore, a researcher must not limit himself or herself to the phrase "population" in the traditional meaning. According to Saunders et al. (2009), a population is a well-defined group of people or objects who share comparable qualities, attributes, or behaviors in research techniques. Due to constraints such as time, budget, and impracticability, researchers must select respondent/s (samples) according to appropriate sampling techniques to determine the desired outcome of the research. Therefore, the sample size in post-positivist research is not simply about the numbers but how these data are analyzed and evaluated into a report and whether the sample is to be split into small sub-groups.

This study aimed to have at least an adequate sample size on the premise of not being too large or too small to understand an experience of a phenomenon. As this study aims to understand middle managers' experiences adopting and implementing a CBSA model in CBA systems, quantitative and qualitative data collection methods were utilized through purposive and snowball sampling. Data were collected via the distribution of the questionnaire (via email and social media platforms), consisting of a Likert scale and open-ended questions. An initial target was for 5-10% of the population to respond, with the minimum desired being 100 responses. However, due to the time limitation in completing this thesis, only a total of 142 responses were gathered from about 4,000 middle managers who might have been invited to participate. Within these respondents, fourteen (14) were found to have only completed the first section

(IWP), while another 36 did not respond to any questions. These 50 responses were, therefore, eliminated from the analysis, leaving 92 completed questionnaires for analysis. For the qualitative data analysis, data is based on respondents' responses who have provided examples of demonstrated competency in Section 2 – CBSA open-ended questions (7 questions) and explained their answers after ticking the choice of 5-point Likert scale answers in Section 3 – Reflective Questions (8 questions). The distribution of respondents according to sections is shown in Table 5.1:

Table 5.1 *Distribution of Open-Ended Questions Responses*

Question	Section 2 – CBSA (n)	Section 3 – Reflective Questions (n)
1	30	30
2	26	27
3	18	22
4	21	23
5	19	23
6	18	19
7	16	22
8	-	31

Note: CBSA – Competency-Based Self-Assessment

5.3 Respondents' demographic profile

Table 5.2 shows the demographic information of 92 respondents who voluntarily participated in this study. There were 50 (54.30%) male and 42 (45.70%) female respondents. The majority of the respondents were in the age group of 31-50 years old (54.30%). As for the ethnicity, most of the respondents were Malay (73.90%), followed by Others (12.0%), Indians (7.6%), and Chinese (6.5%). In addition, most of the respondents (50%) had a Master's degree, while (46.7%) had a Bachelor's degree, and only 3.3% had a Ph.D. degree.

Regarding service information, respondents were asked about their grades, years of experience in the service, and their current role job function. Those in Grade M48 (62%) constituted the highest number of respondents and are the largest proportion of the population. Meanwhile, Grade M52 and Grade M54 had recorded 29% and 9% respondents, respectively. As for the number of years of service, 57 (62%) respondents have been in the service for about 10 to 15 years. A total of 22 (24%) respondents had more than 15 years of service, and 13 (14%) respondents had less than ten years of service.

Regarding the job function related to the respondents' current role, there were eight (8) areas of job function for the ADS officers to pursue. However, the Human Resources Management and Organizational Development job function recorded the most number with 34 (37%) of the respondents, followed by 15 (16.3%) from the Planning and Social/Infrastructure Administration, and Economic Management recorded the third-highest number with a total of 10 (11%) of respondents. The other five job functions recorded a single number and percentages, as shown in Table 5.2. Chi-square tests comparing the sample response rates to the comparable population proportions indicate that significantly more men (or fewer women) responded than expected, fewer Malays and more Chinese, and fewer M54 grade middle managers. Due to the survey being anonymous, it is hard to determine why the response rates differed significantly in these ways from those expected in the population, which represents a possible limitation of the study.

As for the 14 respondents not finishing the survey, because the demographic information was furnished at the end of the survey (after IWP, CBSA, and Reflective Questions), none of the information to compare them to the population was available.

Table 5.2 *Demographic Profile of the Respondents (n = 92)*

Demography	Frequency (n)	Percentage (%)	Population (%)	
Gender				
Male	50	54.3	41.8	PSD 2019 (population of MPS)
Female	42	45.7	58.2	
Age Group				
20 – 30 years	11	12		
31 – 40 years	50	54.3		
41 – 50 years	30	32.6		
51 – 60 years	1	1.1		
Ethnicity				
Malay	68	73.9	79	BH Online 2019 (population of MPS)
Chinese	6	6.5	1.7	
Indian	7	7.6	5.6	
Other	11	12	13.7	
Education Level				
Bachelor	43	46.7		
Masters	46	50		
PhD	3	3.3		
Grade				
M54	8	8.7	18	PSD 2019 (population of ADS)
M52	27	29.3	29	
M48	57	62	53	
Years of Experience				
<10 years	13	14.1		
10 – 15 years	57	62		
>15 years	22	23.9		
Job Function (Current Role)				
Human Resources Management & Organizational Development	34	37		
Financial Management	9	9.8		
National Security & Defence	7	7.6		
Information Technology Management	6	6.5		
Planning & Social / Infrastructure Administration	15	16.3		
Region/ Municipality/ Land/ District/ Local Administration & Development	6	6.5		
Economics Management	6	6.5		
International Relations & Foreign Affairs	5	5.4		

5.4 Descriptive Statistics

5.4.1 Individual work performance questionnaire

Respondents were asked to indicate the frequency of behavior execution in the individual work performance (IWP) for the past three months in relation to the task performance (TP) dimension of job productivity. Meanwhile, ten questions were asked related to the contextual performance (Kirkman et al.) dimension. Data were analyzed accordingly, with item TP3 (TP dimension) reverse coded.

Initially, 106 respondents responded to the IWP questions. 14 respondents were identified to have exited the survey, and the remaining 92 completed the questionnaire. However, because only 92 respondents have completed the survey and are valid for all the quantitative analyses, the descriptive statistics (refer to Appendix C) were only reported for a total sample population of $N=92$. Subsequently, the scale was sub-divided into three levels; low, moderate, and high to show the level of performance demonstrated.

Overall, based on the descriptive statistics, it can be seen that the respondents demonstrated important behaviors or activities to achieve the desired outcome. Item TP2, *“I kept in mind the results that I had to achieve in my work,”* logged the highest sample mean ($M = 6.18$, $SD = 0.851$). Meanwhile, item number three (3), *“I had trouble setting priorities in my work,”* which was reverse coded, indicated the lowest sample mean ($M = 4.90$, $SD = 1.335$). Both items were related to the TP dimension, which indicated that respondents have shown to be productive in work planning and organization, effectively perform tasks, and achieve the desired results. These high levels are not unexpected, given that middle managers were responding.

Items related to CP dimensions indicated middle managers’ initiatives, taking on challenging tasks, keeping job knowledge and skills up to date, and solving problems. Item CP11, *“I tried to learn from the feedback I got from others on my work,”* recorded the highest sample mean ($M = 6.10$, $SD = 0.973$), and item CP12 *“I took on challenging work tasks, when available”* logged the lowest ($M = 5.51$, $SD = 1.104$).

In terms of the level of job productivity, Table 5.3 revealed that most middle managers had demonstrated productivity in both TP and CP dimensions, with 92.40% having an average level at the high end of the scale, and only 7.60% indicated a moderate level of job productivity. The overall sample mean was 5.75 and SD = 1.03.

Table 5.3 *The Level of Job Productivity*

Level	Frequency	Percentage	M	SD
Low (1.00-3.00)	-	-		
Moderate (3.10-5.00)	7	7.60%	5.75	1.03
High (5.10-7.00)	85	92.40%		

Note: N=92, M = Mean, SD = Standard Deviation

In a nutshell, public middle managers, in general, were not just being productive to achieve a specific work outcome or deliverables, but they also performed beyond what is expected from a job. However, the results also indicated that prioritizing tasks and taking on challenging tasks are the areas that need to be improved.

5.4.2 Competency-based self-assessment (CBSA)

The respondents were asked to complete the 5-point Likert scale of the CBSA questionnaire ranging from 1 (to a very small extent) to 5 (to a very great extent). The questions comprise seven competencies: system thinking, creative problem-solving, agility, developing networks, developing self and others, building collaborative environments, and driving for results demonstrated in performing tasks at the workplace. At the end of each set of the 13-competency questions, respondents were asked to provide specific examples related to completing that part of the questionnaire. The responses are reported based on the descriptive statistics on each competency and again categorized into three levels; low, moderate, and high. 92 respondents completed these CBSA scales 5-point Likert. Meanwhile, open-ended questions are reported based on themes for those who described the specific examples while completing the questionnaire.

System thinking

The descriptive statistics (Appendix D) indicated that the item *“I consider how my own work impacts the work of the team and vice versa”* scored the highest sample mean ($M=4.32$, $SD=0.71$). Meanwhile, the item *“I identify actions/plans that do not support the organization’s vision and values, and work to create alignment”* recorded the lowest mean ($M=3.73$, $SD=0.89$).

Table 5.4 shows that the middle managers' level of demonstrated system thinking competency was high with an overall sample mean of 3.95 ($SD = 0.93$). However, an area where they be more effective if they were more attuned towards actions that do not align with the organization’s values and goals.

Table 5.4 *Level of Demonstrated System Thinking Competency amongst Middle Managers*

Level	Frequency	Percentage	M	SD
Low (1.00-2.33)	-	-		
Moderate (2.34-3.66)	-	-	3.95	0.93
High (3.67-5.00)	92	100%		

N=92, M = Mean, SD = Standard Deviation

Based on the open-ended written responses from 30 respondents, when asked to provide example/s while completing this section, system thinking competency was frequently used in planning, policy-making, implementation (including policies, programs, and activities), and gathering and analyzing information.

Creative problem-solving

Descriptive statistics (Appendix E) revealed that the item “*I am open to new ways of doing things*” recorded the highest sample mean ($M=4.35$, $SD=0.63$), whereas item “*I use several analytical techniques to break apart complex situations or problems*” was the lowest ($M=3.76$, $SD=0.84$) demonstrated in the creative problem-solving competency. This shows that, generally, middle managers have the ability to find creative solutions to problems. However, there was some lack of analytical problem-solving skills that might hamper the process of making sound judgments.

As for the level of demonstrated creative problem-solving competency, Table 5.5 revealed that all middle managers had demonstrated a great extent of competency with an overall sample mean of 4.08 ($SD=0.91$).

Table 5.5 *Level of Demonstrated Creative Problem-Solving Competency amongst Middle Managers*

Level	Frequency	Percentage	M	SD
Low (1.00-2.33)	-	-		
Moderate (2.34-3.66)	-	-	4.08	0.91
High (3.67-5.00)	92	100%		

N=92, M = Mean, SD = Standard Deviation

26 respondents answered the open-ended section. As for the example/s, respondents indicated that creative problem-solving competency is often demonstrated in brainstorming and discussion sessions, managing office-related issues, and completing daily work routines.

Agility

Based on the descriptive statistics of demonstrated agility competency (Appendix F), the item “*I seek ways to do things better*” logged the highest sample mean of 4.29 (SD=0.62), indicating that middle managers are responsive in quick decisions making and getting things done. The item “*I proactively articulate and create momentum for organizational change*” indicated the lowest sample mean of 3.83 (SD=0.73), showing that they are also somewhat content with a static view to challenging and changing working environments.

In terms of the level of demonstrated agility competency, Table 5.6 indicated a high level of competency demonstrated with an overall sample mean of 3.98 (SD=0.90).

Table 5.6 *Level of Demonstrated Agility Competency amongst Middle Managers*

Level	Frequency	Percentage	M	SD
Low (1.00-2.33)	-	-		
Moderate (2.34-3.66)	-	-	3.98	0.90
High (3.67-5.00)	92	100%		

N=92, M = Mean, SD = Standard Deviation

For agility competency, there were 18 responses to this open-ended question. Respondents highlighted that agility is the main attribute in change management initiatives. Respondents also indicated they were ready to assess, adapt, and maintain resilience while working with their teams, managing office-related issues, and daily job completion.

Develop networks

The descriptive statistics (Appendix G) present the ‘develop networks’ competency demonstrated amongst middle managers. Table 5.7 shows the level of demonstrated competency in developing networks amongst middle managers with an overall sample mean of 4.04 (SD=0.86). Item “*I build trust by being open and looking for mutually beneficial outcomes*” recorded the highest sample mean of 4.24 (SD=0.65), and item “*I effectively manage complex relationships and use them to achieve the strategic plan*” indicated the lowest

sample mean of 3.78 (SD=0.78). In general, all respondents indicated a high level of developing networks competency in practice. An area for enhancement might be if middle managers could more fully lead and maneuver the complex relationships towards the desired results.

Table 5.7 *Level of Demonstrated Develop Networks Competency amongst Middle Managers*

Level	Frequency	Percentage	M	SD
Low (1.00-2.33)	-	-		
Moderate (2.34-3.66)	-	-	4.04	0.86
High (3.67-5.00)	92	100%		

N=92, M = Mean, SD = Standard Deviation

21 respondents answered the open-ended question. The findings revealed that the develop-networks competency was commonly used in daily job completion and managing stakeholders, including building relationships, working on projects, and maintaining good communication with partners.

Build collaborative environment

Appendix H presents the descriptive statistics of the building collaborative environment competency demonstrated amongst middle managers. The item “*I demonstrate genuine respect of others’ expertise, and I am willing to learn from others*” logged the highest sample mean of 4.27 (SD=0.66). Meanwhile, item “*I initiate strategic communication systems to reach all stakeholders*” recorded the lowest sample mean of 3.79 (SD=0.72).

As for the competency level demonstrated, Table 5.8 revealed that all middle managers had demonstrated a high level of competency in building a collaborative environment at the workplace with an overall sample mean of 4.01 (SD=0.88). However, collaborations amongst stakeholders might be more prolific if team members had multiple communication channels and platforms for the ideas exchange process.

Table 5.8 *Level of Demonstrated Building Collaborative Environment Competency amongst Middle Managers*

Level	Frequency	Percentage	M	SD
Low (1.00-2.33)	-	-		
Moderate (2.34-3.66)	-	-	4.01	0.88
High (3.67-5.00)	92	100%		

N=92, M = Mean, SD = Standard Deviation

Based on the 19 responses, building collaborative environment competency is often demonstrated while engaging with stakeholders, and managing teams, projects, and work-related issues.

Develop self and others

Based on the descriptive statistics of demonstrated developing self and others competency (Appendix I), the item “*I acknowledge my own strengths and weaknesses*” logged the highest sample mean of 4.23 (SD=0.69). Meanwhile, the item “*I establish cross-departmental learning opportunities*” indicated the lowest sample mean of 3.76 (SD=0.79). Having a richer sense of their abilities and capabilities, it appears that respondents are committed to the growth of themselves and their team members. In promoting team development, middle managers should provide ongoing learning opportunities for development and advancements. In terms of the level of demonstrated in the developing self and others competency, Table 5.9 indicated a high level of competency demonstrated amongst middle managers with an overall sample mean of 3.95 (SD=0.89).

Table 5.9 *Level of Demonstrated Developing Self and Others Competency amongst Middle Managers*

Level	Frequency	Percentage	M	SD
Low (1.00-2.33)	-	-		
Moderate (2.34-3.66)	-	-	3.95	0.89
High (3.67-5.00)	92	100%		

N=92, M = Mean, SD = Standard Deviation

Based on 18 respondents, developing self and others competency was utilized while working with others, particularly the subordinates.

Drive for results

Descriptive statistics (Appendix J) revealed that the item “*I ask for guidance when lacking information*” recorded the highest sample mean (M=4.21, SD=0.68), whereas item “*I provide bold advice to internal and external stakeholders*” was the lowest (M=3.89, SD=0.76) demonstrated in the competency.

As for the level of demonstrated driving for results competency, Table 5.10 revealed that all middle managers had demonstrated a high level of competency, showing that they are consistently and passionate about working towards greater results (M = 4.03, SD=0.87).

Table 5.10 *Level of Demonstrated Drive for Results Competency amongst Middle Managers*

Level	Frequency	Percentage	M	SD
Low (1.00-2.33)	-	-		
Moderate (2.34-3.66)	-	-	4.04	0.87
High (3.67-5.00)	92	100%		

N=92, M = Mean, SD = Standard Deviation

Based on 16 responses, the drive for results competency is mainly demonstrated in the decision-making process, daily job completion, managing office-related issues, and working with partners.

To summarize, based on respondents' feedback, it can be concluded that respondents viewed themselves to possess and demonstrate all seven competencies to a high degree in Malaysian public service delivery, particularly in managing work-related issues and the completion of daily work routines. According to the respondents, system thinking and creative problem-solving competencies are areas required in planning, policymaking, gathering and analyzing information, and brainstorming sessions. Agility linked to change management initiatives. Meanwhile, developing networks, building a collaborative environment, and developing self and others mainly were skills that respondents demonstrated when dealing with stakeholders (including top management, project partners, and subordinates). The experiences of this CBSA exercise show that the Malaysian public middle managers were aware and able to describe what and how these competencies should be demonstrated in delivering public service delivery. This suggests that the scale themselves did not appear to relate to competencies relevant to middle managers in the public sector.

5.4.3 Reflective questions

There were eight reflective questions; five were related to the RIA to describe the respondents' experiences using CBSA as an assessment tool to identify their strengths and weaknesses and areas of improvement. Meanwhile, three RFA questions guided them in developing their own professional development plan. Respondents were asked to complete seven 5-point Likert scale questions ranging from 1 (strongly agree) to 5 (strongly disagree) and explained their choice of answers. One question was open-ended. Descriptive statistics (Appendix K) and themes that emerged from data collected, are reported based on the type of questions, namely the RIA and RFA. 92 respondents were identified to have completed this section. However, only a few respondents (varying in number for each question) answered the open-ended question.

Descriptive statistics for Questions 1 – 7 revealed that the item *“Do you like doing the things that you are good at?”* recorded the highest sample mean, 4.53 (SD = 0.65). Meanwhile, item *“Are your strengths used to the fullest in your current job?”* logged the lowest sample mean, 3.79 (SD = 0.86). Table 5.11 showed that all respondents demonstrated a high level of reflective practice with an overall sample mean of 4.04 (SD = 0.87).

Table 5.11 *Level of Demonstrated Reflective Practice*

Level	Frequency	Percentage	M	SD
Low (1.00-2.33)	-	-		
Moderate (2.34-3.66)	-	-	4.04	0.87
High (3.67-5.00)	92	100%		

N=92, M = Mean, SD = Standard Deviation

Detailed findings on the reflective questions are as follows:

RIA questions

Five RIA-related questions, namely, Q1, Q2, Q4, Q6, and Q8, described the respondents' experience using CBSA as an assessment tool to identify their strengths and weaknesses and areas of improvement. Four questions had both the 5-point Likert scale and open-ended type

of questions, and only one (Q8) was an open-ended question. Descriptive statistics (N=92) revealed that the item Q1, *“Do you like doing the things that you are good at?”* recorded the highest sample mean, 4.53 (SD = 0.65). Meanwhile, item Q2, *“Are your strengths used to the fullest in your current job?”* logged the lowest sample mean, 3.79 (SD = 0.85).

(1) *Doing things that middle managers are good at*

When asked about whether middle managers like doing the things they are good at, 58.70% of respondents strongly agree, and 38% agree that they like doing the things (jobs) they are good at. 2.20% were neutral, and 1.10% recorded strongly disagree. Only 30 respondents explained their choice of answers. The respondents highlighted that the CBSA exercise made them feel empowered, ready to face challenges, and open to new opportunities. For instance, a female middle manager (grade M48, 10-15 years of working experience) noted that *“...enable me to be subject matter expert which benefitted the organization and my career development...I am open to new opportunities to utilize my expertise at a higher level or different environment setting.”* However, some limitations to be addressed include an unconducive working environment and the restriction of middle managers' power.

(2) *Utilizing middle managers' strengths in their current job*

From the respondents, 18.50% revealed that they strongly agreed, and 51.10% agreed that their strengths were fully utilized in their current job. 22.80% were neutral, 6.50% recorded a disagreement, and 1.10% strongly disagreed with the statement. 27 respondents responded to this open-ended question. Based on their responses, some of the tasks do not require any specific competencies – as highlighted by a female manager (M52, >15 years of working experience), *“it is a routine job and would not require a lot of my strengths.”* However, statements revealed that they felt bullied and burdened with workloads because of their ability to perform well in their current positions. One quote by a male HR manager (M52, >15 years of working experience), *“...sometimes I feel like been bullied because I do well in my job.”* Nevertheless, when their strengths were fully utilized, most of the respondents stated it enabled them to explore and introduce new approaches in their job, thus motivating them to contribute more towards organizational success.

(3) Valuable insights gained from CBSA exercise

Based on the responses, 19.60% of the respondents strongly agreed, while 64.10% agreed that the insights gained from conducting the self-assessment were valuable. On the other hand, 15.20% were neutral, and 1.10% stated their disagreement. There were 23 responses to the open-ended question. Three insights were identified: First, respondents' experiences in conducting CBSA allowed them to know the competencies that need improvement. Secondly, the CBSA exercises also made them realize the importance of investing in developing the long-term capability of themselves and others. Finally, they proposed how to successfully implement CBSA, which needs to be conducted at a specified time or level of grade and using an established and simplified self-assessment tool. As highlighted by two M48 HR managers (male, >15 years of working experience), “...we rarely identify them unless the self-assessment has been conducted at a specified level or time” and “to use established assessment tool,” respectively.

(4) The practicality of CBSA exercise for competency improvement

The survey indicated that 14.10% of the respondents strongly agreed, and 67.40% agreed that the self-assessment exercise results in a clear and actionable way forward for competency improvement. Meanwhile, 17.40% were neutral, and only 1.10% (1 respondent) disagreed. 19 respondents answered this open-ended question. Many respondents stated that the self-assessment exercise results in a clear and doable way forward for competency improvement only if CBSA is implemented and closely monitored as a periodic assessment. Quoting from a male HR manager (M52, >15 years of experience), “... it requires a close monitoring and expert team to help develop the assessment tool for ourselves. And it also need to be consistently monitored with periodic assessment.”

(5) Self-rating

There were 31 responses to the self-rating-related question. The majority of the respondents were able to rate themselves without having to think about it. For instance, quoting from a female M54 manager, “...able to rate oneself without having to think about it.” One respondent had included the spiritual aspect, which has brought tranquility while reflecting on this CBSA exercise – “with a clear conscience and leaving to the hands and assessment of God, it does give me a peace of mind” (male, M52, >15 years of working experience).

RFA questions

As for the RFA-related questions, namely; Q3, Q5, and Q7 described the respondents' experience in using CBSA as an assessment tool to guide them in developing their own professional development plan. All three questions had both a 5-point Likert scale and open-ended type of questions. Descriptive statistics revealed that item Q5 *"Did the self-assessment help you to indicate the need for competency improvement?"* recorded the highest sample mean, 4.11 (SD = 0.56). Meanwhile, item Q7, *"Are you motivated to address the identified competency gaps?"* logged the lowest sample mean, 3.92 (SD = 0.67).

(1) Values derived from the CBSA exercise

In general, the respondents agreed (14.10% - strongly agree, 68.50% agree) that this self-assessment exercise has brought value to them. Only 17.4% were neutral when asked this RFA-related question. As for the open-ended question, 22 respondents responded that in using the RFA techniques, they were able to learn to move forward and determine their development plans. They also learn not just to improve themselves but to work and grow with others too. However, this tool did not provide room for respondents to explain any restrictions or obstacles to reaching their potentials. For instance, a quote from a female M48 manager with 10-15 years of working experience *"however this tool does not provide room to explain restrictions or obstacles to reaching your potential."*

(2) CBSA as an indicator of the need for competency improvement

When asked if the CBSA exercise indicated the need for competency development, the respondents agreed (21.70% - strongly agree, 67.40% agree) with the statement, and only 10.90% indicated a neutral answer. Consistent with most respondents (out of 23 open-ended question responses) agreeing that the exercise helped indicate the need for competency, respondents highlighted that the weaknesses identified allowed them to determine their development plan. However, they noted that the CBSA should be a guided and informed self-assessment aligned with the organizational goals and objectives. As proposed by a female HR middle manager (M48, >15 years of experience), who stated it should *"be aligned with organizational needs and strategic planning."*

(3) Motivation to address the identified competency gaps

81.50% of the respondents agreed (14.10% - strongly agree, 67.40% agree) that they were motivated to address the identified competency gaps after using this self-assessment tool. However, 14.10% were neutral, and 2.20% were not motivated to address the gaps. Apart from highlighting the benefits of the CBSA exercise, the motivating effect is seen when some of the respondents (22 responses) proposed some thoughts on the implementation plans, where it needs to be a concerted effort with commitments from the leadership. As highlighted by a male middle manager (grade M48, 10-15 years of experience), *“U may address/propose anything for competency development but unless this initiative pick up by the higher up, this is just a waste of time,”*

The RIA questions enabled the respondents to evaluate themselves by identifying their strengths and weaknesses, which increased their self-awareness, empowerment, and readiness for new challenges. The respondents also realized the importance of personal growth and the concept of growing with others. These spontaneous insights from RIA have led to the use of the RFA reflective technique. Hence, the respondents were able to reflect further to adjust or improve their performance and roles as middle managers. Apart from guiding the respondents to determine their development plans, they also expressed thoughts on how to successfully implement CBSA into practice. The implementation of CBSA will be a success if the MPS leadership gives their full commitment to this effort and included it in the yearly appraisal performance. According to the respondents, it should be a guided, monitored, and informed CBSA to allow middle managers (employees) to self-manage their own development plans. The CBSA should be a platform from which individuals could provide feedback and explain any restrictions or obstacles to reaching their potentials. Therefore, it can be concluded that the combination of the spontaneous insights and understanding from RIA and RFA as guiding techniques for future adjustments indicates the benefits of using CBSA as an assessment tool for identifying current strengths and weaknesses, areas of improvement, thus determining a professional development plan.

5.5 Analysis

The following section discusses further findings and explains each outcome. The researcher has obtained data through "detailed description" to learn more about how participants evaluate their experiences using CBSA as an assessment tool to find areas of improvement and determine their development plans. Based on descriptive statistics, four findings emerged from this study, relating to the effectiveness of CBSA and respondents' recommendations towards effective CBSA.

5.5.1 Effectiveness of CBSA

This study's primary and overriding finding is that the CBSA tool can be useful in identifying existing competencies and skill gaps to determine the training required for skill development. This finding emerged clearly because, through reflective practices (RIA and RFA), most respondents reported that the CBSA questionnaire was a useful self-assessment tool that helped identify competency gaps for future development. Additionally, this exercise also has the potential to impact individuals' leadership styles, work performance, and organizational performance. As one female middle manager (grade M54) with more than 15 years of working experience noted that *"...once competency gaps are identified and rectified, it will help to improve the work performance."*

To further assess the robustness of CBSA, cross-sectional validation analyses were carried out to examine the validity (using Pearson's Correlation Coefficient analysis) and reliability (Cronbach's Alpha internal consistency) of the self-assessment tool. Meanwhile, regression analysis was utilized to determine each variable's association to key outcomes. Item impact calculations were then used to highlight items that were most likely to influence most respondents.

Results for the validity and reliability of CBSA as a tool from the Pearson's Correlation analysis revealed that the items in IWP, CBSA, and the combination of the RQ_{Q3-Q7} item were found to have significant correlations between items. As for the reliability analysis, the Cronbach's Alpha value ($\alpha = .801$) is greater than the generally accepted threshold ($\alpha = .70$), revealing that the CBSA scales are highly reliable and have good internal consistency. In terms of the

reflective practices and CBSA exercise, regression analysis revealed that having the CBSA competencies, experience working in the government sector, maturity in age, and ethnicity determine individual work performance, and the extent of reflective practices was demonstrated. Meanwhile, the item impact analysis revealed that 11 items (2 IWP items, 7 CBSA items, and 2 reflective questions items) appeared to be the most prominent amongst respondents towards individuals' work productivity and organizational success. Thus, CBSA is a reliable and valid tool for identifying individuals' strengths and weaknesses and determining areas of improvement, guiding them to determine and develop their development plans. Detailed explanation on the cross-sectional validation analyses is as follows:

(1) Pearson's correlation coefficients

Pearson's correlation coefficients were utilized (r) to assess the direction and strengths of the relationships between items within the IWP, CBSA, and reflective questions scales. The direction of the relationship was based on the value between the range of -1 and +1, indicating the direction of the relationship (-1 = negative linear relationship, 0 = no relationship, and +1 = positive linear relationship) (Kleinbaum, Kupper, & Muller, 1988).

Table 5.12 shows the results for the direction of the relationships between items of each section. Based on the results, IWP (17 items, 70 pairwise) had an 87.14% (61 pairwise) significant correlation coefficient ($r = .107-.563$, $p = 0.01, 0.05$), leaving 13.86% (9 pairwise) for non-significant correlation pairwise, which related to only one item (TP3 - *I had trouble setting priorities in my work*).

Table 5.12 *Pearson's Correlation Coefficient Results*

Correlation (r)	Items (n)	Total r-pair	Positive Correlations			Non-Significant Correlations		
			Low	High	Total r-pair	Low	High	Total r-pair
IWP*	17	70	0.107	0.563	61	-0.087	0.073	9
CBSA**	91	4,095	0.143	0.811	4,094	0.041		1
Reflective*	7	21	0.315	0.684	13	0.024	0.151	8
RQ_{Q3-Q7}**	5	10	0.315	0.684	10			

* $p=0.05$, ** $p=0.01$

Meanwhile, out of 4,095 pairwise CBSA competencies items (91 items), 4,094 were significantly correlated within and across competencies ($r=.143-.811$, $p = 0.001$). Only one pairwise did not correlate ($r = 0.041$, $p = 0.01$), which was found in the combination of item Q3 (creative problem-solving) "*I ask questions to get a deeper understanding on issues*" and Q7 (develop self & others) "*I design a personal action plan to support career goals.*" As for Reflective Questions (7 items, 21 pairwise), the initial results of the validity analysis, 13 pairwise were found to have positive correlations ($r=.315-.684$, $p = 0.001$), and 8 pairwise did not correlate ($r=.024-.151$, $p > 0.05$).

From these results, a new Reflective Questions construct combination (5 items - Q3, Q4, Q5, Q6, and Q7) was created, leaving Q1 and Q2 as individual items for the later analyses. The results of the new RQ_{Q3-Q7} with 10 pairwise appeared to be significantly correlated ($r=.315-.684$, $p = 0.001$). Overall, despite the 10 non-correlated items in IWP, CBSA, and the new RQ_{Q3-Q7} items combined as a composite scale, results showed the scales to be highly reliable measures of separate underlying constructs.

Based on the positive correlations of items in IWP, CBSA, and RQ_{Q3-Q7} results, the strength of the relationship (Table 5.13) were categorized as strong, moderate and weak based on general guidelines of ≥ 0.5 , 0.3 to 0.5 and 0.1 to 0.3. IWP indicated 7 strong correlations ($r = 0.507-0.563$, $p = 0.01$), 32 moderate correlations ($r = 0.304-0.487$, $p = 0.01$), and 22 low correlations ($r = 0.107-0.297$, $p = 0.01, 0.05$). Meanwhile, CBSA had 1,695 strong correlations ($r = 0.500-$

0.811, $p = 0.01$), 2,128 moderate correlations ($r = 0.300-0.499$, $p = 0.01$), and 271 low correlation ($r = 0.143-0.299$, $p = 0.01$). Finally, the RQ_{Q3-Q7}, results revealed the 10 pairwise exhibited 6 strong correlations ($r = 0.570-0.684$, $p = 0.01$), and 4 moderate correlations ($r = 0.315-0.432$, $p = 0.01$).

Table 5.13 *The Strength of the Correlations*

Correlation (<i>r</i>)	<i>N</i>	Total <i>r</i> -pair	Strong $r > 0.5$			Moderate $0.3 < r < 0.5$			Weak $0.1 < r < 0.3$		
			Low	High	Total <i>r</i> -pair	Low	High	Total <i>r</i> -pair	Low	High	Total <i>r</i> -pair
IWP*	17	61	0.507	0.563	7	0.304	0.487	32	0.107	0.297	22
CBSA**	91	4,094	0.500	0.811	1,695	0.300	0.499	2,128	0.143	0.299	271
RQ _{Q3-Q7} **	5	10	0.570	0.684	6	0.315	0.432	4			

* $p=0.05$, ** $p=0.01$

For the few items of the scale that were negatively worded, which can be found in IWP and Reflective questions, the results were more mixed, suggesting that such working likely needs to be assessed in more depth. The CBSA competency items were, though found to be significantly correlated within and across competencies. This could mean that most middle managers build multiple competencies simultaneously or that the middle managers were reluctant to score themselves lower on particular scale items or across competencies. Comparing CBSA with external assessment of middle managers' competencies would help understand this more fully and may be useful for future research.

(2) Cronbach's Alpha analysis

To further demonstrate that CBSA exhibits reliability as a self-assessment tool, Cronbach's Alpha analysis was used to assess the internal consistency of items in IWP, CBSA, and Reflective questions in determining the degree to which a research instrument (survey) produces consistent results. Acceptable values for alpha (α) are those ranging from .70 to .95 (Cortina, 1993). Overall, the Cronbach's alpha value for items of IWP, CBSA, and RQ_{Q3-Q7} combined as a questionnaire, $\alpha = .768$, greater than .70, indicating that the scales are highly reliable and have a good internal consistency (refer to Table 5.14).

Table 5.14 *Cronbach's Alpha Analysis*

Scale	N	Cronbach's Alpha*
<i>Individual Work Performance (IWP)</i>		
Task Performance (TP)	7	0.731
Contextual Performance (CP)	10	0.879
Combined scale TP & CP	17	0.891
<i>CBSA</i>		
System Thinking	13	0.934
CPS**	13	0.931
Agility	13	0.943
Develop Networks	13	0.944
BCE**	13	0.951
Develop Self & Others	13	0.954
Drive for Results	13	0.955
Combined Scale CBSA	91	0.988
<i>Reflective</i>		
RIA (Q1, Q2, Q4, Q6)	4	0.544
RFA (Q3, Q5, Q7)	3	0.707
RQ _{Q3, Q4, Q5, Q6, Q7}	5	0.841
Combined scale	7	0.744

* *accepted α value ≥ 0.70*

**CPS - *Creative Problem Solving*, BCE - *Build Collaborative Environment*

The IWP questionnaire was highly reliable and had good internal consistency (17 items; $\alpha = .89$). The 17 items in the IWP questionnaire were assessed in two steps. First, it was assessed individually according to the two dimensions, Task Performance (TP $\alpha = .731$) and Contextual Performance (CP $\alpha = .879$) (Kirkman et al., 2002). Secondly, the scales were assessed as a combined scale that made up the IWP questionnaire ($\alpha = 0.89$).

Meanwhile, the CBSA questionnaire was also found to be highly reliable with good internal consistency as a combined scale (91 items; $\alpha = .988$). The CBSA scale consisted of 7 subscales

representing the competencies questions, and each competency has 13 items. Cronbach's alpha for the 7 subscales was greater than $\alpha = .70$ ranging from .931 to .955, namely, system thinking ($\alpha = .934$), creative problem-solving ($\alpha = .931$), agility ($\alpha = .943$), develop networks ($\alpha = .944$), building collaborative environment ($\alpha = .951$), develop self and others ($\alpha = .9534$), and drive for results ($\alpha = .955$).

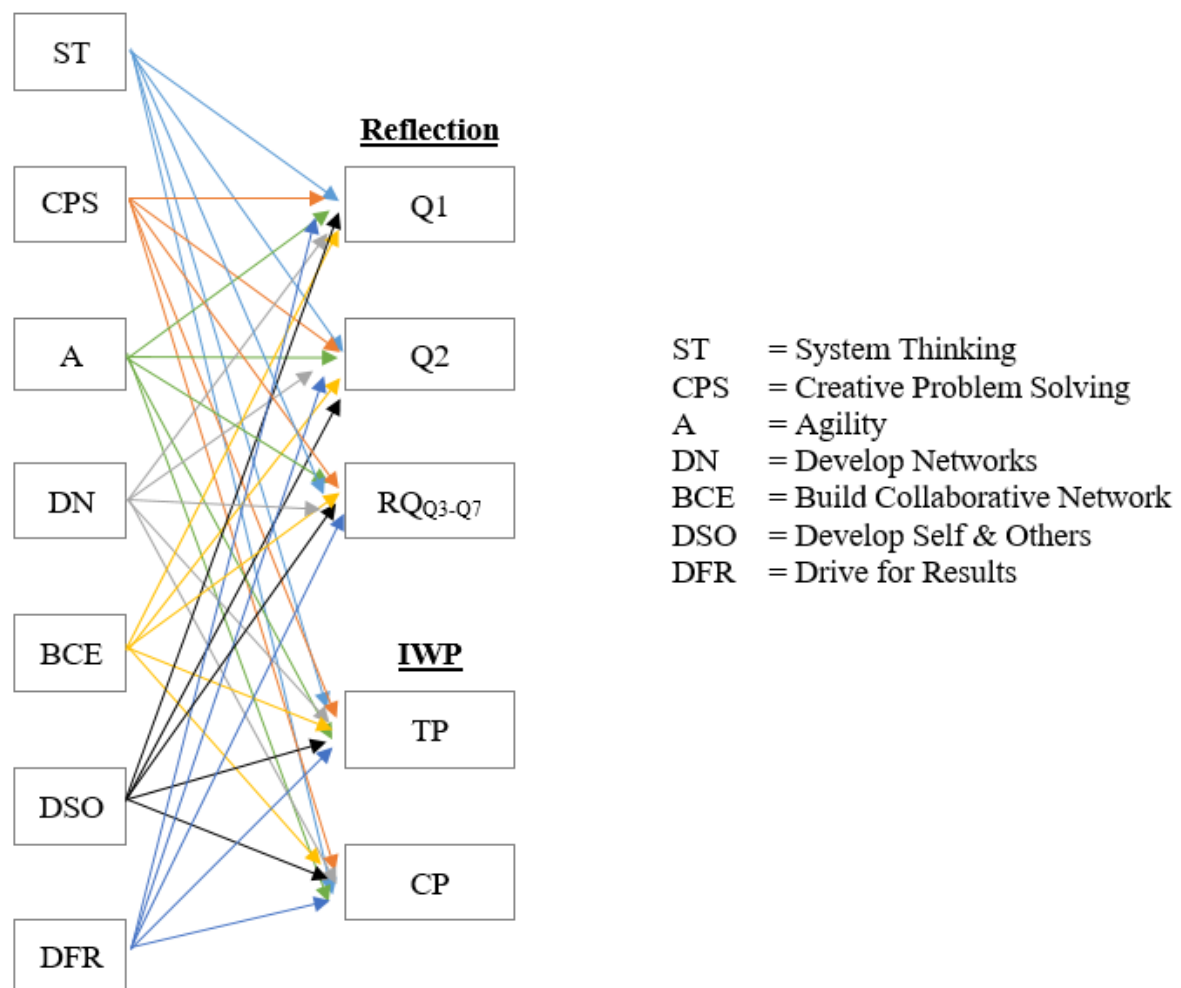
As for the reflective questions, Cronbach's alpha analysis was conducted in two steps. First, analysis according to RIA (4 items) and RFA (3 items) subscales, and second, the combination of 5 items RQ_{Q3-Q7}. When the subscales were assessed individually, RIA Cronbach's alpha value was .544, lower than the accepted $\alpha = .70$, indicating the subscale has limited internal consistency. In contrast, the RFA subscale ($\alpha = .707$) was slightly greater than $\alpha = .70$, indicating the scale has a good internal consistency. However, when the combination of RQ_{Q3-Q7} was assessed together, the Cronbach's alpha value was .841, greater than $\alpha = .70$, indicating the scale items were highly reliable and had a good internal consistency.

Based on the above analyses, the subsequent evaluations drew on the combinations of scale items with strong internal consistency so that averages across items could be used to measure IWP (TP, CP), the CBSA competencies, and key aspects of RIA and RFA.

(3) Regression analysis

By measuring IWP, reflective practices, and conducting the CBSA exercise, it was possible to assess the associations between these constructs and then to narrow the focus down to key elements of the assessed competencies. These results were gathered via multiple regression analysis and item impact calculation. A stepwise linear regression analysis was used to examine the association between independent variables for demography and CBSA and both the IWP dimensions (TP and CP) and the reflective questions (Q1, Q2, and RQ_{Q3-Q7}) based on the measurement model (Figure 5.1) and equation of F (Demography gender, age, tenure, education, grade, function + CBSA_{ST, CPS, A, DN, BCS, DSO, DFR}). The purpose of multiple regression was to assess if the variances of outcome variables had associations with the CBSA dimensions when controlling for other factors, including gender, age, ethnicity, years of experience, grade, education level, and job function.

Figure 5.1 *Measurement Models for Regression Analyses*



$$F(\text{Demography}_{\text{gender, age, tenure, education, grade, function}} + \text{CBSA}_{\text{ST, CPS, A, DN, BCS, DSO, DFR}})$$

In the analysis, the demographic information was included in the model using the SPSS enter method. Meanwhile, the competencies variables used the stepwise method to examine their impact on individual work performance (TP and CP dimensions) and reflective practices (RIA1, RIA2, and RQ_{Q3-Q7}). The stepwise option was chosen because the competency dimensions demonstrated very strong inter-correlations, and so adding all CBSA dimensions simultaneously creates multicollinearity and some statistical estimation difficulties. The results (Table 5.15) showed that demographics as a combined group of control variables did not significantly impact individual work performance and reflective practices. However, when referring to individual demographic variables, service tenure was positively related to individual work performance's TP and CP dimensions. In contrast, for reflective practices,

ethnicity, age, and service tenure were associated with all the outcome variables. When competencies variables were added into the models, the outcome variances only appeared in service tenure, age, and Malay ethnicity. Out of the 7 competencies, only system thinking (ST), creative problem-solving (CPS), develop networks (DN), and drive for results (DFR) appeared to have an impact on the models.

Table 5.15 *Regression Model for Individual Work Performance and Reflective Practices*

Variable	No. of Model	Best Fit Model	Results
<i>Individual Work Performance</i>			
TP	Model 1	Demographic	NS
	Model 2	Demographic + CPS	S*
	Model 3	Demographic + CPS + DFR	S*
CP	Model 1	Demographic	NS
	Model 2	Demographic + ST	S*
	Model 3	Demographic + ST + CPS	S*
<i>Reflective Practices</i>			
RIA1	Model 1	Demographic	NS
	Model 2	Demographic + DFR	S**
	Model 3	Demographic + DFR + DN	S**
RIA2	Model 1	Demographic	NS
	Model 2	Demographic + DFR	S*
RQQ3-Q7	Model 1	Demographic	NS
	Model 2	Demographic + ST	S**

NS = Not Significant, S = Significant

* $p = .000$, ** $p > .005$

A detailed explanation of the results is as follows:

Task performance

Model 1 – The r^2 value of .11 revealed that the demographic collectively explained 11% variance in TP with $F(10, 81) = 1.020, p > .005, \beta = .374$. The findings revealed that demographics did not significantly predict the individual task performance.

Model 2 – The r^2 value of .43 revealed that demographic and CPS explained 43% of variance in TP with $F(11, 80) = 5.540, p = .000$. CPS ($\beta = .591, t = 6.722, p = .000$) was significantly related to the individual task performance.

Model 3 – This model revealed that demographic, CPS ($\beta = .370, t = 3.293, p = .001$), and DFR ($\beta = -.345, t = -2.967, p = .004$) explained 49% of variance in TP $F(12, 79) = 6.307, p = .000$, indicating that the model significantly predicts the variance in individual task performance.

Contextual performance

Model 1 – The r^2 value of .03 revealed that the demographic collectively explained very little (only 3%) of the variance in CP with $F(10, 81) = .283, p > .005$. Service tenure again appeared to have the highest association with $\beta = .232$.

Model 2 – The r^2 value of .55 revealed that demographic and ST explained 55% of variance in CP with $F(11, 80) = 8.770, p = .000$. The findings revealed that ST ($\beta = .745, t = 9.514, p = .000$) significantly predicts the variance in individual contextual performance.

Model 3 – This model revealed that demographics, ST ($\beta = .446, t = 4.018, p = .000$), and CPS ($\beta = .399, t = 3.585, p = .001$) explained 61% of the variance in CP $F(12, 79) = 10.301, p = .000$.

RIA1

Model 1 – The r^2 value of .16 revealed that the demographic collectively explained only 16% of the variance in RIA1 with $F(10, 81) = 1.55, p > .005$. When referring to the individual demographic variables, Malay ethnicity and service tenure were positively related with $\beta = .260$ and $\beta = .224$, respectively, compared to the other variables.

Model 2 – When the competency variable is added, the r^2 value of .23 revealed that demographic and DFR explained 23% of the variance in reflective practices with $F(11, 80) = 2.148, p = .026$. The findings revealed that demographic and DFR ($\beta = .280, t = 2.637, p = .010$) significantly predict the reflective practices with Malay ethnicity ($\beta = .154$) and age ($\beta = .121$) having high estimated β value.

Model 3 – The model revealed that demographic and DFR ($\beta = .499, t = 3.375, p = .001$), and DN ($\beta = -.309, t = -2.084, p = .040$) explained 27% of variance in the RIA1 $F(12, 79) = 2.413, p = .01$.

RIA2

Model 1 – The r^2 value of .08 revealed that the demographic collectively explained 8% variance in RIA2 with $F(10, 81) = .552, p > .005$. The findings revealed that demographics did not significantly predict the reflective practices. Referring to the individual demographic variable, the two highest β values were age ($\beta = .142$) and Indian ethnicity ($\beta = .141$) compared to the other variables.

Model 2 – As for the CBSA, in Step 1, the r^2 value of .35 revealed that demographic and DFR explained 35% of the variance in reflective practices with $F(11, 80) = 3.828, p = .000$. The findings revealed that demographic and DFR ($\beta = .553, t = 5.662, p = .000$) significantly predict the reflective practices. The stepwise procedure did not add additional CBSA variables.

RQ_{Q3-Q7}

Model 1 – The r^2 value of .15 revealed that the demographic collectively explained 15% variance in RQ_{Q3-Q7} with $F(10, 81) = 1.397, p > .005$. The findings revealed that demographics did not significantly predict the reflective practices. However, when referring to the individual demographic variable, Malay ethnicity and service tenure appeared to have higher values of $\beta = .373$ and $\beta = .353$, respectively, compared to the other variables.

Model 2 – The r^2 value of .26 revealed that demographic and ST explained 26% of variance in reflective practices with $F(11, 80) = 2.543, p = .008$. The findings revealed that demographic and ST ($\beta = .348, t = 3.478, p = .001$) significantly predict the reflective practices.

Based on the above findings, it can be concluded that specific competencies variables are significantly associated with variation in individual work performance and reflective practices. In particular, system thinking, creative problem-solving, develop networks, and drive for results impact the different models, suggesting that these four competencies were most influential amongst public middle managers in performing public service. Thus, if low levels of these competencies are self-identified for particular middle managers, then these would be an appropriate starting point for guiding competency development choices. The MPS should also consider the other three competencies (agility, develop self and others, and build collaborative environment) to be included in the focus areas of competencies for future development, given these currently have a lesser impact on key outcomes.

(4) Item Impact Calculation

As for items that appeared to be most appealing to respondents, an item impact calculation was conducted on items in IWP, CBSA, and reflective questions. Item impact aims to identify things that survey participants thought were of different significance (Broder et al., 2007), here different levels of performance, reflection, or competency. Item impact was calculated as mean score multiplied by the percentage of respondents who reported an impact to highlight the questionnaire items most important to most people. Results showed (Table 5.16) that 11 items (2 IWP items, 7 CBSA items, and 2 reflective questions items) were identified to be the most prominent amongst respondents towards individuals' work productivity and organizational success. Thus allowing respondents to identify their strengths and weaknesses, areas for progress, and determine their development plans. The results revealed the following:

Table 5.16 *Item Impact Analysis*

Scale	N	Range						Highest Item Impact Score Question
		Percentage		Mean		Item Impact		
		Low	High	Low	High	Low	High	
Individual Work Performance (IWP) (5 - frequently, 6 - usually, 7 - every time)								
Task Performance	7	54.35	97.83	4.90	6.18	266.30	604.57	TP7
Contextual Performance	10	84.78	95.65	5.51	6.10	467.15	571.04	CP13
Competency-Based Self-Assessment (CBSA) (3 - to a moderate extent, 4 - to a large extent, 5 - to a great extent)								
System Thinking	13	91.30	98.90	3.73	4.32	344.22	427.30	Q1
CPS*	13	93.48	98.91	3.76	4.35	351.48	430.26	Q2
Agility	13	93.48	100.00	3.83	4.29	358.96	429.00	Q6
Develop Networks	13	95.70	98.90	3.78	4.24	361.75	424.00	Q7
BCE*	13	93.50	98.90	3.79	4.27	365.59	422.30	Q3
Develop Self & Others	13	93.50	96.70	3.76	4.23	351.56	568.60	Q5
Drive for Results	13	96.70	100.00	3.89	4.21	376.16	420.00	Q3
Reflective Questions (RQ) (4 - agree, 5 - strongly agree)								
RIA (Q1, Q2, Q4, Q6)	4	69.57	96.74	3.79	4.53	263.65	438.23	Q1
RFA (Q3, Q5, Q7)	3	81.52	89.13	3.92	4.11	319.88	366.21	Q5

*CPS - Creative Problem Solving, BCE - Build Collaborative Environment

The IWP questionnaire was divided into 7 items under the TP and 10 items for CP. The item impact scores were conducted in both categories based on respondents who scored an impact (5-frequently, 6-usually, and 7-every time to responses on the item) using the 7-point Likert

scale. Often fewer than 5-10% of responses were for the lower scores (see Appendices for each scale distribution). The results revealed that the highest item impact score in TP dimension was recorded in item TP7, *“communication with others led to the desired results,”* with a score of 604.57 (95.7% of responses, $M = 5.80$). Meanwhile, the highest item impact score in the CP dimension was found in item CP13, *“I worked at keeping my job knowledge up-to-date”* (571.04, 95.65% of responses, $M = 5.79$). Based on the highest item impact score in both TP and CP dimensions, it appeared that communicating and having a good relationship with stakeholders and updating job knowledge are strong aspects of performance for most respondents.

As for the CBSA questionnaire, the analysis was conducted on all 91 items of the 7 competencies based on the respondents who scored an impact (3 - to a moderate extent, 4 - to a large extent, 5 - to a great extent) using the 5-point Likert scale. Out of 91, scored the highest item impact Q5 *“I contribute by sharing information, knowledge, and experiences, even when not asked”* (568.83, 96.70% responses, $M = 5.88$) within the scale of Develop Self & Others competency and across the 7 competencies. This was followed by creative problem-solving Q2 *“I am open to new ways of doing things”* (430.26, 98.91% responses, $M = 4.35$), agility Q6 *“I seek ways to do things better,”* (429, 100% responses, $M = 4.29$), system thinking Q1 *“I consider how my own work impacts the work of the team and vice versa”* (427.30, 98.90% responses, $M = 4.32$), develop networks Q7 *“I understand how changes in government and its policies might impact clients and their needs”* (424, 100% responses, $M = 4.34$), build collaborative environment Q3 *“I demonstrate genuine respect of others’ expertise, and I am willing to learn from others,”* (422.30, 98.90% responses, $M = 4.37$), and drive for results Q3 *“I incorporate past learnings into work plans,”* (420, 100% responses, $M = 4.20$). These high scores of item impact have provided insights on the importance of learning from the past, hence creating new opportunities for individuals to strengthen their skills and knowledge in performing their jobs successfully. Additionally, the scores revealed that the respondents were aware of the importance of acknowledging, respecting, establishing, supporting, and maintaining strategic working relationships with the stakeholders towards organizational success.

The item impact calculation was conducted in the 4-item RIA and 3-item RFA, involving respondents who reported an impact (4-agree and 5-strongly agree) using a 5-point Likert scale. The highest item impact score for RIA questions was found in Q1, *“Do you like doing the things that you are good at?”* (438.23 with 96.74% of responses, $M = 4.53$). Meanwhile, for RFA questions, the highest item impact score was Q5, *“Did the self-assessment exercise help you to indicate the need for competency improvement?”* (366.21 with 89.13% of responses, $M = 4.11$). Based on the scores above, it can be concluded that conducting the CBSA exercise has allowed the respondents to reflect on understanding their current roles or jobs, hence identifying areas of competencies that already exist where existing development activities may already be performing adequately.

5.5.2 Recommendations towards effective CBSA

Research shows that self-assessment is the most appropriate instrument for facilitating a shared approach for employees to build career and development plans (Draganidis & Mentzas, 2006; Hellström et al., 2000; Woodruffe, 1993a). Thus, it seems reasonable for CBSA to be introduced and implemented in the MPS as part of the assessment system. However, research also suggests that organizations should be cautious in implementing assessment methods and strategies as different approaches may lead to different results. Therefore, to guide the organization to determine an appropriate approach, this study managed to gain insights from respondents who raised four recommendations. These recommendations were gathered from the reflective open-ended questions, where the respondents shared their thoughts about deriving insights from the CBSA exercise. Based on the respondents' descriptions, as highlighted, four recommendations were raised.

First, the implementation of CBSA needs full commitment from the leadership and management. According to Nasomboon (2014), leadership commitment has a direct impact on organizational performance. As described by a male middle manager (grade M48, 10-15 years of experience), *“U may address/propose anything for competency development but unless this initiative pick up by the higher up, this is just a waste of time,”* highlighting that to ensure its success and effectiveness, it is crucial to acquire full commitment from the leaders to introduce and implement CBSA in the MPS. This finding is consistent with prior studies that effective

and high-commitment leaders can positively influence their employees to create an environment that promotes organizational effectiveness (Nasomboon, 2014).

Secondly, it should be a guided and informed CBSA. Four themes were derived from the respondents' descriptions should CBSA be introduced and implemented, CBSA should be aligned with organizational strategies, guided by a framework or standard, feedback-seeking CBSA, monitored, and led by trained expertise/ supervisor. This finding is also consistent with previous research that the self-assessment technique is used against a pre-determined set of competencies and evaluation scale for assessment accuracy (Russo, 2016).

(1) *Framework/ Standards*

According to the respondents, CBSA is an assessment tool that would help employees perform in their current job better, identify areas of improvement, and make adjustments, thus developing their competencies. CBSA employs the self-assessment technique that empowers employees to take charge of their own competencies development; therefore, it should be presented in the form of a guided and clear competency framework or model equipped with an appropriate competency standard and evaluation scale. Quoting from an HR middle manager (M48, 10-15 years of experience), *"It explains some directions of what to consider and strategies to improvise."*

(2) *Aligned with Organizational Strategies*

Research suggests that an established competency model is commonly designed and linked to HR strategies aligned with the organization's mission and vision in achieving organizational success. Findings support this notion that CBSA should be linked to the MPS' vision and mission to avoid disconnecting between the development planning strategy and the implementation reality. As proposed by a female HR middle manager (M48, >15 years of experience), who stated it should *"be aligned with organizational needs and strategic planning."*

(3) *Feedback-seeking concept*

Quoting from another HR middle manager (male, M48, 10-15 years of experience), *"as middle management officer, we always need feedback and approval from our superior and top*

management officer towards complete any task given.” The self-assessment activity is incomplete without integrating it with a feedback-seeking process. Feedback-seeking is active monitoring and inquiry of information concerning job performance acquired from communicating with people and observing the environment within the work settings (Ashford & Cummings, 1983; Renn & Fedor, 2001). According to Renn and Fedor (2001), feedback-seeking facilitates employees in achieving their personal (including evaluating and developing their competencies) and organizational goals within their work settings.

(4) *Expertise*

A well-defined set of personal development objectives and managers with a consistent measurement tool, practical competency framework would not work at its best without the expertise to conceptualize it across geographical, cultural, and work boundaries. Therefore, recruiting and training individuals to become self-assessment subject matter experts would help MPS successfully and effectively implement CBSA. As suggested by research, self-assessment would not just be an assessment technique, but CBSA shall be included as part of the competencies in work performance.

Thirdly, based on the respondents’ descriptions, “...it also need to be consistently monitored with periodic assessment” (a male HR middle manager, M52, >15 years of experience), CBSA is to be considered as periodic assessment for best results. The objective of introducing CBSA is to upskill and reskill individuals’ knowledge and attitude for employees to make career and development plans. Not as extra work or a burden adding to the current job. Therefore, CBSA to be implemented as periodic assessment should be considered as this finding supports the notion that the process of workforce empowerment settings in mastering a skill or knowledge should be conducted at their own pace, time, and understanding (Draganidis & Mentzas, 2006; Hellström et al., 2000; Woodruffe, 1993a).

Finally, two themes were derived from the responses highlighting that the CBSA questionnaire should be simplified and provide space for individuals’ reflection. A good design of a self-assessment questionnaire lies in the quality of questions, rating scale length, the order of answer choices, and the use of words (Krosnick, 2018). However, Krosnick (2018) further argued that the utmost about the questionnaire is that it does not bore the respondents, fewest completion

errors, and it can be completed as quickly as possible. For instance, one HR personnel (male, M48, 10-15 years of experience) said, *“Too wordy that made me forgot what I answered on the earlier parts.”* Having said that, CBSA, if implemented, should avoid wordy questions to get good quality of responses. As highlighted by the respondents, *“however this tool does not provide room to explain restrictions or obstacles to reaching your potential”* (female, M48, 10-15 years of experience); CBSA should also provide spaces for individuals to reflect and share their thoughts, especially when they could not fulfil the expectations of the competencies. This information could be treated as a formative assessment for other assessments such as the yearly performance appraisals, peer rating, 360°, and other external assessments.

Koene (2017) argued that managers play a vital role in examining, testing, and refining reform ideas before setting an example in adopting and adapting towards organizational success. Based on the above discussion, it appeared to be that the middle managers’ opinions matter in any public sector reform process (in this context, CBSA is to be introduced and implemented as part of the MPS’ assessment system). Indeed, the reflective practices of the RIA have allowed them to share their experience using CBSA as an assessment tool and suggested some recommendations should CBSA be included in the MPS’ assessment system. These recommendations raised should be considered in the updated MPS competency framework. It will serve as a guideline for civil servants in utilizing CBSA as a tool to identify individuals’ strengths and weaknesses, hence determining their development plans.

5.5.3 Areas of competencies for future development

Table 5.17 shows the lowest score of the sample mean, the lowest score of item impact calculation, and areas for improvement in each competency, highlighting 11 possible areas of improvement. Detailed items can be referred to in Appendix L. These 11 items were further analyzed, and 7 areas of competencies could be considered areas for improvement. There were three areas of competencies (creative problem solving, develop self and others, and develop networks) shared similar questions of possible focus of improvement, Q9 (analytical techniques), Q11 (managing complex relationships), and Q12 (creating learning opportunities), respectively. Meanwhile, the other four competencies had 8 different sets of items with 4 possible areas for improvement (system thinking – *aligning organizations’ objectives and action plans*, agility – *proactive behavior*, build collaborative environment – *communication*

strategies, and drive for results – *plan integration*) that can be included in future training programs. Out of these seven areas for improvement, an utmost emphasis on the proactive behavior (agility competency) should be given in training and development programs as similar results appeared in the IWP (both TP and CP dimensions) section, which related to setting work priorities and taking on challenging tasks. The lowest item impact score was found in the reversely coded item TP3, “*I had trouble setting in work priorities*” (266.30, 54.35% of responses, $M = 4.90$). The lowest was CP12, “*I took on challenging work tasks, when available*” (467.15, 84.78% of responses, $M = 5.51$).

Table 5.17 *Lowest Score of the Sample Mean and Item Impact Calculation and Areas for Improvement*

Competency	Sample Mean		Item Impact		Areas for Improvement
	Mean	Item	Score	Item	
Creative Problem Solving	3.76	Q9	351.48	Q9	Analytical techniques
Develop Self & Others	3.76	Q11	351.48	Q11	Creating learning opportunities
Develop Networks	3.78	Q12	361.57	Q12	Managing complex relationship
System Thinking	3.73	Q8	344.20	Q12	Aligning organizations' objectives & action plans
Agility	3.83	Q12	358.96	Q7	Proactive behaviour
Build Collaborative Environment	3.79	Q12	365.50	Q10	Communication strategies
Drive for Results	3.89	Q12	376.32	Q8	Plan integration

Despite the differences in context (such as country, culture, and work environment), this finding confirms that the MPS public middle managers also stumbled upon similar challenges in public service delivery encountered by middle managers worldwide, particularly in executing strategy and delivering results, leading and developing others, and building relationships (Blackman et al., 2019; Booth & Farquhar, 2003). This could also suggest that these areas for improvement are relevant and would be an informed decision to MPS to include and prioritize these areas as part of competency-based training and development programs.

The analysis also revealed that the MPS public middle managers did not lack the skills or capabilities to perform jobs effectively, but how knowledge and skills are managed, activated, and shared to serve organizational and social goals could be the issue (Al-Yahya, 2010). The results showed that some of these competencies may or may not have been practiced or considered unimportant to middle managers in their work performance, indicating that the 12 competencies of the 2004 MPS Competency Model might need to update its relevancy in these rapid economic changes and technological advancement era.

In a nutshell, identifying and prioritizing the areas of improvement allows middle managers to plan their development plans accordingly, not just to improve what is lacking, but it also opens up rooms for reskilling and upskilling their current competencies. Therefore, an emphasis on organizational design and enhancing the fit of training and development with organizational requirements should be prioritized as a long-term approach and an informed decision in updating the competencies lists, formulating training and development programs, improving job descriptions, and employment establishment.

5.5.4 CBSA develops self and others

According to Eva and Regehr (2008), self-assessment would be more beneficial if utilized with reflective practices. The respondents' reflections on CBSA revealed that the benefits of self-assessment can be categorized into two levels, individual and collective, where individuals making sense of their existence as middle managers and how CBSA has led them to build relationships and grow with others towards organizational success collectively. As identified by a female HR manager (M48, 10-15 years of experience), how CBSA benefited at both levels, *"Help me to think how to continue improve myself and team under my supervision."*

Being a public middle manager requires a sense of working in the public interest, service-oriented, mission-driven management, equipped with strategic planning and political wisdom. The finding revealed that self-assessment and the role of reflection had increased the individual understanding of possessing job competence and technical knowledge of the profession, hence utilizing them for effective performance, yet maintaining professionalism.

Additionally, the position of middle managers in the hierarchy had empowered them to forge connections, build relationships and a sense of belonging among diverse employees, and develop talents. This study has made middle managers realize the reciprocal relationship and interaction between individual self-assessment and reflective practices and the collective construct that has led towards professional development, contributing to collective knowledge and learning organization (Desjarlais & Smith, 2011; Eva & Regehr, 2008; Pandit, 2011).

CBSA and the role of reflection triggered how individuals perceived themselves. This supports the notion posited by Desjarlais and Smith (2011), self-assessment is used as a tool to identify

areas for improvement, and the results should be shared with others for development purposes. Furthermore, this study also supports the work of Cheetham and Chivers (1998), the holistic model of professional competence that combines reflective practices with the strengths of various competency-based approaches (functional, behavioral, cognitive, ethical, and meta-competence), providing professional guidelines in self-development and collectively performing work-related tasks effectively towards organizational success.

5.6 Reflective leaders in the making

Based on the work Schön's RIA (1983), and Killion and Todnem's RFA (1991), and Cheetham and Chivers' (1998) model of Professional Competence, a theoretical framework (Figure 2.6) was developed to examine middle manager's experience of CBSAs, to inform future implementation in the MPS. The strong relationship of RIA and RFA and the professional competence model highlighted the significant contributions in becoming a reflective professional. The study revealed that this model operates in two levels, individual and organizational. At the individual level, when combined with the CBSA exercise, the spontaneous insights gained from RIA suggest the benefits of using CBSA as an assessment tool leads to RFA in determining strategies of intervention for individual improvement and future development. Meanwhile, at the organizational level, the results of CBSA shall be informed decision-making for organizations' training needs strategy and development. This would also raise the importance of organizations providing and creating a safe learning environment for employees to learn and grow collectively. The study also revealed that the strong relationship between RIA and RFA is shaped by experiences working in the government sector, maturity in age, and ethnicity towards individuals' work productivity and organizational success. To summarize, there is a strong interlink between the key features of the theoretical framework highlighting the use of CBSA as a tool (in relation to reflective practices) and how it might aid professionals in determining and developing a competency-based plan of action at the individual and organizational level.

5.7 Summary of Findings

This chapter describes and analyses MPS managers' evaluation of using CBSA as a tool to self-assess key competencies and determine future development plans. Four main findings

were concluded, namely, (1) the effectiveness of CBSA, (2) respondents' recommendations towards effective CBSA, (3) areas of competencies for future improvement, and (4) CBSA develops self and others. Taking each briefly:

The first key findings of this study are that most respondents regard the CBSA exercise to be a useful tool to identify individuals' strengths and weaknesses and determine areas of improvement, hence guiding them to determine and develop future development plans. CBSA was found through the analysis to be a reliable self-assessment method. Despite variation in middle managers' perspectives, experience working in the government sector, maturity in age, and ethnicity, the analysis demonstrated that CBSA significantly impacts individual work performance and reflective practices. Meanwhile, item impact analysis found that 11 items (2 IWP items, 7 CBSA items, and 2 reflective questions items) appeared to be the most prominent amongst the respondents towards individuals' work productivity and organizational success.

The second finding was that the respondents suggested four recommendations towards the success of the introduction and implementation of CBSA. First, it requires full commitment from the leadership and management. Second, it should be a guided and informed CBSA as highlighted; CBSA should be aligned with organizational strategies, guided by a framework or standard, feedback-seeking CBSA, monitored and led by trained expertise/ supervisor. Thirdly, CBSA is to be considered as periodic assessment for best results as the process of workforce empowerment settings in mastering a skill or knowledge should be conducted at their own pace, time, and understanding. Finally, the CBSA questionnaire should be simplified by avoiding wordy questions to get good-quality responses. CBSA should also provide rooms for individuals' reflections to share their thoughts, and that information shall be used as a feeder (formative assessment) for other external assessments. It appeared to be that the middle managers' opinions matter, and these recommendations shall serve as part of the framework guideline should CBSA be introduced and implemented as part of the MPS' assessment system.

The third finding was that based on the lowest sample mean of the items and the lowest score of item impact calculation in each competency, and the study identified three areas of competencies (creative problem solving – analytical techniques, develop self and others – creating learning opportunities, and develop networks – managing complex relationship) that

could be considered and focused on training and development programs for future improvement. These areas for improvements could indicate an informed decision for MPS in updating the competencies lists, formulating training and development programs, improving job descriptions and employment establishment. At the individual level, it allows middle managers to plan their development plans accordingly, hence opening up rooms for reskilling and upskilling to add value to their current competencies.

The fourth finding was that the CBSA exercise and the reflective practices had increased respondents' self-awareness and the need for personal growth. Additionally, reflective practices have made them realize the importance of growing with others. The combination of CBSA (functional, behavioral, cognitive, ethical, and meta-competence) and reflective practices could be considered professional guidelines in self-development and collectively performing work-related tasks effectively towards organizational success.

The findings and discussions reveal that the middle managers' opinions and experiences, in general, are valuable in maintaining organizational change efforts' continuity and long-term development. This study finds a strong relationship between RIA and RFA in the self-assessment exercise, which not only triggers an understanding of individuals' strengths and weaknesses but incorporates values and ethics, knowledge, functional and personal competencies towards professional growth, establishing and building connections with the work environments. In short, the research clearly demonstrates that CBSA is worthwhile in meeting future organizational skill demands of the MPS and, if applied along with the improved MPS training policy, will ensure a more holistic competency-based approach.

Chapter 6 : Conclusions

6.1 Introduction

As outlined at the outset, this research seeks to understand middle managers' experiences with adopting and implementing a CBSA model in CBA systems. This final chapter summarizes the contributions, limitations, and recommendations drawn from this research. The conclusion from this study follows the research questions and the findings and therefore addresses three areas: (1) CBSA is a useful tool to identify areas of improvement, hence determining their development plans; (2) implementation of CBSA; and (3) public middle managers matter.

- (1) *The usefulness of CBSA as an HR tool to help is a useful tool to help determine employee development plans*

A significant finding of this research is that most middle managers found CBSA to be a useful tool to help them identify areas of improvement and determine future development plans. As the literature purports, self-assessment is a tool to evaluate or identify individual ability, actions, and performance. However, as this research clearly shows, when combined with reflective practices, self-assessment is an opportunity for public sector middle managers to learn of their development needs and is key to pursuing lifelong learning and professional development across the public sector. At the same time, reflective practices help individuals develop their thinking and learning skills, turning their self-assessment results into development plans to fulfill their personal goals and grow collectively. This is in line with the concept of self, where people in nature (in this context, public sector middle managers) are regarded as competent when that competency can be developed to make decisions for themselves, effectively interact, and co-exist with others. However, the research also shows that middle managers require guidelines, which can be gleaned from competency models in which competency standards are set out. Competency models that align with the organizations' mission and vision and incorporate functional, behavioral, cognitive, ethics, and meta-competence dimensions would yield the desired outcome towards organizational success (Chivers & Cheetham, 2000). This research shows that public sector middle managers, in general, are competent in performing their multi-layered roles. The CBSA as an assessment

tool embedded in the holistic competency model could guide public sector middle managers to develop their ability to think and act strategically, engage and build relationships with people, and deliver results towards organizational success.

(2) CBSA Implementation

Self-assessment is ineffective when conducted on its own (Fitzgerald et al., 2003; Holmboe et al., 2010). This research notes managers' views that CBSA should be embedded as part of the assessment system in the MPS competency model to help them understand and demonstrate the intended competencies in performing their jobs effectively at their own pace, time, and location. Managers also note that many civil servants may regard the implementation of CBSA as another burden on top of the existing assessment system, undermining the usefulness of the CBSA exercise. To ensure successful implementation, managers recommend that CBSA should be presented as a guided platform and opportunity for civil servants to voice their thoughts concerning their competency development plan. Finally, a full commitment from the MPS leadership is seen by managers as necessary to ensure successful implementation, as organizational leaders hold the key to positively impacting organizational performance and success.

(3) The role of public sector middle managers

Research suggests middle managers' opinions matter in maintaining organizational change efforts' continuity and the policymaking process, as they are directly involved and experienced in ensuring policy implementation. Despite differences in their public service motivation, recognizing their opinions as public middle managers matters. They have shown strong commitment in doing their job, hence facing the challenges of the job demands and the organizational environment (Koene, 2017). Indeed, recognizing their role can make a difference to middle managers and the organization's performance. That said, the lack of recognition can negatively impact individual performance, creating a stagnant working environment growth. Therefore, goal clarity is important – public middle managers need to know what is expected of them, enabling organizations to reach their objectives and ensuring how success is measured is more widely understood. A holistic competency model with an embedded CBSA would help managers understand what they are working for and provide a platform to channel their opinions. Additionally, competency models comprising functional,

behavioral, cognitive, ethics, and meta-competence dimensions would guide middle managers to make sound judgments. Providing voice channels would also help strengthen work and organizational ethics.

6.2 Contributions

The findings presented here point toward a number of theoretical and practice-based implications. Dealing with each briefly:

Theoretical Contribution

The research findings presented here contribute to salient literature by providing managerial insights into self-assessment and reflective practices inherent in CBSA. The research, which drew on Schön's (1983) RIA theory, the RFA theory (Killion and Todnem, 1991), and Cheetham and Chivers' (1998) Professional Competence Model, clearly enable individuals' to determine, enhance and enrich competencies development. Based on individuals' learning and technical knowledge, the RIA's spontaneous insight while performing tasks allows them to operate, make adjustments, and sound judgment, leading to RFA and future actions in determining a professional development plan. As these findings show, the Professional Competence model, as devised by Cheetham and Chivers (1998) and consisting of values and ethics, knowledge, functional and personal competencies components, guide individuals to identify and develop their competencies, establish individual and team accountability, and motivate and positively impact employee performance.

Practical Contribution

As the findings show, this study confirms that the APS Competency Self-Assessment Questionnaire model is well-designed with only seven competencies, namely, system thinking, creative problem solving, agility, develop networks, build a collaborative environment, develop self and others, and drive for results. Therefore, the model is an effective instrument for encouraging excellence and establishing uniformity across the public sector, within organizations, in HR operations, and other supporting corporate responsibilities.

Additionally, this study has some learning for HRD and organizational development, which focuses on competency development. As others have noted, skills and competencies represent important sources of competitive advantage and should be protected through a strategic investment approach in training and development (Garavan, 2007). The use of CBSA helps HRD researchers and practitioners understand how self-assessment can be pivotal to assessment systems in a manner that helps managers independently assess their existing competencies and skills—additionally identifying their skill gaps to determine the training required for skill development.

6.3 Limitations

This study contains three limitations worth noting. Firstly, due to time constraints and researching during a global pandemic, the sample size for this research, while meeting the needs of this research, is not representative of the wider population. A larger representative sample is required to examine and confirm existing relationships between variables. An additional limitation of the study is social desirability as a potential source of respondent-related bias. Participants can project a favorable image of themselves and report answers in a more socially acceptable way (Lavrakas, 2008). As a result, they may not disclose that they are below-average performers concluding with over or under-reporting their existing competencies. Thus, a follow-up study to assess the extent of respondent-related bias could be important. This could occur by using other competency assessment scales or approaches (including external evaluation of some individual middle managers by experienced senior managers) and comparing assessments. Finally, this study was confined to public sector middle-managers from one particular service scheme (ADS scheme), focusing on senior grades ranging from M48 to M54. The experiences and views shared are limited to this particular group. The results, therefore, are more difficult to generalize to other service schemes, grades, or sectors.

6.4 Recommendations

A number of recommendations based on the findings, analysis, limitations, and conclusions are apparent from this study, including:

Recommendations for practices

Integrating competency-based approaches into the wider public sector human resources management system would enhance the efficiency of the public sector and contribute to current MPS reforms. Hence, understanding the experience of CBSA exercises and reflective practices amongst the ADS public middle managers in the MPS is imperative. Therefore, several recommendations could be considered:

(1) Towards a holistic MPS competency model

A well communicated and structured competency framework would help increase awareness of key competencies and the importance of competency-based training. CBSAs offer a pathway for civil servants to be efficient, able to cope with the uncertainties, and ensure workplace wellbeing. Therefore, it is recommended that the MPS competency model be updated and include a list of suitable competencies for the MPS organizational context. In keeping a holistic competency model, with core components including values and ethics, knowledge, functional and personal competencies components should also be incorporated to guide competency development and ensure organizational success.

(2) Introduce CBSA as part of the wider MPS assessment system

As the MPS moves towards a self-regulated training policy where civil servants will be responsible for their personal skills and competencies development, there should be an independent assessment format (in addition to the external assessments) that staff can conduct at their own pace and time. Furthermore, the global pandemic has drastically changed the nature of the MPS workforce, forcing civil servants to embrace the remote working concept, which entails giving employees more autonomy and responsibility to perform their jobs and self-determine their skill development. The findings presented here reveal that CBSA is a useful tool to identify individuals' improvement areas, determining their development plans. Therefore, it is recommended that CBSA be introduced as part of the MPS assessment system to support policy shifts and approaches to promote self-learning and development.

(3) Relevant content and components for areas of competencies improvement

This study could enable public sector organizations to identify components that need to be included in competency training and development programs. In general, respondents showed a

high level of all seven competencies, including system thinking, creative problem-solving, agility, develop networks, build collaborative environment, develop self and others, and drive for results. That said, three areas of competencies were also identified for improvement, namely analytical techniques (creative problem solving), managing complex relationships (develop networks), and creating learning opportunities (develop self and others). It is recommended that MPS focus on developing these three competency areas as they are key to solving work-related issues, particularly when confronted by techno-economic changes and advances in the workplace. Additionally, having good working relationships with stakeholders is important for organizational success, but it can be challenging to manage as different stakeholders have different expectations. Thus managing complex relationships is vital to a manager's work in the public sector. Finally, managers' complex and multi-layered roles provide them to have wider learning opportunities. While learning from others (their supervisors or/and subordinates), as middle managers, they should also be able to create learning opportunities for others. Learning collectively would therefore increase the organizational success rate.

(4) Creating a conducive organizational climate for developing self and others

CBSA and reflection exercises triggered how individuals perceived themselves, which led to growing with others. Therefore, public organizations should provide organizational environments conducive to continuous professional growth.

Recommendations for future research

Furthermore, creating a database of worker experience of CBSA would provide organizations with a more comprehensive understanding of these types of assessment tools. In addition, this information would help organizations identify areas for improvement and determine a development plan. In light of this, the following should be considered:

- (1) Based on the limitation of the current study and to correct the researcher's bias, a large sample of respondents could be considered to establish more evident patterns in the variables.
- (2) The respondents' anonymity was maintained throughout the research process to reduce the respondent-related biases and ensure greater confidence in the results. Nevertheless,

while completing the questionnaire, respondents may not be willing to disclose that they are below-average performers. Therefore, further testing on the CBSA questionnaire should be conducted to assess the extent to which the same or similar findings would be uncovered.

- (3) As the study was confined to the middle managers of a particular service scheme in the MPS, the experiences shared were only limited to the ADS and the management and administrative point of view. Widening the research scope to other service grades, schemes, and job functions would help broaden the range of perspectives towards CBSA and help identify best practices in its introduction as part of a wider MPS assessment system.

6.5 Concluding Thoughts

When first conceived, the aim of this research was to help middle managers identify their developmental strengths and weaknesses, areas for improvements, with a view to collating into an overall individual development plan. Indeed, this CBSA exercise and reflective practices with a holistic competency model as guidance can help facilitate the enhancement and enrichment development process for MPS' middle managers. However, as the data shows, the introduction of CBSA highlights individuals' empowerment, raising the importance of providing and creating a safe learning environment for employees to learn and grow collectively. However, full commitment and support from the MPS management are needed to ensure the successful implementation of CBSA.

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Appendices

Appendix A

Information sheet and questionnaire



VICTORIA UNIVERSITY OF
WELLINGTON
TE HERENGA WAKA

Your reflections and experiences are important!

In the '12th Malaysia Plan' agenda, Malaysia aspires to be an innovative, market-driven, collaborative economy with high skilled talent, an entrepreneurship community, good governance, and sustainable development, so as to provide a decent standard of living for all Malaysians. The role of Malaysian Public Service (MPS), as the government machinery, in coordinating, mediating, and implementing the 12th Malaysia Plan is crucial.

To ensure the success of these plans, the Malaysian public service is tasked with transforming itself into a faster and more agile administration so it can respond to future challenges and meet the demands of its public. This mandate raises questions about individual abilities to meet these dynamic changes – for example, it asks *"are we ready and do we have the abilities and skills to meet these demands?"* and *"what can be done if we do not have the skills or knowledge necessary to meet those demands?"* one way to answer those questions is for each of us to independently take stock of our own abilities and skills.

I am asking for your help in developing a competency-based self-assessment tool that will help you independently assess your existing competencies and skills. This tool is designed to help you determine and create your own development plans.

Share with me your thoughts and experience conducting this competency-based self-assessment!

Your *reflections* and valuable experiences will help me understand how self-assessed competency tools can be used to identify the development needs as public middle-manager in meeting future organisational demands.

Please note that all responses are completely anonymous and has been designed to protect your identity

Thank you for participating.

Dear Dato'/Datin/Sir/Madam - Public Middle-Managers,

I am Fauzana Abdul Muhi. I am a Masters student in Human Resources and Industrial Relations at Victoria University of Wellington, New Zealand. As part of my studies, I am researching middle-managers experiences of competency-based self-assessment tools in Malaysian Public Services. This project is conducted under the supervision of Prof. Dr. Urs Daellenbach, Head of School, School of Management, and Dr. Noelle Donnelly, Senior Lecturer at Victoria University of Wellington.

This research seeks to understand your experiences of using a competency-based self-assessment tool. Your reflections will help inform the future use of self-assessment tools. Therefore, I seek your consent and assistance by completing this anonymous questionnaire. This research has been reviewed and approved by the Victoria University of Wellington Human Ethics Committee (ID: 0000028796).

If you agree to take part, you will need to complete a survey. Answering and reflecting on behaviours you demonstrate when you are doing your job will help us understand the potential benefits of this tool and will also enable you to identify areas for future development. The survey will take approximately 15 minutes to complete.

This research is anonymous. No one, including myself, will be able to identify you. Your answers will remain completely anonymous and unidentifiable. Once you submit the survey, it will be impossible to extract your answer. Please do not include any personal identifiable information in your responses.

By completing this survey, you are giving consent to me to use your responses in this research.

Please note that the results will be reported in a thesis in an aggregated form. The thesis will be available at the University Library and Institutional Repository and the Public Service Department of Malaysia. There will also be a chance that the aggregated results shall be published or shared in any academic or professional conferences or publications. Please do not hesitate to contact me, should you need to get access to the final results

I will be glad to provide further information, simply contact us at:

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Human Ethics Committee information

If you have any concerns about the ethical conduct of the research you may contact:

Associate Professor Judith Loveridge
HEC Convenor
Victoria University of Wellington
Phone No. : +644463 6028.
Email : hec@vuw.ac.nz

How To Complete Your Self-Assessment

The purpose of this research is to provide you with an experience in conducting a self-assessment using Behavioral Competency Model. Answering and reflecting about the behaviors that you demonstrate when you are doing your job should allow you to learn about yourself and areas where competency development could be provided. After completing the questionnaire, reflect on what they mean, and may help you create a development plan.

This document is divided into four (4) sections and please respond to each statement in this self-assessment questionnaire.

SECTION 1 - PRODUCTIVITY

Please indicate your assessment of your productivity in your current job over the past three (3) months using the following rating scale:

- 1 – never
- 2 – rarely
- 3 – occasionally
- 4 – sometimes
- 5 – frequently
- 6 – usually
- 7 – every Time

SECTION 2 – COMPETENCY

Please rate yourself of a number of key behaviors and provide situational examples. Please indicate the behavior that you actually demonstrate using the following rating scale:

- 1 - to a very small extent (I may demonstrate this behavior, but only very rarely)
- 2 - to a small extent (I demonstrate this behavior occasionally)
- 3 - to a moderate extent (I demonstrate this behavior more often)
- 4 - to a large extent (I demonstrate this behavior very often)
- 5 - to a great extent (I demonstrate this behavior all the time)

SECTION 3 – REFLECTIONS

Includes the reflection questions to evaluate your experience of conducting this self-assessment questionnaire and how it might help you create a development plan. Please indicate your answer using the following rating scale:

- 1 - strongly agree
- 2 – agree
- 3 – neutral
- 4 – disagree
- 5 - strongly disagree

You will also be asked to explain your chosen answer.

SECTION 4 - DEMOGRAPHIC & SERVICE INFORMATION

Include information about some demographic and service information that will allow me to compare responses in aggregate.

The assessment is a snapshot of your current competencies. It is recommended to discuss your needs further with your supervisor to review the results to get a well-rounded assessment of your level of competency.

Please note that all responses are completely anonymous.

SECTION 1 – PRODUCTIVITY

Please indicate your assessments of your productivity about the situation in your current job over the past three months.

<i>Never</i>	<i>Rarely</i>	<i>Occasionally</i>	<i>Sometimes</i>	<i>Frequently</i>	<i>Usually</i>	<i>Every Time</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>

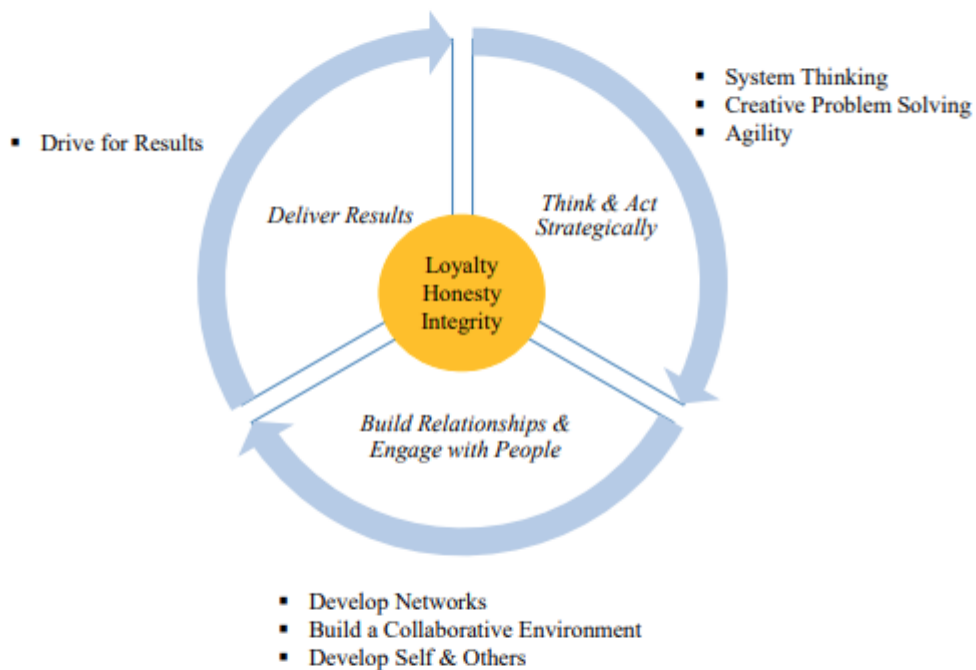
Item	1	2	3	4	5	6	7
I managed to plan my work so that it was done on time							
I kept in mind the results that I had to achieve in my work							
I had trouble setting priorities in my work							
I was able to perform my work well with minimal time and effort							
I was able to meet my appointments							
Collaboration with others went well							
Communication with others led to the desired results							
I took initiative when something had to be organized							
I started new tasks myself, when my old ones were finished							
I was open to criticism of my work							
I tried to learn from the feedback I got from others on my work							
I took on challenging work tasks, when available							
I worked at keeping my job knowledge up-to-date							
I worked at keeping my job skills up-to-date							
I was able to cope well with difficult situations and setbacks at work							
I recovered fast, after difficult situations and setbacks at work							
I came up with creative solutions to new problem							

SECTION 2 – COMPETENCY

Please rate yourself on the key behaviours and provide situational examples where possible. Please indicate the behaviour that you actually demonstrate.

Behavioural Competency Model

Competencies are the underlying characteristics of an employee that are related to knowledge, skills and abilities. Behaviours contribute to individual and organizational performance. For the purpose of this study, seven (7) competencies have been identified and categorized under three (3) themes namely ability to: *Think and Act Strategically*, *Build Relationships and Engage with People*, and *Deliver Results*. These competencies are considered as critical to success as follows:



SYSTEMS THINKING

<i>to a very small extent (I may demonstrate this behaviour, but only very rarely)</i>	<i>to a small extent (I demonstrate this behaviour occasionally)</i>	<i>to a moderate extent (I demonstrate this behaviour more often than not)</i>	<i>to a large extent (I demonstrate this behaviour very often)</i>	<i>to a great extent (I demonstrate this behaviour all the time)</i>
1	2	3	4	5

How characteristic is this behaviour of me in my role?	1	2	3	4	5
I consider how my own work impacts the work of the team and vice versa.					
I ask questions to understand broader goals and objectives.					
I consider the inter-relationships between different approaches, including how they relate to other programs and/or other divisions/ministries.					
I seek insight about different options from both a people and organizational perspective.					
I identify unintended consequences of a plan.					
I consistently take a holistic and long-term view of challenges and opportunities at multiple levels across related areas.					
I plan outcomes for range of groups and stakeholders.					
I identify actions/plans that do not support the organization's Vision and Values, and work to create alignment.					
I plan for how current policies, processes and methods might be affected by broader trends.					
I create strategies that support the Government's Vision and Values as well as my department's goals.					
I identify system behaviours that challenge progress and address them or work around them.					
I align actions and advance program policy at the overall ministry and government-wide levels, because I take a big picture view.					
I use knowledge of the underlying problems, opportunities or the forces affecting the organization.					
Specific examples I was thinking about when completing this section:					

CREATIVE PROBLEM-SOLVING

<i>to a very small extent (I may demonstrate this behaviour, but only very rarely)</i>	<i>to a small extent (I demonstrate this behaviour occasionally)</i>	<i>to a moderate extent (I demonstrate this behaviour more often than not)</i>	<i>to a large extent (I demonstrate this behaviour very often)</i>	<i>to a great extent (I demonstrate this behaviour all the time)</i>
1	2	3	4	5

How characteristic is this behaviour of me in my role?	1	2	3	4	5
I break straightforward problems down into manageable components to identify what needs to be done.					
I am open to new ways of doing things.					
I ask questions to get a deeper understanding on issues.					
I improve activities and results by doing something new and different in the organization.					
I actively seek out different approaches to work.					
I engage different perspectives in seeking out root causes of problems.					
I set priorities and take calculated risks that results in optimizing resources and/or improving the delivery of services or operations.					
I encourage debate and group/team discussion to find solutions.					
I use several analytical techniques to break apart complex situations or problems.					
I create a safe environment for creative thinking.					
I involve my team in the diagnosis of problems and the developing of solutions.					
I eliminate barriers that stifle creativity (e.g.: bureaucracy, traditional thinking/structure)					
I actively encourage others to innovate and expand their thinking.					
Specific examples I was thinking about when completing this section:					

AGILITY

<i>to a very small extent (I may demonstrate this behaviour, but only very rarely)</i>	<i>to a small extent (I demonstrate this behaviour occasionally)</i>	<i>to a moderate extent (I demonstrate this behaviour more often than not)</i>	<i>to a large extent (I demonstrate this behaviour very often)</i>	<i>to a great extent (I demonstrate this behaviour all the time)</i>
1	2	3	4	5

How characteristic is this behaviour of me in my role?	1	2	3	4	5
I ask questions on change initiatives and impacts.					
I change approach as required to achieve intended outcomes.					
I adapt to shifting priorities and rapid change.					
I stay positive during times of change.					
I work creatively within procedures to get results.					
I seek ways to do things better.					
I anticipate the emotional triggers of others, and try to mitigate reactions.					
I anticipate obstacles to change and think ahead. I stay focused on goals despite pressure and stress.					
I can shift strategic focus quickly for changing organizational priorities.					
I take action to create opportunities.					
I alert and commit groups to the need for change and its implementation.					
I proactively articulate and create momentum for organizational change.					
I anticipate and proactively address organizational barriers to change.					
Specific examples I was thinking about when completing this section:					

DEVELOP NETWORKS

<i>to a very small extent</i> <i>(I may demonstrate this behaviour, but only very rarely)</i>	<i>to a small extent</i> <i>(I demonstrate this behaviour occasionally)</i>	<i>to a moderate extent</i> <i>(I demonstrate this behaviour more often than not)</i>	<i>to a large extent</i> <i>(I demonstrate this behaviour very often)</i>	<i>to a great extent</i> <i>(I demonstrate this behaviour all the time)</i>	
1	2	3	4	5	
How characteristic is this behaviour of me in my role?	1	2	3	4	5
I seek to understand the perspectives of all stakeholders.					
I demonstrate professional and courteous service.					
I establish working relationships with clients, stakeholders and organizational members.					
I actively support the client by making choices to meet their needs.					
I use my understanding of others' points of view to strategically communicate.					
I build trust by being open, and looking for mutually beneficial outcomes.					
I understand how changes in government and its policies might impact clients and their needs.					
I maintain communication with clients regarding expectations, progress of projects or helpful information.					
I develop win/win relationships to achieve effective delivery of services.					
I dig deep to uncover co-workers' or stakeholders' poorly expressed thoughts or feelings.					
I provide services beyond clients' expectations by seeking out their underlying needs.					
I effectively manage complex relationships, and use them to achieve the strategic plan.					
I am strategic in the impression I make on others. I use common analogies to inspire and connect with others' values, beliefs and interests.					
Specific examples I was thinking about when completing this section:					

BUILD COLLABORATIVE ENVIRONMENTS

<i>to a very small extent (I may demonstrate this behaviour, but only very rarely)</i>	<i>to a small extent (I demonstrate this behaviour occasionally)</i>	<i>to a moderate extent (I demonstrate this behaviour more often than not)</i>	<i>to a large extent (I demonstrate this behaviour very often)</i>	<i>to a great extent (I demonstrate this behaviour all the time)</i>
1	2	3	4	5

How characteristic is this behaviour of me in my role?	1	2	3	4	5
I share information openly and honestly.					
I acknowledge that others' points of view are valid, even when they are different from my own.					
I demonstrate genuine respect of others' expertise, and I am willing to learn from others.					
I facilitate conflict resolution by initiating an open and respectful discussion of issues.					
I work with others to remove barriers to progress.					
I create processes and structures that facilitate communication.					
I promote collaboration and positive relationships within and across groups, and build commitment to reach desired results.					
I involve key stakeholders in developing solutions.					
I identify issues and facilitate discussion to resolve conflict.					
I investigate, and use, strategies to build morale and productivity.					
I promote the sharing of expertise to achieve broader organizational outcomes.					
I initiate strategic communication systems to reach all stakeholders.					
I articulate a vision that generates enthusiasm and commitment to action, and is aligned with the government's strategic direction.					
Specific examples I was thinking about when completing this section: 					

DEVELOP SELF AND OTHERS

<i>to a very small extent</i> <i>(I may demonstrate this behaviour, but only very rarely)</i> 1	<i>to a small extent</i> <i>(I demonstrate this behaviour occasionally)</i> 2	<i>to a moderate extent</i> <i>(I demonstrate this behaviour more often than not)</i> 3	<i>to a large extent</i> <i>(I demonstrate this behaviour very often)</i> 4	<i>to a great extent</i> <i>(I demonstrate this behaviour all the time)</i> 5	
How characteristic is this behaviour of me in my role?	1	2	3	4	5
I make specific changes to improve personal performance.					
I offer knowledge or insight to others when asked.					
I acknowledge my own strengths and weaknesses.					
I stay current on a broad range of topics.					
I contribute by sharing information, knowledge, and experiences, even when not asked.					
I build on the skills and knowledge of others to create results.					
I design a personal action plan to support career goals.					
I take on increased responsibility in 'stretch' or developmental assignments.					
I give feedback in behavioural rather than personal terms, and gives specific suggestions for improvement.					
I keep up to date with emerging approaches, and share this information with others.					
I establish cross-departmental learning opportunities.					
I proactively garner information about the broader organization.					
I engage in strategic thinking, and encourage them to take action in spite of barriers.					
Specific examples I was thinking about when completing this section:					

DRIVE FOR RESULTS

<i>to a very small extent (I may demonstrate this behaviour, but only very rarely)</i>	<i>to a small extent (I demonstrate this behaviour occasionally)</i>	<i>to a moderate extent (I demonstrate this behaviour more often than not)</i>	<i>to a large extent (I demonstrate this behaviour very often)</i>	<i>to a great extent (I demonstrate this behaviour all the time)</i>
1	2	3	4	5

How characteristic is this behaviour of me in my role?	1	2	3	4	5
I prioritize work to accomplish identified goals, follow through and report on progress.					
I ask for guidance when lacking information.					
I incorporate past learning's into work plans.					
I act on opportunities to partner with others to achieve outcomes.					
I identify ways to exceed performance expectations.					
I monitor progress to detect problems early.					
I take responsibility for tasks within direct and indirect control.					
I put into place a strategy to ensure the team achieves future goals and objectives.					
I anticipate project barriers and address them in advance.					
I remove barriers to the achievement of outcomes					
I confront problems directly.					
I integrate plans with broader organizational initiatives.					
I provide bold advice to internal and external stakeholders.					
Specific examples I was thinking about when completing this section:					

SECTION 3 – REFLECTIVE

Please indicate your answers to these reflection questions to evaluate your experience of conducting this self-assessment questionnaire and how it might help you to create a development plan.

<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>

Item	1	2	3	4	5
Do you like doing the things that you are good at? Please explain: <input type="text"/>					
Are your strengths used to the fullest in your current job? Please explain: <input type="text"/>					
Did you derive value from conducting this self-assessment exercise? Please explain: <input type="text"/>					
Were the insights gained from conducting this self-assessment exercise valuable? Please explain: <input type="text"/>					
Did the self-assessment exercise help you to indicate the need for competency improvement? Please explain: <input type="text"/>					

Item	1	2	3	4	5
<p>Did the self-assessment exercise result in a clear and doable way forward for competency improvement?</p> <p>Please explain:</p> <div style="border: 1px solid black; height: 20px; width: 450px;"></div>					
<p>Are you motivated to address the identified competency gaps?</p> <p>Please explain:</p> <div style="border: 1px solid black; height: 20px; width: 450px;"></div>					

Is there any kind of situation where you know how to rate yourself without having to think about it?

SECTION 4 – DEMOGRAPHIC & SERVICE INFORMATION

Please indicate your answer.

1. Please select your gender:

Male

☐

Female

☐

2. Please select your age range:

20-30 years

☐

41-50 years

☐

31-40 years

☐

51-60 years

☐

3. Please select your ethnicity:

Malay

☐

Chinese

☐

Indian

☐

Others

☐

4. Please select your years of experience in the service:

<10 years

☐

10 - 15 years

☐

>15 years

☐

5. Please select your education level:

Bachelor

☐

Masters

☐

PhD

☐

6. Please select your grade:

M54

☐

M52

☐

M48

☐

7. Please select your job function that is related to your current role:

Human Resources Management & Organizational Development

Financial Management

National Security & Defence

Information Technology Management

Planning & Social/ Infrastructure Administration

Region/ Municipality/ Land/ District/ Local Administration & Development

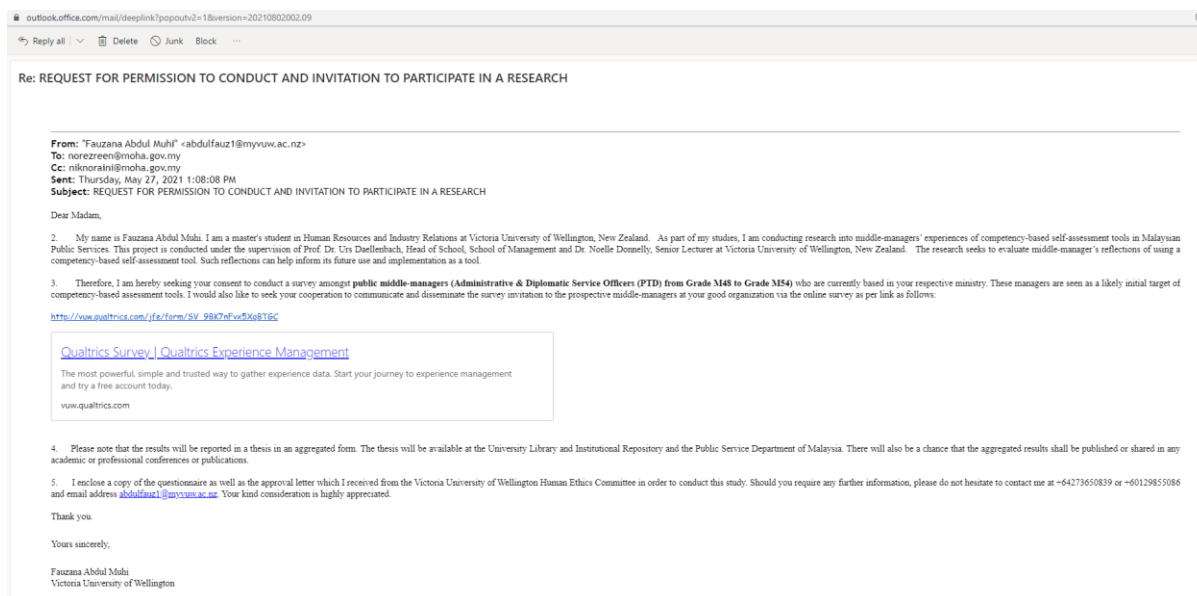
Economics Management

International Relations & Foreign Affairs

You have now completed the survey. Thank you for your participation. Please note that all responses are completely anonymous.

Appendix B

Example of the Formal Invitation to Participate in the Research



Appendix C
Descriptive Statistics for Job Productivity

No.	Item	1	2	3	Percentage			5	6	7	M
Task Performance (TP)											
TP2	I kept in mind the results that I had to achieve in my work	0.00	0.00	0.00	2.20	21.7	31.5	44.6	6.18		
TP5	I was able to meet my appointments	0.00	0.00	0.00	2.20	22.80	46.70	28.30	6.01		
TP1	I managed to plan my work so that it was done on time	0.00	1.10	0.00	5.40	22.80	37.00	33.70	5.96		
TP6	Collaboration with others went well	0.00	1.10	1.10	2.20	16.30	57.60	21.70	5.93		
TP7	Communication with others led to the desired results	0.00	2.20	2.20	5.40	15.20	53.30	21.70	5.80		
TP4	I was able to perform my work well with minimal time and effort	1.10	1.10	6.50	18.50	33.70	29.30	9.80	5.10		
TP3	I had trouble setting priorities in my work (reverse coded)	3.30	1.10	3.30	38.00	9.80	38.00	6.50	4.90		
Contextual Performance (CP)											
CP11	I tried to learn from the feedback I got from others on my work	0.00	0.00	1.10	7.60	13.60	37.00	41.30	6.10		
CP14	I worked at keeping my job skills up-to-date	0.00	0.00	6.50	19.60	42.40	42.40	31.50	5.99		
CP13	I worked at keeping my job knowledge up-to-date	1.10	0.00	0.00	3.30	22.80	41.30	31.50	5.97		
CP10	I was open to criticism of my work	0.00	1.10	2.20	8.70	19.60	34.80	33.70	5.86		
CP16	I recovered fast, after difficult situations and setbacks at work	0.00	0.00	0.00	7.60	19.60	54.30	18.50	5.84		
CP15	I was able to cope well with difficult situations and setbacks at work	0.00	0.00	0.00	5.40	28.30	48.30	17.40	5.78		
CP8	I took initiative when something had to be organized	1.10	0.00	5.40	7.60	21.70	37.00	27.20	5.68		
CP9	I started new tasks myself, when my old ones were finished	2.20	0.00	0.00	9.80	29.30	34.80	23.90	5.66		
CP17	I came up with creative solutions to new problem	1.10	0.00	2.20	10.90	28.30	43.50	14.10	5.52		
CP12	I took on challenging work tasks, when available	1.10	0.00	4.30	9.80	30.40	35.90	18.50	5.51		

N = 92, *Skewness* = 0.251, *Kurtosis* = 0.498

M = Mean, *SD* = Standard Deviation, 1=never, 2=rarely, 3=occasionally, 4=sometimes, 5=frequently, 6=usually, 7=every time

Appendix D
Descriptive Statistics on System Thinking Competency

No.	Item	Percentage					M	SD
		1	2	3	4	5		
Q1	I consider how my own work impacts the work of the team and vice versa	0.00	1.09	10.87	43.48	44.57	4.32	0.71
Q2	I ask questions to understand broader goals and objectives	1.09	1.09	6.52	58.70	32.61	4.21	0.70
Q3	I consider the inter-relationships between different approaches, including how they relate to other programs and/or other divisions/ministries	0.00	1.09	11.96	69.96	25.00	4.11	0.63
Q4	I seek insight about different options from both people and organization perspectives	1.09	3.26	14.13	58.70	22.83	3.99	0.77
Q13	I use knowledge of the underlying problems, opportunities or the forces affecting the organization	0.00	2.17	23.91	47.83	26.09	3.98	0.77
Q10	I create strategies that support the Government's vision and values as well as my department's goals	1.09	4.35	20.65	44.57	29.35	3.97	0.88
Q11	I identify system behaviors that challenge progress and address them or work around them	1.09	4.35	22.83	50.00	21.74	3.87	0.84
Q9	I plan for how current policies, processes and methods might be affected by broader trends	1.09	5.43	25.00	43.48	25.00	3.86	0.89
Q6	I consistently take a holistic and long-term view of challenges and opportunities at multiple levels across related areas	0.00	2.17	27.17	53.26	17.39	3.86	0.72
Q5	I identify unintended consequences of a plan	0.00	3.26	26.09	53.26	17.39	3.85	0.74
Q7	I plan outcomes for range of groups and stakeholders	1.09	4.35	26.09	50.00	18.48	3.80	0.82
Q12	I align actions and advance program policy at the overall ministry and government-wide levels, because I take a big picture view	0.00	8.70	26.09	44.57	20.65	3.77	0.87
Q8	I identify actions/plans that do not support the organization's vision and values, and work to create alignment	2.17	5.43	27.17	47.83	17.39	3.73	0.89

N = 92, Skewness = 0.251, Kurtosis = 0.498

M = Mean, SD = Standard Deviation, 1=to a very small extent, 2=to a small extent, 3=to a moderate extent, 4=to a large extent, 5=to a great extent

Appendix E
Descriptive Statistics on Creative Problem Solving Competency

No.	Item	Percentage					M	SD
		1	2	3	4	5		
Q2	I am open to new ways of doing things	0.00	1.09	5.43	51.09	42.39	4.35	0.63
Q3	I ask questions to get a deeper understanding on issues	1.09	2.17	5.43	46.74	44.57	4.32	0.77
Q11	I involve my team in the diagnosis of problems and the developing of solutions	1.09	2.17	8.70	50.00	38.04	4.22	0.78
Q13	I actively encourage others to innovate and expand their thinking	1.09	2.17	13.04	46.74	36.96	4.16	0.81
Q6	I engage different perspectives in seeking out root causes of problems	1.09	2.17	11.96	53.26	31.52	4.12	0.78
Q8	I encourage debate and group/team discussion to find solutions	1.09	2.17	13.04	52.17	31.52	4.11	0.79
Q10	I create a safe environment for creative thinking	0.00	2.17	17.39	48.91	31.52	4.10	0.75
Q5	I actively seek out different approaches to work	1.09	1.09	18.48	52.17	27.17	4.03	0.77
Q1	I break straightforward problems down into manageable components to identify what needs to be done	1.09	1.09	18.48	53.26	26.09	4.02	0.77
Q7	I set priorities and take calculated risks that results in optimizing resources and/or improving the delivery of services or operations	0.00	2.17	20.65	54.35	22.83	3.98	0.72
Q12	I eliminate barriers that stifle creativity (e.g.: bureaucracy, traditional thinking/structure)	0.00	4.35	19.57	52.17	23.91	3.96	0.78
Q4	I improve activities and results by doing something new and different in the organization	1.09	1.09	25.00	48.91	23.91	3.93	0.79
Q9	I use several analytical techniques to break apart complex situations or problems	0.00	6.52	30.43	43.48	19.57	3.76	0.84

N = 92, *Skewness* = 0.251, *Kurtosis* = 0.498

M = Mean, *SD* = Standard Deviation, 1=to a very small extent, 2=to a small extent, 3=to a moderate extent, 4=to a large extent, 5=to a great extent

Appendix F
Descriptive Statistics on Agility Competency

No.	Item	Percentage					M	SD
		1	2	3	4	5		
Q6	I seek ways to do things better	0.00	0.00	8.70	53.26	38.04	4.29	0.62
Q5	I stay positive during times of change	1.09	2.17	17.39	48.91	30.43	4.05	0.81
Q4	I work creatively within procedures to get results	0.00	2.17	16.30	55.43	26.09	4.05	0.71
Q10	I take action to create opportunities	0.00	1.09	17.39	56.52	25.00	4.05	0.68
Q11	I alert and commit groups to the need for change and its implementation	0.00	1.09	16.03	59.74	22.83	4.04	0.66
Q3	I adapt to shifting priorities and rapid change	1.09	1.09	19.57	51.09	27.17	4.02	0.78
Q1	I ask questions on change initiatives and impacts	1.09	2.17	17.39	54.35	25.00	4.00	0.78
Q8	I anticipate obstacles to change and think ahead. I stay focused on goals despite pressure and stress	1.09	2.17	21.74	47.83	27.17	3.98	0.82
Q2	I change approach as required to achieve intended outcomes	1.09	3.26	21.74	51.09	22.83	3.91	0.82
Q13	I anticipate and proactively address organizational barriers to change	0.00	2.17	25.00	56.52	16.30	3.87	0.69
Q9	I can shift strategic focus quickly for changing organizational priorities	0.00	5.43	19.57	58.70	16.30	3.86	0.75
Q7	I anticipate the emotional triggers of others, and try to mitigate reactions	1.09	5.43	26.09	43.48	23.91	3.84	0.89
Q12	I proactively articulate and create momentum for organizational change	1.09	2.17	23.91	58.70	14.13	3.83	0.73

N = 92, *Skewness* = 0.251, *Kurtosis* = 0.498

M = Mean, *SD* = Standard Deviation, 1=to a very small extent, 2=to a small extent, 3=to a moderate extent, 4=to a large extent, 5=to a great extent

Appendix G
Descriptive Statistics on Develop Networks Competency

No.	Item	Percentage					M	SD
		1	2	3	4	5		
Q6	I build trust by being open, and looking for mutually beneficial outcomes	0.00	1.09	8.70	55.43	34.78	4.24	0.65
Q7	I understand how changes in government and its policies might impact clients and their needs	0.00	0.00	10.87	54.35	34.78	4.24	0.63
Q2	I demonstrate professional and courteous service	0.00	1.09	8.70	57.61	32.61	4.22	0.64
Q3	I establish working relationships with clients, stakeholders and organizational members	0.00	1.09	10.87	58.70	29.35	4.16	0.65
Q8	I maintain communication with clients regarding expectations, progress of projects or helpful information	0.00	0.00	14.13	57.61	28.26	4.14	0.64
Q5	I use my understanding of others' points of view to strategically communicate	0.00	0.00	13.04	61.96	25.00	4.12	0.61
Q9	I develop win/win relationships to achieve effective delivery of services.	1.09	1.09	9.78	60.87	27.17	4.12	0.70
Q1	I seek to understand the perspectives of all stakeholders	1.09	2.17	11.96	63.04	21.74	4.02	0.72
Q4	I actively support the client by making choices to meet their needs	0.00	0.00	20.65	57.61	21.74	4.01	0.65
Q11	I provide services beyond clients' expectations by seeking out their underlying needs	0.00	2.17	20.65	53.26	23.91	3.99	0.73
Q13	I am strategic in the impression I make on others. I use common analogies to inspire and connect with others' values, beliefs and interests	0.00	3.26	20.65	52.26	22.83	3.96	0.75
Q10	I dig deep to uncover co-workers' or stakeholders' poorly expressed thoughts or feelings	0.00	2.17	32.61	45.65	19.57	3.83	0.76
Q12	I effectively manage complex relationships, and use them to achieve the strategic plan	0.00	4.35	30.43	47.83	17.39	3.78	0.78

N = 92, *Skewness* = 0.251, *Kurtosis* = 0.498

M = Mean, *SD* = Standard Deviation, 1=to a very small extent, 2=to a small extent, 3=to a moderate extent, 4=to a large extent, 5=to a great extent

Appendix H

Descriptive Statistics on Creative Problem Solving Competency

No.	Item	Percentage					M	SD
		1	2	3	4	5		
Q2	I am open to new ways of doing things	0.00	1.09	5.43	51.09	42.39	4.35	0.63
Q3	I ask questions to get a deeper understanding on issues	1.09	2.17	5.43	46.74	44.57	4.32	0.77
Q11	I involve my team in the diagnosis of problems and the developing of solutions	1.09	2.17	8.70	50.00	38.04	4.22	0.78
Q13	I actively encourage others to innovate and expand their thinking	1.09	2.17	13.04	46.74	36.96	4.16	0.81
Q6	I engage different perspectives in seeking out root causes of problems	1.09	2.17	11.96	53.26	31.52	4.12	0.78
Q8	I encourage debate and group/team discussion to find solutions	1.09	2.17	13.04	52.17	31.52	4.11	0.79
Q10	I create a safe environment for creative thinking	0.00	2.17	17.39	48.91	31.52	4.10	0.75
Q5	I actively seek out different approaches to work	1.09	1.09	18.48	52.17	27.17	4.03	0.77
Q1	I break straightforward problems down into manageable components to identify what needs to be done	1.09	1.09	18.48	53.26	26.09	4.02	0.77
Q7	I set priorities and take calculated risks that results in optimizing resources and/or improving the delivery of services or operations	0.00	2.17	20.65	54.35	22.83	3.98	0.72
Q12	I eliminate barriers that stifle creativity (e.g.: bureaucracy, traditional thinking/structure)	0.00	4.35	19.57	52.17	23.91	3.96	0.78
Q4	I improve activities and results by doing something new and different in the organization	1.09	1.09	25.00	48.91	23.91	3.93	0.79
Q9	I use several analytical techniques to break apart complex situations or problems	0.00	6.52	30.43	43.48	19.57	3.76	0.84

N = 92, *Skewness* = 0.251, *Kurtosis* = 0.498

M = Mean, *SD* = Standard Deviation, 1=to a very small extent, 2=to a small extent, 3=to a moderate extent, 4=to a large extent, 5=to a great extent

Appendix I
Descriptive Statistics on Develop Self and Others Competency

No.	Item	Percentage					M	SD
		1	2	3	4	5		
Q3	I acknowledge my own strengths and weaknesses	0.00	1.09	11.96	50.00	36.96	4.23	0.69
Q2	I offer knowledge or insight to others when asked	0.00	1.09	13.04	48.91	36.96	4.22	0.70
Q1	I make specific changes to improve personal performance	0.00	1.09	16.30	53.26	29.35	4.11	0.70
Q13	I give feedback in behavioral rather than personal terms, and gives specific suggestions for improvement	0.00	4.35	17.39	56.52	21.74	3.96	0.75
Q9	I engage in strategic thinking, and encourage them to take action in spite of barriers	0.00	3.26	18.48	57.61	20.65	3.96	0.72
Q6	I build on the skills and knowledge of others to create results	0.00	1.09	20.65	60.87	17.39	3.95	0.65
Q4	I stay current on a broad range of topics	0.00	3.26	21.74	53.26	21.74	3.93	0.75
Q10	I keep up to date with emerging approaches, and share this information with others	0.00	3.26	22.83	53.26	20.65	3.91	0.75
Q5	I contribute by sharing information, knowledge, and experiences, even when not asked	0.00	3.26	25.00	52.17	19.57	3.88	0.75
Q12	I proactively garner information about the broader organization	0.00	1.09	27.17	56.52	15.22	3.86	0.67
Q8	I take on increased responsibility in 'stretch' or developmental assignments	0.00	2.17	29.35	50.00	18.48	3.85	0.74
Q7	I design a personal action plan to support career goals	1.09	4.35	26.09	52.17	16.03	3.78	0.81
Q11	I establish cross-departmental learning opportunities	0.00	6.52	26.09	52.17	15.22	3.76	0.79

N = 92, *Skewness* = 0.251, *Kurtosis* = 0.498

M = Mean, *SD* = Standard Deviation, 1=to a very small extent, 2=to a small extent, 3=to a moderate extent, 4=to a large extent, 5=to a great extent

Appendix J
Descriptive Statistics on Drive for Results Competency

No.	Item	Percentage					M	SD
		1	2	3	4	5		
Q2	I ask for guidance when lacking information	0.00	1.09	11.96	52.17	34.78	4.21	0.68
Q3	I incorporate past learning's into work plans	0.00	0.00	16.30	47.83	35.87	4.20	0.70
Q7	I take responsibility for tasks within direct and indirect control	0.00	0.00	14.13	53.26	32.61	4.18	0.66
Q1	I prioritize work to accomplish identified goals, follow through and report on progress	0.00	2.17	9.78	58.70	29.35	4.15	0.67
Q4	I act on opportunities to partner with others to achieve outcomes	0.00	0.00	17.30	54.35	28.26	4.11	0.67
Q6	I monitor progress to detect problems early	0.00	1.09	16.30	59.78	22.83	4.04	0.66
Q9	I anticipate project barriers and address them in advance	0.00	0.00	22.83	54.35	22.83	4.00	0.68
Q8	I put into place a strategy to ensure the team achieves future goals and objectives	1.09	2.17	18.48	54.35	23.91	3.98	0.78
Q5	I identify ways to exceed performance expectations	0.00	0.00	22.83	57.61	19.57	3.97	0.65
Q10	I remove barriers to the achievement of outcomes	0.00	1.09	25.00	53.26	20.65	3.93	0.70
Q11	I confront problems directly	0.00	2.17	23.91	53.26	20.65	3.92	0.73
Q13	I integrate plans with broader organizational initiatives	0.00	2.17	26.09	52.17	19.57	3.89	0.73
Q12	I provide bold advice to internal and external stakeholders	0.00	3.26	25.00	51.09	20.65	3.89	0.76

N = 92, *Skewness* = 0.251, *Kurtosis* = 0.498

M = Mean, *SD* = Standard Deviation, 1=to a very small extent, 2=to a small extent, 3=to a moderate extent, 4=to a large extent, 5=to a great extent

Appendix K
Descriptive Statistics on Reflective Questions

Question No.	Item	1	2	Percentage 3	4	5	M	SD
Reflection-In-Action (RIA)								
Q1	Do you like doing the things that you are good at?	1.10	00.00	2.20	38.00	58.70	4.53	0.85
Q4	Were the insights gained from conducting this self-assessment exercise valuable?	00.00	1.10	15.2	64.10	19.60	4.02	0.60
Q6	Did the self-assessment exercise result in a clear and doable way forward for competency improvement?	1.10	00.00	17.40	67.40	14.10	3.95	0.63
Q2	Are your strengths used to the fullest in your current job?	1.10	6.50	22.80	51.10	18.85	3.79	0.65
Reflection-For-Action (RFA)								
Q5	Did the self-assessment exercise help you to indicate the need for competency improvement?	00.00	00.00	10.90	67.40	21.70	4.11	0.56
Q3	Did you derive value from conducting this self-assessment exercise?	00.00	00.00	17.40	68.50	14.10	3.97	0.56
Q7	Are you motivated to address the identified competency gaps?	1.10	1.10	16.30	67.40	14.10	3.92	0.67

N = 92, *Skewness* = 0.251, *Kurtosis* = 0.498

M = Mean, *SD* = Standard Deviation, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

Appendix L
Items for Areas of Improvements

Competency	Areas for Improvement	Items <i>Sample Mean</i>	Items <i>Item Impact Calculation</i>
Creative Problem Solving	Analytical techniques	Q9: I use several analytical techniques to break apart complex situations or problems.	
Develop Self & Others	Creating learning opportunities	Q11: I establish cross-departmental learning opportunities .	
Develop Networks	Managing complex relationship	Q12: I effectively manage complex relationships , and use them to achieve the strategic plan.	
System Thinking	Aligning organizations' objectives & action plans	Q8: I identify actions/plans that do not support the organization's vision and values, and work to create alignment	Q12: I align actions and advance program policy at the overall ministry and government-wide levels, because I take a big picture view
Agility	Proactive behaviour	Q12: I proactively articulate and create momentum for organizational change.	Q7: I anticipate the emotional triggers of others, and try to mitigate reactions.
Build Collaborative Environment	Communication strategies	Q12: I initiate strategic communication systems to reach all stakeholders.	Q10: I investigate, and use, strategies to build morale and productivity.
Drive for Results	Plan integration	Q12: I integrate plans with broader organizational initiatives.	Q8: I put into place a strategy to ensure the team achieves future goals and objectives.