

**Public Service Motivation:  
A Meta-Analysis of its Antecedents and Consequences**

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### **Attestation of Authorship**

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.”

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Irene Kumar

Date:

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## ABSTRACT

Public service motivation (PSM) has been an area of interest to many researchers, from as early as the 1900s (Perry & Porter, 1982), and there is much more interest generated in the field in recent years (Ritz, Brewer, & Newmann, 2016). Most importantly, the study of PSM directly impacts employee motivation, management practices such as hiring and compensating, and organizational performance in the public service (Charbonneau & Van Ryzin, 2017). Hence, researchers and practitioners are continually studying antecedents and consequences that can positively impact PSM, improve performance in public service organizations. At the same time investigate and reduce those antecedents and consequences that may negatively impact public service employee's motivation and organizational performance.

Therefore, the researcher undertakes this study to synthesis literature and contribute to the existing literature on PSM by employing a meta-analysis. This study adds to the existing literature by drawing on the model of process theory of PSM to investigate the different sociohistorical and demographical factors, antecedents (under motivational context), and outcomes that impact PSM. The study investigates the strength of these relationships with PSM. To highlight some of the results of the study, age was found to have a positive impact on PSM. On the other hand, gender did not show any effect on PSM and resulted in furnishing a nonsignificant result. Looking to the positive outcomes of PSM, such as job satisfaction and organizational commitment, these relationships with PSM supported previous studies. Furthermore, turnover intention and stress furnished a negative relationship with PSM, which is in line with the literature.



## CHAPTER 1

### INTRODUCTION

#### 1.1 Overview of Chapter

This chapter serves to provide the study's context for this Master's thesis – Public service motivation and organizational performance: a meta-analysis. The chapter begins with an endeavor to establish the aim of this study. Next, the study elaborates on the theoretical framework and the different areas of the study's focus. Followed by research questions and objectives of the study clearly stated. This chapter concludes with an outline of the thesis structure.

#### 1.2 Brief Background

In recent decades the public administration is receiving much attention; with a strong focus is on performance in public institutions. This focus can be associated with the challenges associated with working in public service, such as cost-cutting measures to reduce operational costs, and expectation of delivering high-quality services to the public and an increase in calls for accountability. The literature on PSM claims that those employed in the public service are different from those employed in other sectors (Liu, Perry, Tan, & Zhou, 2018). Hence, some researchers view PSM as a force behind the performance of individuals and organizations in the public service (Zhu & Wu, 2016). In this attempt to improve performance, public administration practitioners and academics look at public employees and try to explain why public employees act or accomplish their tasks and work to benefit society. Thus, both the motivation and administration of public employees is of utmost importance to scholars and organizational leaders (Ritz et al., 2016)

Interest in PSM has grown significantly, with propositions to use PSM in HR activities of selection and retention. Several scholars have studied antecedents of PSM in relation to organizational and individual performance (Liu, Perry, Tan, & Zhou, 2018). For example, a study that investigated the relationship between PSM, workplace attributes, and work relations established that those employees who showed higher PSM exhibited higher levels of intrinsic workplace characteristics such as self-directed job and extrinsic workplace characteristics such as better workplace relations with their co-workers and superiors (Taylor & Westover, 2011). In addition, studies have examined socio-historical antecedents such as gender and age quite often. However, findings have been inconsistent (Parola, Harari, Herst, & Prysmakova, 2019).

Furthermore, other antecedents of PSM studied are autonomy (Borst, 2018; Camilleri & Van der Heijden, 2007; Schott & Pronk, 2014; Zheng, Wu & Graham, 2020); goal clarity (Bao & Ge, 2019; Homberg, Vogel & Weiherl, 2019; Wright, Moynihan & Pandey, 2012); job characteristics (Battaglio & Gelgec, 2017; Park, 2020)

On the other hand, in relation to outcomes, there have been many studies that investigated the relationship between PSM and job satisfaction (Breaugh, Ritz & Alfes, 2018; Cantarelli, Belardinelli & Belle, 2016; Karolidis & Vouzas, 2019; Zheng, Wu & Graham, 2020); performance (Borst, 2018; Caillier, 2014; Leisink & Steijn, 2009; Stefurak, Morgan & Johnson, 2020); OCB (Abdelmotaleb & Saha, 2019; Kim, 2018; Moustafa & Leon-Cazares, 2015; Shim & Faerman, 2017); Organizational commitment (Kai-Peng & Wang, 2020; Kim, 2017; Park, 2020; Potipiroon & Ford, 2017). While these studies have accentuated PSM's role and influence in public service performance, there are still inconclusive or contradictory results (Charbonneau & Ryzin, 2017; Ritz, Brewer & Newmann, 2016). While there have been a number of studies about the antecedents of PSM, it is clear that most of the research on PSM has been about the positive consequences.

There are several areas within the public service literature where a meta-analysis is the preferred means to provide an in-depth study of various aspects of employee motivation and or performance, such as a study that examined the relationship between PSM and job satisfaction (Homberg, McCarthy & Tabvuma, 2015). Their study revealed a positive relationship between PSM and job satisfaction (Homberg et al., 2015). Another study looked at the relationship between performance management and performance in public organizations (Gerrish, 2016). Their study revealed that performance management had a minimal impact on performance while best practice implementation had a substantial impact (Gerrish, 2016). A third study examined the impact of human resource management practices on PSM (Homberg & Vogel, 2016). Their study revealed that intrinsic HR practices had a positive impact on PSM. However, extrinsic HR practices did not show any association (Homberg & Vogel, 2016). Finally, the most recent study looked at PSM, age, and gender relationships (Parola, Harari, Herst & Prysmakova, 2019). The authors confirm that age and gender can be classified as antecedents of PSM. Furthermore, they confirmed PSM to increase with age (Parola et al., 2019). The above studies show the significance of PSM in the public service and the link to performance.

### 1.3 Research Gap

Theoretical and empirical studies above all show various relationships of PSM to antecedents and outcomes; however, some gaps need further investigation. Writers have linked PSM to work engagement, organizational commitment, and organizational performance (Belle & Cantarelli, 2012; Koumenta, 2015; Moynihan & Pandey, 2007). From the above examples of recent studies undertaken, it is clear that the focus has been on the positive consequences of PSM so far. Hence, there is a gap to investigate the effect of the negative impact of PSM by employing a meta-analytical study. More recently, a systematic literature review of 323 publications examined six dominant aspects of PSM literature concluded: (1) that there is a need for more research; (2) that inclusion of the undesirable attributes of PSM should be considered (Ritz et al., 2016). In addition, the literature review states that some studies' have a low consistency of results which may be due to simple conceptual models utilized, and most studies did not consider the context (Ritz et al., 2016). The authors also state that some studies' use of secondary data did not address research questions appropriately, along with sampling and measurement errors; therefore, they call for more meta-analysis to help remove the deficiencies in studies (Ritz et al., 2016). Hence, to address the above gaps, this study intends to investigate the antecedents of PSM, the positive outcomes of PSM, and the possibility of negative outcomes of PSM, and identify the strengths of these relationships by undertaking a meta-analysis.

### 1.4 Theoretical Framework

In the literature it is suggested that PSM is also seen as prosocial motivation (Moustafa & Saha, 2019b). Taking on Perry, Hondeghem, and Wise's (2010, p.682) definition of PSM: "a particular form of altruism or prosocial motivation that animated by specific dispositions and values arising from public institutions and their missions," it can be argued that PSM is both a pro-social motivation as well as restricted to the public sector. Perry's work in 2000 proposed the process theory of PSM, whereby the study identified that the three factors that impact motivation are socio-historical context, motivational context, and individual characteristics (Moustafa & Saha, 2019b). Accordingly, this study bases its line of research on the process theory of PSM proposed by Perry (2000). Therefore, the study extends the process theory of PSM by bringing in demographic variables within the socio-historical context, and including

the motivational context, and proposes to include positive consequences and adverse outcomes of PSM.

### 1.5 Research Questions

Therefore, the purpose of this study is to explore and systematically derive answers to the following research questions: 1) what are the possible antecedents of PSM; 2) what are the positive consequences or outcomes of PSM; 3) what are the negative consequences of PSM. The study will look at age, gender, education, hierarchy, income, professional association, job and organizational tenure in relation to socio-historical and demographic antecedents. In addition, the study will look at job characteristics, autonomy, empowerment, goal clarity, intrinsic reward, job demand, role ambiguity, red tape, transformational leadership, and trust in relation to the motivational context. Furthermore, the study will investigate positive consequences such as performance, job satisfaction, organizational commitment, OCB, CCB, knowledge sharing, and mission valence. Finally, the study will investigate negative consequences of PSM such as absenteeism, presenteeism, burnout, resigned satisfaction, stress, and turnover intention. In addition, to answering the above research questions, this study will also look at the strength of these relationships. Consequently, to address the paucity of research concerning to PSM, its antecedents, and consequences, the researcher calls for further investigation using a meta-analysis.

Thus, during the analysis process, a number of relationships between PSM and its antecedents and outcomes emerged. The findings so far support and substantiate the existing literature on PSM and its relationship with antecedents and outcomes. Hereafter, to achieve the objectives of the research, this study is organized as follows. The second chapter examines the development in PSM literature over the past years. In doing so, chapter two introduces the concept of PSM, the different antecedents and consequences of PSM. It goes on to explain the definition this study intends to follow. The chapter moves on to discuss the background of PSM and the importance of this study. The chapter concludes with various research undertaken in the field while identifying gaps in the literature.

The third chapter provides the research methodology chosen for the study and the justification for the choice. The chapter lays out its ontological and epistemological position, followed by an outline of the process followed to retrieve the available and relevant literature on the study variables. The chapter explains the systematic processes used to obtain study samples and

variables. Finally, the chapter concludes with the reliability and validity procedure and process employed.

The fourth chapter entails the results and findings of this study. The hundred seventy-one articles were finally selected for the meta-analysis. The results chapter presents the socio-historical antecedents of PSM first, followed by the rest of the antecedents. Next, the consequences of PSM are presented, and finally, the adverse outcomes of PSM.

The fifth chapter lays out the discussion of the results and limitations of this study finally, and the chapter finishes off with a conclusion and future recommendations for research.

## CHAPTER 2

### REVIEW OF THE LITERATURE

#### 2.1 Overview of the chapter

This chapter begins by introducing PSM. Followed definition of PSM, the origin of PSM. Next follows the three underlying motives of PSM and the theoretical framework of PSM. The chapter continues with antecedents of PSM where socio-historical and demographical factors such as age, education, gender, hierarchy, professional association, income, job security, and tenure are studied. The next area in this chapter is about the motivational context where autonomy, job characteristics, goal clarity, job demand, empowerment, transformational leadership, red tape, and role ambiguity and trust. Then the next phase of this chapter looks at the positive outcomes of PSM such as organizational commitment, CCB, OCB, job satisfaction, performance, knowledge sharing, and mission valence. Finally, the chapter looks at the negative outcomes of PSM, such as absenteeism, presenteeism, burnout, resigned satisfaction, stress, and turnover intention.

#### 2.2 Introduction

Public service motivation (PSM) has been an area of interest to many researchers, from as early as the 1900s (Behn, 1995; Perry & Porter, 1982; Wright, 2001; Bright, 2008), and there is much more interest generated in the field in recent years (Liu, Zhang, Du & Hu, 2015; Mingus & Jing, 2017; Ritz, Brewer, & Neumann, 2016). The study of PSM has a direct impact on motivation, management practices such as hiring and compensating (Charbonneau & Van Ryzin, 2017), as well as organizational productivity, trust, and accountability in government performance, thus making it a critical area of research (Brewer, Selden & Facer, as cited in Moynihan & Pandey, 2007). Public service is another term for government service comprising all those employed in the public sector (Perry, 1990). Motivation has been a crucial part of management, Camilleri (2007) explains as the force that stimulates, sustains or energizes an individual's behavior (Perry, Hondeghem, & Wise, 2010; Perry & Porter, 1982). Studying motivation, one needs to look at several variables such as individual and job characteristics, external and internal work environments (Porter & Miles, 1974 as cited in Perry & Porter, 1982). PSM originated from the notion that the public sector experienced distinctive motives in comparison to the private sector (Perry et al., 2010) or have differing work-related needs and values (Perry, 1997). Some scholars view that those individuals with PSM would be highly

attracted to commence employment in the public sector simply because their aspirations coincide with the government's policy or mission (Wright, Moynihan & Pandey, 2012).

PSM is defined by Staats (1988, p. 601) and later iterated by Perry and Wise (1990, p. 367) as: "a concept, an attitude, a sense of duty – yes, even a sense of public morality." Another definition of PSM is that it is, "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry & Wise, 1999, p. 368). Furthermore, according to Rainey & Steinbauer (1999), PSM fulfills the needs of a nation or individuals. Finally, some researchers see PSM as the actions of individuals who are a selfless concern for others' betterment, an altruistic act (Andersen & Kjeldsen, 2013; Braender & Andersen, 2013; Vogel, Homberg & Gericke, 2016). One reason identified was that individuals embraced the public values of their organizations, thus exhibiting PSM (Vandenabeele, 2011). A precise definition of PSM has proved elusive; however, the common focus of these definitions seems to revolve around providing service to society (Andersen & Kjeldsen, 2013; Christensen & Wright, 2018; Ritz et al., 2016). Individuals in employment join an organization or remain in the job for various reasons or motives. Similarly, individuals enter the public sector for different reasons, and each person has a different need in comparison to the next person. Literature suggests three categories of PSM: the rational motive, norm-based motive, and the affective motive (Bright, 2005; Perry & Wise, 1990). In an attempt to study PSM, Perry and Wise (1990) classified it into three main reasons or bases; individuals choose public service: rational, normative, and affective. A rational basis can be, for example, due to their self-interest to promote specific public policies or advocate a particular interest (Brewer & Seldon, 1998). On the other hand, Normative may be due to ethical considerations for the common good, and affective perspective can be due to their emotional affiliation to a specific program or service (Bright, 2005).

Work by Perry (1996) saw the development of a multidimensional construct established in public administration theory to aid research. This framework consisted of 24 items in the scale that attempted to measure the following four dimensions: an attraction to policymaking, a dedication to serving the interests of the public (commitment to the public interest), self-sacrifice (a selfless giving nature), and compassion to others (Kim, 2017; Perry, 1996). These dimensions reflect the three motives (rational, norm-based and, affective) explained earlier (Caillier, 2017). A closer look at the four constructs (attraction to policymaking, a commitment to public interest, compassion, and self-sacrifice) and the three motives (rational, norm-based, and affective) leads to the identifying and understanding the antecedents of PSM. In an earlier

study, one of the antecedents of PSM identified was socialization and professionalism (Perry, 1997). A study conducted by Moynihan and Pandey (2007) found that the organizational environment individuals found themselves in consequently led to PSM. This study shows the importance of organizational commitment over extrinsic rewards (Moynihan & Pandey, 2007). Personal characteristics such as age, educational attainment, and gender were common antecedents identified with PSM levels (Vandenabeele, 2011). Several researchers recognize the role played by various institutions such as one's employer, membership to volunteer association, and political affiliation (Camilleri, 2007; Moynihan & Pandey, 2007; Vandenabeele, 2011).

Despite the number of studies undertaken in public service motivation in the past forty years, scholars believe that to date, research on its antecedents (Vandenabeele, 2011), including management initiatives, is underdeveloped (Perry & Vandenabeele, 2015; Ritz et al., 2016; Zhu & Wu, 2016). Furthermore, researchers' ability to explain the relevance of PSM in improving organizational performance (Perry, 2014) as well as the inconclusive results in the literature (Charbonneau & Ryzin, 2017; Palma, Hinna & Mangia, 2017; Ritz et al., 2016) warrant further investigation. Therefore, Perry and Vandenabeele (2015) envisage further research into PSM to better understand the constructs (Perry & Vandenabeele, 2015).

This chapter will commence with a look at the origination of PSM, followed by the makeup of PSM. The chapter continues to delve into the antecedents of PSM, where the following are antecedents are studied: age, education, gender, hierarchy, job security, tenure, job characteristics, autonomy, empowerment, goal clarity, job demand, role ambiguity, red tape, transformational leadership, and trust. The chapter then moves to positive consequences of PSM, where the following outcomes are studied: performance, job satisfaction, organizational commitment, OCB, CCB, mission valence, and knowledge sharing. Finally, the chapter looks at the negative outcomes of PSM: absenteeism, presenteeism, burnout, resigned satisfaction, stress, and turnover intention.



### 2.3. Public Service Motivation (PSM)

Employee motivation or what drives employees has been an area of great attention, and indeed a question facing public service organizations for a long time as much as it is today (Behn, 1995; Perry & Porter, 1982; Piatak & Holt, 2020; Ritz et al., 2016). Motivation is an important topic, particularly in understanding and appreciating PSM. For some time now in public administration, many scholars and practitioners propose that the motivations experienced by public servants are different from those experienced by employees in private organizations or the rest of the society (Perry & Wise, 1990). According to Breugh et al. (2017), motivation is the necessity that drives behavior and is inborn and universal. Furthermore, Perry and Porter (1982) add that motivation is an effort but includes direction of effort exerted as well as the quality of effort one employs. Motivation studies go back as early as the 1800s when leaders focused on improving the performance of public servants (Van Riper, 1958 as cited in Perry & Hondeghem, 2008). Later in the 1900s, studies asked how public employees can be motivated and how performance can be measured (Behn, 1995). A study showed that governments were pushing for efficiency; thus, a refocus on how managers can motivate employees in the public service (Perry & Porter, 1982). Therefore, the early studies that tried to address what and how to motivate public employees ended up leading to the consideration of PSM. In studying PSM, it is imperative to get a thorough understanding of the theory. Therefore the following paragraphs delve into the history of PSM, the definition of PSM, the different motives of PSM, and the different constructs of PSM used in studies so far.

#### 2.3.1. Origin of PSM

While the origins of PSM are arduous, it is a unique concept in society and in public administration history (Wamsley et al. as cited in Brewer & Selden, 1998). Furthermore, PSM has received significant interest, particularly in the last twenty-five years (Christensen & Wright, 2018; Pandey, Pandey, Breslin, & Broadus, 2017). However, Moynihan and Pandey (2007a) argue that there is a need to undertake empirical research on PSM. According to Horton's study in 2008 (as cited in Perry & Hondeghem, 2008), identifies public service existence in the ancient civilization as an ideal and an idea. Some arguments supported traits of a specific nature that led individuals to public service (Lasswell, as cited in Perry & Hondeghem, 2008). On the other hand, there were arguments that supported the view that behavior is learned (Merton, 1940 as cited in Perry & Hondeghem, 2008). Still, others

proposed that individuals enter public service because they feel a sense of responsibility and duty-bound to serve society (Mosher, 1968 as cited in Perry & Hondeghem, 2008). These different viewpoints gave room for further investigation on PSM. Hence, in the 1980s, more research on PSM theory and empirical studies was undertaken (Perry & Hondeghem, 2008). With respect to origination or first use of the term PSM, Rainey (1982) used the term PSM in his study, utilizing a sample of managers from the public and private sectors. His research indicated that public managers scored higher compared to private managers in their desire to serve the public (Rainey, 1982). During this period, Rainey proposed to develop PSM as a concept (Perry, 2014).

During the 1980s, Alonso and Lewis (2001) argue that a lack of confidence in the ruling government and little regard for those who were in the public service contributed to a lack of confidence in the state. Furthermore, the authors add that inflation rose faster than pay rise in the public service, and little room to reward high performers once again lead to problems of attracting and retaining qualified employees (Alonso & Lewis, 2001). In order to address these shortcomings faced by the public service, there was a proposal to delve into the unique contributions that PSM could deliver (Perry & Wise, 1990). The authors intention is to reframe motivation concept and relook at the basis of PSM. The first conceptual definition of PSM was developed by Perry and Wise (1990) in their seminal article. Perry and Wise's (1990) work opened the door to further research. The development of an instrument for measuring PSM was the next achievement made in literature (Perry, 1996). Then came studies on origins and antecedents of PSM (Perry, 2000).

### 2.3.2. Definition of PSM

In the last decades, research into PSM has grown relatively fast (Christensen, & Wright, 2018; Harari, Herst, Parola & Carmona, 2017; Ritz et al., 2016). Consequently, motivation of those employed by the public service over the years has been an area researched by scholars, a topic debated widely and one that concerns the public; for example, a bibliometric study that analyzed publications between the periods 2004-2014 found PSM to be one of the most researched topics (Juliani & de Oliveria, 2016). Public service has a dual meaning; first, it relates to working for society's common good, the second meaning considers those employed in the public sector (Brewer & Seldon, 1998). Furthermore, PSM is often associated as a means to enhance performance in the public service in light of a lack of incentives (Perry, Hondeghem

& Wise, 2010). Also, employees are said to develop a strong attachment to public organizations for various reasons, and one reason, in particular, is PSM (Potipiroon & Ford, 2017). This study uses the definition of PSM presented in a seminal article by Perry and Wise (1990, p. 368): “individual’s predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations.” Accordingly, Perry and Wise (1990) argue that PSM is the intrinsic motivation of a public service employee to exhibit actions and behaviors that are advantageous to society. Therefore, the definition of PSM connotes that public service employees exhibit a particular type of motive that is associated with public service work (Han, 2018). PSM is often described as prosocial behavior, meaning acts or actions of public service employees that benefit others rather than oneself (Batson & Powell, as cited in Piatak & Holt, 2020). Importantly, PSM, according to Perry (2014), is altruistic in nature, meaning selfless actions displayed by those in public service. Also, PSM is linked to prosocial behavior, meaning “the desire to expend effort to benefit other people” (Grant as cited in Perry, Hondeghem & Wise, 2010 p. 682). Therefore, PSM encompasses the motivation to serve the needs of others.

### 2.3.3 Is PSM stable or dynamic in nature

A line of argument still under consideration is the view as to whether PSM is stable or dynamic (Charbonneau et al., 2017). Some studies view PSM as a dynamic state (Bellé, 2013; Ward, 2014). On the other hand, there are scholars who view it as a stable state (Bozeman & Su, 2015). For example, a study of 420 Chinese police officers surveyed treated PSM as a stable state (Bao & Ge, 2019). Furthermore, some researchers propose that PSM constitutes both states, dynamic and stable (Wright & Grant, 2010). Besides, Perry (1997) states, in relation to work values and needs, public service employees differ distinctively from private sector employees. The second line of argument is whether PSM is an altruistic motive. For example, Perry (2014) states that PSM is a result of altruism within public institutions. On the other hand, Ritz, Brewer, and Newman (2016) argue that PSM is not entirely an altruistic motive as some people see it. Consequently, one study sees PSM as a self-serving motive at play (Perry, Hondeghem & Wise, 2010). Hence, academics have not clearly agreed upon the nature of PSM.

#### 2.3.4 The three motives of PSM

In the realm of academia, joining the public sector is seen as more than a job, a sense of duty, even to the extent of a calling to serve the public (Perry, 1996). Hence, it is understood that those with higher levels of PSM would naturally seek positions in the public service as the work allows them to deliver meaningful public service and at the same time find it intrinsically rewarding (Wright & Grant, 2010). Therefore, it is of no surprise that researchers pay a lot of attention to the motive of employees to serve the public, that is, the underlying PSM. High levels of commitment, productivity, and organizational performance are exhibited mainly through those employees who experience intrinsic motivation (Crewson, 1997 as cited in Georgellis, Lossa & Tabvuma, 2010). Ritz et al. (2016) reiterate the question raised earlier by Behn (1995): how managers in public service can motivate their subordinates. Academics have identified three categories of PSM motives: rational, normative, and affective (Han, 2018).

First, the rational motive is when an employee seeks to join or serve the public in order to satisfy his/her own need (Han, 2018). Rational motives can be, for example, due to one's self-interest to promote specific public policies or advocate for a particular interest (Brewer & Seldon, 1998). In addition, the rational motive addresses actions that target to fulfill both individual and social needs (Bright, 2005). Fulfilling these needs means an individual may support a public policy directly related to his self-interest or personal interest (Ballart & Riba, 2017). Second, normative motive, on the other hand, may be due to ethical considerations for the common good, and affective perspective can be due to their emotional affiliation to a specific program or service (Bright, 2005). The norm-based motive on the other hand, distillates on an employee's desire to serve the public (Han, 2018). In addition, normative motive focuses on being loyal to the government (Caillier, 2017; Perry & Wise, 1990). Also, it includes complying with norms (Mostafa & Leon-Cazares, 2016), such as working towards social justice on ethical grounds.

Finally, the affective motive is when individuals are committed to the program, probably due to its importance socially or when they exhibit patriotism (Bright, 2005). Although there are three different motives of PSM, it is worthy to note that an individual employed in the public service may have different reasons to join the public service from the next person (Bright, 2005). According to Moynihan and Pandey (1999) it is imperative to investigate motivation from a rational perspective, but focusing only on the incentive side is incomplete. Thus, it is just as important to study a person's normative viewpoint and his emotional viewpoint of the

world (Moynihan & Pandey, 2007). Overall, the three motives and an individual's action for the wellbeing of society seem to be the emphasis of PSM.

### 2.3.5 Measures of PSM

Having explained PSM thus far, it is important to draw some light on its dimensions, as research has been carried out with different constructs. Accordingly, Corduneanu, Dudau, and Kominis (2020) state, PSM is an integral measure in the public sector research. In order to measure the three motives (rational, normative, and affective), Perry (1996) constructed a scale. The understanding is that each PSM measure comprises the following four items: attraction to policymaking, commitment to public interest/civic duty, self-sacrifice, and compassion (Giauque et al., Perry, 1996). Furthermore, while different measures seem to be related, each construct on the other hand, focuses on a different aspect of PSM (Wright & Pandey, 2005).

The first dimension of PSM, attraction to policymaking dimension, considers those public service employees who are highly concerned in the political arena and really show the desire to be involved in activities that serve the needs of the public interest (Anderfugren-Biget et al., 2014). Commitment to the public interest, the second dimension of PSM, deals with public service employees have aspirations to better the public interest such as accomplishing public policy goals (Anderfugren-Biget et al., 2014). Whilst compassion, the third dimension, constitutes those individuals who portray sympathy and are empathetic to others suffering, the self-sacrifice dimension, on the other hand, deals with accepting intangible rewards by serving the society's needs rather than accepting tangible rewards (Steen & Rutgers, 2011). Finally, the fourth dimension, self-sacrifice, is about public service employee's desire and willingness to let go of tangible personal incentives for service to others. Self-sacrifice, another way to define, is the 'willingness to substitute service to others for tangible personal rewards (Anderfugren-Biget et al., 2014). Perry (1996) argued that attraction to policymaking could be classified under rational motive because it gives employees a sense of importance. Furthermore, commitment to public interest can be classified under normative motive as it builds a desire for the public service employee to conform to norms (Perry, 1996). Finally, compassion and self-sacrifice can be under the category of affective motive due to the desire of individuals to make a difference in society. Hence, the four dimensions (attraction to policymaking, attraction to public interest, compassion, and self-sacrifice) of PSM can be categorized under the three motives (rational, normative, and affective).

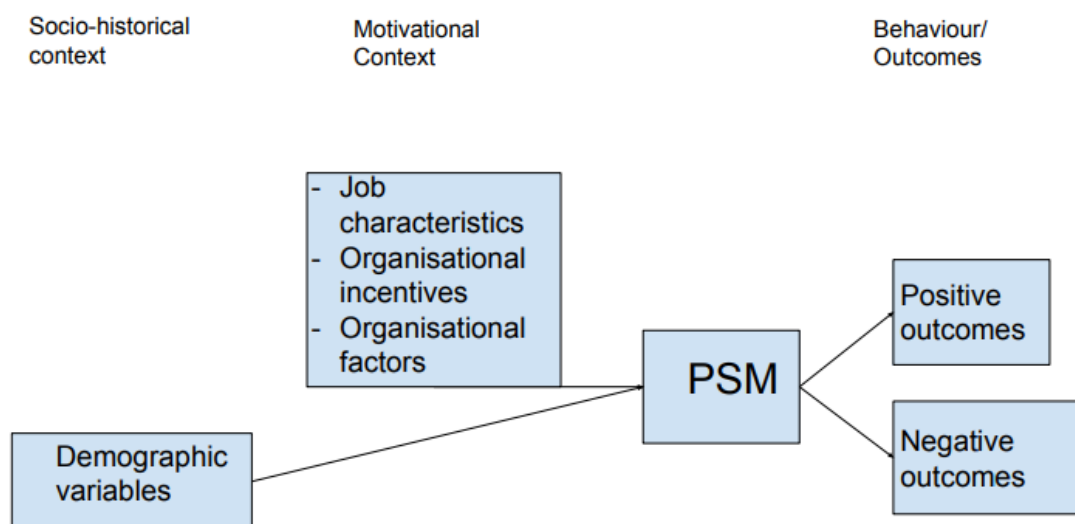
### 2.3.6. Process theory of PSM

The building block of any research is the underlying theory that supports the line of investigation, and in this case, the process theory of PSM is the framework employed. Public administration researchers have quite often resorted to applying the process theory of PSM to study the relationship between organizational environment and PSM. Also, between PSM and its outcomes (Mostafa & Saha, 2019). In addition, it is imperative to point out that PSM in terms of a Process theory sees individual behavior as a result of sociohistorical context, motivational context, and individual characteristics. Sociohistorical context (such as education) has an impact on an individual's PSM level (Mostafa & Saha, 2019). On the other hand, employee outcomes such as performance and job satisfaction relate to within the work environment (Mostafa & Saha, 2019). That is, process theory separates behaviors that an employee brings with him prior to joining an organization (sociohistorical context) and behaviors that he/she develops within the environmental context, which could be either outcomes or motivational context.

The development of process theory began with Perry's (2000) work, where he presented a critique of motivation theory in the article titled *"Bringing society in: toward a theory of public service motivation."* In his publication, Perry (2000) highlighted individualistic bias and a lack of specification of behaviors as some of the reasons for the moving from motivation theory to process theory of PSM. He argues that one failure is that motivation theory bases its foundation on rational choice behavior, thus hiding empirical failures (Perry, 2000). Hence, motivation theory addresses an individual's assessment of an activity based on cost and benefit, while PSM incorporates society's influence. Accordingly, Perry (2000) proposes a more inclusive perspective in developing the process theory of PSM. For example, Moustafa and Saha (2019) explain that the process theory encompasses utility maximization, social norms, an employee's interaction with social context. Hence, taking note of Perry's (2000) argument, self-concept revolves as the focus of the process theory of PSM. Hondeghem and Wise's work in 2010, PSM is considered as a type of pro-social motivation and is directly attributed to values that come from public institutions (Moustafa & Saha, 2019). Therefore, in order to study the relationship between antecedents, PSM, and outcomes, one means is by use of process theory of PSM which includes socio-historical context, motivational context, and individual characteristics.

Overall, PSM is unique to public service organizations, focused on serving a community by providing social service and deals with beliefs and values that override one's self-interest. PSM constitutes of three motives (rational, normative, and affective), and the process theory of PSM is one of the theories that can be used to analyze the relationship between antecedents, PSM, and outcomes. According to Vandenabeele, Brewer, and Ritz (2014), to be able to get a better understanding of the antecedents and outcomes of PSM, one should start by investigating the claims of the relationship's strength in the literature. In line with the above statement, for the following sections, the study proceeds to discuss the antecedents and consequences of PSM (Fig.1).

Figure 1: Process theory of PSM



## 2.4 ANTECEDENTS OF PSM

In light of motivating public service employees towards positive consequences, it is of great importance to identify the antecedents of PSM that can bring about these improved performances. While research in the area of PSM has grown over the years, studies on the antecedents of PSM remain low (Ritz et al., 2016; Vandenabeele, 2011). Similarly, according to Gould-Williams (2016), very little study has been devoted to contextual factors that impact PSM. Studies have found that organizational factors can have a positive or a negative effect on PSM (Battaglio Jr. & French, 2016; Moynihan & Pandey, 2007). Existing literature recognizes the critical role played by organizations to create output or service as well as in the study of PSM in conditioning an individual's behavior and beliefs (Moynihan & Pandey, 2007). One may ask is PSM present in an individual prior to entering employment. Furthermore, in order to study the effect of antecedents on PSM, the factors can be broken down into three sub categories (Camilleri, 2007): 1) personal attributes (also known as socio-historical context) such as education and tenure; 2) individual characteristics such as age, gender, income; 3) motivational context, such as job characteristics and work environment. Consequently, it is very important to study PSM's antecedents in understanding the various determinants of PSM and their impact. Therefore, the following paragraphs will delve into some of the antecedents that fall under these three contexts.

### 2.4.1 Sociohistorical and demographical context

The sociohistorical influences, also known as extra-organizational factors, are one of the most researched antecedents of PSM (Ritz, Brewer, & Newmann, 2016), therefore, making it an important area to be studied. Sociohistorical contexts are factors pre-existing in an individual before employment and occurred in an individual's life up to early adulthood (Gould-Williams, 2016). A considerable literature has revolved around PSM, demographical, and sociohistorical characteristics (Perry & Wise, 1990). Perry's work (1997) shed light on sociohistorical background, stating that one's relationship with parents, education level attained, and particularly observations made over one's life all impact an individual's PSM level. Therefore, an individual's desire to join the public sector or serve the public may depend on their interaction with sociohistorical forces (Gould-Williams, 2016). Some examples of sociohistorical institutions are educational achievements, and professional development gained, as well as learning accrued through observations and modeling over the course of one's



life (Moynihan & Pandey, 2007). Therefore, the following characteristics such as age, education, professional association membership, gender, and tenure will be studied under sociohistorical context demographical context, while job characteristics, autonomy, organizational incentives, and job security will be addressed under motivational context.

## Age

The impact of age on PSM has been studied for quite some time as academics and administrators try to figure out what motivates public service employees. According to Ritz et al. (2016), one of the most researched antecedents of PSM under the demographic characteristics is age. Furthermore, as the public service organizations confront an aging workforce, it becomes more important to study how age can impact PSM (Parola et al., 2017). Accordingly, some studies have shown that older employees exhibit higher PSM (Chen & Chen, 2015; Moynihan & Pandey, 2007a; Perry, 1997). A much recent systematic review also found that older employees exhibited higher levels of PSM (Ritz et al., 2016). Consequently, a much recent meta-analytical study on demographics found PSM to positively impacting age (Xu & Li, 2021). On the other hand, there are studies that have found that younger employees exhibit higher PSM. Interestingly, despite the extensive studies on age and PSM relationship, the findings seem to point to the fact that it is not as clear cut as initially thought. Age has been an important aspect of PSM, particularly in the American public sector facing more employees retiring (Bright, 2010). Bright (2010), therefore, proposes that consideration should be given to different generational cohorts as younger employees' need for recognition, financial rewards, and career advancement differs from the older generations. From the literature so far, age has a positive effect on PSM.

## Education

Education is an important socio-historical factor that has an impact on PSM; hence it is very important to study. Education has been one factor that has shown a strong positive relationship to PSM in literature (Battaglio Jr. & French, 2016; Moynihan & Pandey, 2007), thus making it an important variable to be studied. Hence, Ritz et al. (2016) stated that one of the most researched antecedents of PSM under the demographic characteristics is education. Some authors have studied how education influences PSM, found in particular higher-level education

as one of the strongest predictors of PSM (Bright, 2005; Moynihan & Pandey, 2007; Perry, 1997). For example, an earlier study by Naff and Crum (1999) found that employees with higher education scored higher on PSM scores. Therefore, it can be said that education has a positive relationship with PSM.

## Gender

An area that has received a lot of attention is whether gender has any effect on PSM. In the same vein, according to Ritz et al. (2016), one of the most researched antecedents of PSM is gender. Furthermore, as the public service organizations are confronted with the need to balance gender, it becomes more important to study how gender can impact PSM (Parola et al., 2017). Earlier studies showed a positive association between gender and PSM. For example, Naff and Crum (1999), in their study of 10000 public service employees found women scored higher on PSM in comparison to men. Similarly, Perry's (1997) study also showed a stronger relationship with the women study group. Taylor (2010) found that women took part in civic duties and made themselves available for public service duties. A later study by Lee and Kim (2014) recorded a significant positive relationship between gender and PSM. According to a systematic study by Ritz et al. (2016), women showed higher levels of PSM in comparison to men. Although Vandenaabee's (2011) study of 3506 public service employees reported male respondents had higher PSM levels in comparison to female respondents, however, there are more studies that reported otherwise. Hence, so far, it can be clearly seen that there is a lot of studies that have looked at the association between gender and PSM. However, the impact on PSM is inconclusive. While results on the relationship between gender and PSM have been mixed, there are more studies that have found a positive association between the two variables.

## Professional association

A professional association is another important antecedent of PSM. One reason is that public service employees' association with a professional body gives them the values to maintain certain standards desired (Battaglio Jr. & French, 2016). Professional identification is linked to certain occupational areas, specialized technical skills or knowledge, and an acceptance that the public service employee will deliver their expert services ethically and responsibly (Perry, 1997). In addition, professional identification to an institution is most likely to influence PSM

as it creates an ethical responsibility on its members when they disperse their expertise for the good of others, such as lawyers and doctors (Perry, 1997). In the same vein, a professional association is considered a strong predictor of PSM (Moynihan & Pandey, 2007). Therefore, a number of studies have found a positive effect of professional association on PSM. For example, earlier studies found professional association to have a direct impact on PSM (DeHart-Davis et al., 2006; Moynihan & Pandey, 2007). On the other hand, Perry (1997), in his study, did not find any significant association between professional association and PSM. Similarly, Prysmakova's (2018) study did not find support for the relationship between professional association and PSM, despite the contrary expectations. However, more research show support for the positive relationship between professional association and PSM.

## Tenure

Tenure, another organizational factor that is a significant antecedent of PSM, has had its fair share of research. Tenure is defined as the length of time spent in employment, either in a job or an organization (McEnrue, as cited in Jensen & Vestergaard, 2017). Earlier studies that looked at how PSM originated argued that socialization played a crucial role. Socialization is the employee's membership in the organization and is part of the sociohistorical context (Romzek, 1990 as cited in Harari et al., 2017). There is an argument that length of an employee's organizational membership has a positive impact on the employee's loyalty to the public service (Romzek, 1990 as cited in Moynihan & Pandey, 2007). Therefore, according to Harari et al. (2017) work experience in the public service could have a positive impact on the individual's PSM; thus, tenure may have a positive relationship with PSM.

Naff and Crum's (1999) earlier study found that those employees with lower years of service (tenure) reported higher satisfaction compared to those who had a long tenure. Therefore, based on the positive impact of tenure on PSM, a number of studies were identified (Camilleri, 2007). Another example, in a longitudinal study conducted by Ward (2014) where he used two groups, a treatment, and a comparison group. He found that the treatment group that had volunteered to undertake community service work in differing fields exhibited an increase in their PSM. Although the comparison group that did not partake in the volunteer service work exhibited a decline in PSM over the study period (Ward, 2014). Therefore, this research is in line with other earlier researches that there is a negative relationship between organizational

tenure and PSM (Moynihan & Pandey, 2007). Ward (2014) goes on to suggest that introducing employees to an intensive service experience program may be successfully developed.

Surprisingly, one study found that high PSM correlated negatively with tenure (Moynihan & Pandey, 2007). Although one would expect this to be the opposite. In the same vein, another study where 3,754 Swiss municipality employees were surveyed found that senior staff members were more likely to experience resigned satisfaction (Giauque, Ritz, Varone & Anderfuhren-Biget, 2012). While there are a few studies that reported a negative relationship between tenure and PSM, however, most of the literature shows a positive relationship.

### Income

Financial rewards have been a significant variable linked to PSM. A number of studies have been undertaken to see the impact of income on PSM (Alonso & Lewis, 2001; Battaglio Jr. & French, 2016). Perry (1997), in his early work, found that public service employees who were on the higher-income level reported lower levels of PSM; thus, he concluded that PSM level declines with income. Battaglio and French (2016) argue that financial rewards are directly linked to PSM. A number of researchers hold similar point of view on financial rewards, that public employees are not motivated by extrinsic needs entirely (Anderfuhren-Biget et al, 2010; Blais, Blake & Dion, 1990; Bright, 2005; Bright, 2009; Rainey & Bozeman, 2000). Therefore, based on the literature, income has a positive relationship with PSM.

### Hierarchy and Job security

An important area within the organizational factors researchers focus their attention on is whether hierarchy and job security impact PSM. For example, a study by Moynihan and Pandey (2007) found that administrations with more hierarchical levels had a higher PSM level. In terms of job security, Huston's (2000) found that job security is highly valued by public employees. Whilst this is contradictory to the ethos of PSM, it is, on the other hand, in line with the government worker stereotype (Huston, 2000). Therefore, based on the literature, it is expected that hierarchy and job security will have a positive impact on PSM.

Hypothesis 2.1: socio-historical and demographic variables will have a positive impact on PSM

#### 2.4.2 Motivational context

The motivational context variables relate to those factors an employee experiences while in employment (Gould-Williams, 2016). The following paragraphs will look at the different perspectives and empirical findings on the PSM relationship with autonomy, empowerment, goal clarity, job characteristics, job demand, intrinsic motivation, role ambiguity, red tape, transformational leadership, and trust.

##### Autonomy

Autonomy is an important antecedent of PSM and needs to be investigated further. Jobs that provide employee discretion in decision-making are essential in motivating employees in the workplace (Grant, 2007). Furthermore, jobs that accommodate for autonomy enhance employee motivation (Battaglio Jr & Gelgec, 2017). A number of studies found workplace autonomy to be a strong predictor of PSM (Battaglio Jr. & Gelgec, 2017; Moynihan & Pandey, 2007). Therefore, autonomy has a positive effect on PSM.

##### Empowerment

With regards to empowering employees, Moynihan and Pandey (2007) find employment has a positive impact on PSM. Job designs that cater to employee autonomy encourage motivation. More recent attention has focused on the impact of empowerment on PSM through job characteristics, where responses of 315 directors of the Turkish government were studied (Battaglio Jr. & Gelgec, 2017). The study found empowerment motivated employees via job content (Battaglio Jr. & Gelgec, 2017); this was contributed through an environment where the respondents felt they played an active part in problem-solving and decision making as well as room to develop professionally. A growing body of literature recognizes contributing factors such as gaining recognition, congenial working relationships among co-workers to be the force behind motivation (Anderfuhren-Biget, Varone, Giauque & Ritz, 2010). Therefore, empowerment has a positive relationship with PSM.

##### Intrinsic and Extrinsic Rewards

A much-debated question is whether public employees opt to maximize their self-interest (Sen, 1995) or that their motivation stems from higher needs (Perry & Wise, 1990). These are

opposing points of view researchers hold (Anderfuhren-Biget, et al., 2010), but one thing is guaranteed, and that is the public sector is underpaid in comparison to the private sector employees (Sardžoska & Tang, 2015). Furthermore, according to Georgellis et al. (2010), intrinsic rewards are not necessarily reduced by extrinsic rewards, but it is when reward procedure is poorly defined then crowding out occurs. Their study revealed that individuals who are intrinsically motivated opt to enter public service jobs simply due to higher satisfaction obtained from the nature of the work itself as the public sector may provide one with prosocial behaviors (Georgellis et al., 2010).

An earlier study by Rainey (1982) surveyed 275 mid-level management staff and found extrinsic rewards rated quite low by public managers in comparison to private sector managers. Later, a study by Perry (1997) also came up with similar results that PSM actually decreases with increasing income levels. He proposed that some public employees, in fact, value monetary rewards; however, the use of extrinsic rewards within the governments contradicted with the motive to serve the public (Perry & Wise, 1990). Therefore, they suggested that due to the pay differential between private and public employees in similar roles, one needs to address the motivational focus slightly differently to understand its uniqueness in the public sector (Perry & Wise, 1990).

On the other hand, the view that extrinsic incentives do not motivate public employees has been challenged by Alonso and Lewis's study (2001). Their results were quite the opposite. Alonso and Lewis (2001) conducted two surveys in 1991, and in February, a year later, of 35,000 Federal employees. They found that performance was positively impacted when organizations rewarded employees on their ability to perform based on their knowledge and skill level (Alonso & Lewis, 2001). This performance was equally represented in situations where employees valued service and those who valued their individual incentives. For example, a study in the United States was undertaken to find out if public service employees value extrinsic rewards over intrinsic rewards (Huston, 2000). The study supports existing literature; public service employees place less value on extrinsic rewards (Huston, 2000). Hence, there are more studies that support the line of thought that intrinsic motivation is positively related to PSM, while extrinsic rewards are negative.

## Goal clarity

A lot of attention is given by researchers to find out which factors can positively impact PSM; one such factor is goal clarity. A number of studies have been undertaken to find if goal clarity has an impact on PSM (Caillier, 2016; Desmidt, S. & Prinzie, A., 2019; Park & Kim, 2015). Goal clarity is defined as when employees understand the organizations' goals clearly, including what they need to do in order to achieve these goals as well as how their work is related to the overall organization (Caillier, 2016). Therefore, the author states that if expectations are not clearly laid out for employees, it will be difficult for them to understand or be time-consuming, thus may lead to difficulty in fulfilling their terms of contract (Caillier, 2016). As it is seen, public service employees with higher PSM tend to seek work that contributes to society or that has a social impact. Hence, it becomes just as important to ensure these employees are clear about their goals. As Caillier (2016) states, when roles are clearly stated for public service employees, and they understand how they can contribute to service the mission of their organization, their PSM is reinforced. Hence, a number of studies have found goal clarity to have a positive impact on PSM (Park & Kim, 2015). For example, a study of 913 United States local, state, and Federal public service employees were surveyed (Caillier, 2016). The study found a positive association between goal clarity and PSM, and one contributing factor was that employees saw clearly how their work benefited society (Caillier, 2016). From the studies above, it can be seen that goal clarity has a positive impact on PSM.

## Job characteristics

One of the critical organizational factors is job characteristics, as it deals with what a person does at the workplace. According to Moynihan and Pandey (2007), job characteristics are how a public service employee may perceive his or her role in the organization depending on how he views certain aspects of those tasks assigned. Hence, Perry and Porter (1982) argue that this variable can be changed to impact an employee's motivation. A study by Camilleri (2007) and a study investigated job characteristics (Battaglio & Gelgec, 2017). They concluded that job characteristics have a significant positive effect on PSM. Consequently, when an employee does not find a task interesting or fulfilling, there is a chance of lower PSM for the individual. Hence, the organizational environment plays an important role to either facilitate or impede altruistic needs (Potipiroon & Ford, 2017). Therefore, from the literature, it can be predicted that job characteristics will have a positive effect on PSM.

## Transformational leadership

Transformational leadership is an area of great interest and is one of the most researched leadership styles (Judge and Piccolo, 2004). Transformational leadership is defined as leaders aligning employees' values and beliefs with their organizations by articulating appealing organizational vision (Burns as cited in Bao & Ge, 2019). According to Bass (1985), transformational leadership constitutes the following four components. First, idealized influence (e.g., leaders' ability to build trust and respect with followers) and second, inspirational motivation (e.g., leaders' ability to create and align employees to their organizational vision) (Bao & Ge, 2019). Third, intellectual stimulation (the leader's initiative in enabling subordinates to work innovatively) and, fourth, individualized consideration (leaders' ability to provide development opportunities to subordinates) (Bao & Ge, 2019). The public service sector relies on appealing to employee's altruistic motivation to go above and beyond serving other's needs (Bao & Ge, 2019). Since transformational leadership constitutes inspiring employees to reach the organizational vision hence, transformational leadership can be an important factor that can enhance PSM.

Although transformational leadership is important in public service management, however, there are fewer studies that have investigated the relationship with PSM (Kim, 2018). Consequently, there are few studies that investigated the relationship between transformational leadership and PSM (Ritz et al., 2014; Wright et al., 2012; Bao & Ge, 2019). For example, one study purports that transformational leadership facilitates employee's motivation towards organizational achievements (Wright, Moynihan & Pandey, 2012). Hence, a direct positive effect on PSM. Another study that was undertaken in Germany surveyed 1165 police officers, found a positive relationship with PSM (Homberg, Vogel, & Weiherl, 2019). Therefore, in light of the literature so far, transformational leadership would have a positive effect on PSM.

## Red Tape

Red tape has an important relationship with PSM that needs a lot of attention due to its possible negative effect. Red tape is defined as excessive procedures and regulations that can create an unhealthy work environment (Giauque et al., 2012). Hence, according to Moynihan and Pandey (2007), all regulations and procedures cannot be deemed red tape, but those that create frustration for public service employees in accomplishing their tasks and goals. For example, according to Moynihan and Pandey (2007), employees with higher levels of PSM show they



are able to cope with bureaucratic procedures in their public organization. On the other hand, an argument put forward by Kjeldsen and Jacobsen (2013), public service employees experiencing red tape may end up feeling frustrated in the process of serving society. Therefore, the existence of red tape in public service consequently discourages employees into believing that they are not serving the interests of the public. An earlier study by Moynihan and Pandey (2007) found red tape to be negatively related to PSM. In the same vein, Quratulain and Khan (2015) highlight in their study the likelihood of negative implications of PSM. Their study puts forward the argument that red tape impacts public employees with lower levels of PSM as well as those with higher levels of PSM (Quratulain & Khan, 2015).

On the contrary, a study of 1165 German federal state employees found red tape did not have any significant influence on PSM (Homberg et al., 2019). The researchers argue that one reason for this non-significant finding is that employees were already used to the prevalence of bureaucracy, treating it as part of their routine or unavoidable work practice (Homberg et al., 2019). Therefore, there is a need to investigate further the possible negative effects of the implications of PSM. In light of the literature so far, red tape would have a negative effect on PSM.

### Role ambiguity

Role ambiguity has been studied extensively due to its negative impact on workers, hence, making it an important factor to study as an antecedent of PSM. Role ambiguity is defined as when public service employees face a lack of information in their given position or role (Rainey, 2009). Accordingly, Camilleri's (2007) study found a positive relationship between role ambiguity and PSM. Hence, role ambiguity is said to have a negative effect on workers (Callier, 2016). It is believed based on the literature that role ambiguity has a negative effect on PSM.

### Trust

Trust is when public service employees have a positive expectation from other members in their organization based on the roles of the organization members (Shockley-Zalabak, Ellis & Winograd, 2000 as cited in Kim (2018). Trust, according to Kim (2018), has a lot of beneficial outcomes for the employee and the organization. Whilst on the topic of organizational

environment, one study looked at workplace trust's role on PSM in Taiwan (Chen, Hsieh & Chen, 2014). The survey of 774 middle managers revealed that public managers' interaction with employees modifies their trust, thus influencing their PSM, furthermore; it states that PSM is not static in nature (Chen et al., 2014). Based on the literature, trust has a positive relationship with PSM. Overall, in line with literature on antecedents of PSM, the following hypotheses are proposed:

Hypothesis 2.2: Autonomy, empowerment, goal clarity, intrinsic motivation, job characteristics, transformational leadership, and trust will have a positive effect on PSM.

Hypothesis 2.3: Role ambiguity and red tape will have a negative effect on PSM.

## 2.5 Positive Consequences of PSM

PSM is a central construct that has an impact on a number of consequences (outcomes) and thus receives a fair share of research (Perry & Vandenabeele, 2015). Hence, a number of studies have been undertaken to study the influence of PSM on various outcomes such as performance (Giauque et al. 2013; Schwarz, Newman & Eva, 2020; Qi & Wang, 2018; van Loon, 2017), job satisfaction (Park & Lee, 2020; Kim, 2017), and organizational commitment (Liu & Perry, 2014; Stefurak, Morgan & Johnson, 2020) to name a few. The paragraphs will look at the following consequences of PSM: performance, job satisfaction, organizational commitment, organizational citizenship behavior, knowledge sharing, mission valence, community citizenship behavior, and extra-role behavior in light of recent literature. The intention is to identify different perspectives on the relationship of PSM to its outcomes.

### Job Performance

An important area of study is job performance, as public organizations look for ways to improve efficiency and productivity. Hence, public administrators and scholars have focused their research on how PSM in public service organizations can be used to improve performance (Brewer & Seldon, 2000; Stefurak et al., 2020). PSM is said to play a crucial role in public service organizations (Perry & Wise, 1990; Vandenabeele, 2009). Performance can be explained simply as the ability of an individual to contribute to accomplishing an organization's public mission (van Loon, 2017). Performance is seen differently by various stakeholders in

the public service; hence, researchers put forward a multidimensional view on performance (van Loon, 2017). Performance is (1) outputs of an organization inclusive of quality and quantity, (2) service outcomes and efficiency; these include impact, equity and value, (3) responsive, provides satisfaction to user, and citizen, (4) democratic outcome which encompasses being fair, allowing for participation and holding one accountable (Boyne, year as cited in van Loon, 2017, page). Accordingly, it is complex and difficult to measure performance. However, objective and subjective methods are commonly used (van Loon, 2017). Objective performance is rated externally, while subjective performance, on the other hand, is when a person rates him/herself or when a leader or another individual rates the person (Nielsen, Nielsen, Ogbonnaya, Sarri & Isaksson, 2017). The following paragraphs intend to unravel the relationship between PSM and performance, look at the different perspectives the literature has so far, and bring a consensus to the differing perspectives.

The importance and relevance of PSM are accentuated as several of studies have highlighted its positive association to performance in public service (Bellé, 2012; Miao et al., 2018; Perry & Wise, 1990) and said to be higher in public service (Huston, 2000; Perry & Wise, 1990). A number of studies have shown PSM's positive relationship to performance, such as Bellé (2013), Cheng (2015), Perry and Wise (1990), Qi and Wang (2018), Ritz (2009), and van Loon, Kjeldsen, Andersen, Vandenabeele, and Leisink (2018). Petrovsky and Ritz (2014) undertook a systematic literature review of 16 studies that tested the relationship between PSM and performance. Interestingly, their findings showed that all the studies had at least one positive PSM-performance result; however, no single study supported a negative finding (Petrovsky and Ritz, 2014). In the same vein, research conducted in Italy of a sample of 617 teachers from public schools explored PSM's influence on performance (Palma, Hinna & Mangia, 2017). Their findings revealed that PSM has a positive relationship with performance (Palma et al., 2017). Furthermore, a study by van Loon et al. (2018) found positive correlation between PSM and organizational performance. In a more recent study, the use of structural equation modeling on a sample of 711 public servants from China found PSM had a positive and direct impact on organizational performance (Qi & Wang, 2018). Similarly, Gross et al. (2019), in their study of 413 German public service employees, found direct positive relationship between PSM and performance. Accordingly, studies argue that employees in the public service with higher PSM work harder, deliver higher performance, solely for the reason that they find it intrinsically rewarding to serve the needs of others (Mostafa & Leon-Cazares, 2016; Wright & Pandey, 2008).

On the other hand, there are some studies that show there is no relationship between PSM and performance; for example, Alonso and Lewis's (2001) study indicated that the relationship between PSM and performance was insignificant. In their second part of the study, Petrovsky and Ritz (2014) had accounted for common method bias (observed in self-reported measures) and found no significant relationship between PSM and performance and therefore, concluded that there is limited knowledge on the positive relationship between PSM and performance. Consequently, the authors go on to state that those studies that have identified a positive relationship would most likely be due to common-method bias (Petrovsky & Ritz, 2014). Another study that set out to determine the link between PSM and organization performance, using a survey method in Mexico, found no direct link between the two variables. (Mostafa & Leon-Cazares, 2016). A central aspect identified from studies is that the results were inconclusive, often between PSM and performance (Perry & Hondeghem, 2009; Zhu & Wu, 2016).

According to Bellé (2012), most of the research that shows the link between PSM and performance have studies that are not experimental but observational, thus fall short on internal validity. Perry and Vandenabeele (2008) argue that several studies employ cross-sectional designs with researchers assuming PSM is linked to outcomes directly, thus limiting the understanding of the theory. Furthermore, most of the studies concentrated on developed countries (Ritz, 2009; Zhu & Wu, 2016). Therefore, country differences can have an impact on the relationship between PSM and performance. They go on to say that it is quite early to draw conclusions about the positive relationship between PSM and performance (Petrovsky & Ritz, 2014). While the above mixed findings give rise to invest time in further studies and analysis on the relationship between PSM and performance, however, from literature there are more studies that support the positive influence of PSM on performance.

## Job Satisfaction

Job satisfaction is one of the most studied variables in the literature on public management (Cantarelli et al., 2016; Hsieh, 2018). Thus, identifying the impact of PSM on job satisfaction becomes just as important. Several studies have been undertaken to explore the relationship between PSM and job satisfaction and are treated as a significant consequence of PSM (Wright & Pandey, 2008; Kjeldsen & Hansen, 2018). Job satisfaction is defined as "an overall evaluation of the favorability of one's job" (Spector as cited in Harari et al., 2017, p. 72). Job

satisfaction is said to have a positive feeling experienced by an employee after his/her performance appraisal (Locke as cited in Gan, Lin & Wang, 2020). Early studies were few on PSM and job satisfaction relationship. One early study was undertaken by Naff and Crum (1999), then in 2000, quite a bit of work is seen such as Liu et al. 2008, Pan and Zhu (2010), and Taylor (2007). Recently there is more interest in the relationship, for example, Breaugh et al. (2018), Campbell and Im (2016), Liu et al. (2015), and Zheng et al. (2020). In recent years researchers are questioning if the relationship between PSM and job satisfaction is really positive, is there a chance of a negative impact. Hence, the following paragraphs will try to bring together the different views from the literature on the relationship and see the potential of investigating a negative association.

A number of studies have found a positive relationship between PSM and job satisfaction (Andersen & Kjeldsen, 2013; Kjeldsen & Hansen, 2018; Liu et al., 2015; Naff & Crum, 1999, Stazyk, 2012; Park & Rainey, 2008). For example, a study by Taylor (2008) of 2274 employees, their findings shows a direct and significant relationship between PSM and job satisfaction. Meaning those employees with higher PSM levels were more satisfied compared to those employees who showed lower levels. The positive relationship between the two variables is further emphasized by a meta-analysis consisting of 28 different primary studies by Homberg, McCarthy, and Tabvuma (2015), who looked at the effect of PSM on job satisfaction. Consequently, their study found a positive direct relationship between PSM and job satisfaction (Homberg et al., 2015).

While there are studies that have shown a strong relationship between PSM and job satisfaction, for example, a study by Kim (2005) and another study by Christensen and Pandey (2013), on the other hand, the overall aggregate effect was more negligible (Homberg et al., 2015). On the other hand, a study by Wright and Pandey (2008) looked at the PSM and job satisfaction relationship. Their study conducted in the United States consisted of 206 managerial and professional public service employees from the local and state governments (Wright & Pandey, 2008). Their results showed there was no direct relationship between PSM and job satisfaction (Wright & Pandey, 2008). In the same vein, a much later study still did not find a direct association between PSM and job satisfaction (Wright & Pandey, 2011). Similarly, a much recent study by Park (2020) where an online survey of 491 public employees from the Korean central government was undertaken to determine the effects of PSM on job satisfaction. Surprisingly, his study did not find any direct association between PSM and job satisfaction (Park, 2020).

The PSM and job satisfaction relationship can be enhanced when serving the public becomes part of an employee's daily work (Homberg et al., 2015). Consequently, there were studies that reported otherwise on the PSM-job satisfaction's positive relationship (Park, 2020; Wright & Pandey, 2008). Homberg et al. (2015) attributed the above mixed findings to the national context, that is, country effects may contribute to the difference in results. Despite the mixed findings on the PSM and job satisfaction relationship, there are more studies that have found the a positive association between the two variables.

### Organizational commitment

Due to the lack of financial resources to accommodate rewards and incentives, public administrators' focus has turned to non-financial means to motivate public employees, and one such variable is organizational commitment. Organizational commitment has been an area of interest for many researchers over the years, and one reason is its role in motivating public service employees (Casting, 2006; Park, 2020). Organizational commitment, put simply, is an individual's effort to be involved and also be identified with an organization, and this is seen when he/she puts in effort for the organization (Mowday & Steers & Porter, 1979). Hence, organizational commitment is defined as "a psychological state that (a) has implications for the decision to continue or discontinue membership in the organization" (Meyer, Allen & Smith, 1993, p.539). Furthermore, when public service employees exhibit higher organizational commitment, it can lead to employees committing more work even in cases when resources are limited (Crewson, 1997). That is, PSM has a positive effect on organizational commitment (Caillier, 2016). Numerous studies have shown the positive association between PSM and organizational commitment (Camilleri, 2006; Castaing, 2006; Giauque et al., 2013; Moynihan & Pandey, 2007; Naff & Crum, 1999; Perry & Wise, 1990; Vandenabeele, 2009). For example, a study of 2274 employees in Australia showed a direct and significant relationship between PSM and organizational commitment (Taylor 2008). Also, a field study of 196 public service employees in Thailand was undertaken to see if PSM leads to higher organizational commitment (Potipiroon & Ford, 2017). The authors found that PSM had a significant positive effect on organizational commitment (Potipiroon & Ford, 2017). Similarly, Yudiatmja's (2019) study in Indonesia found a positive association with organizational commitment. In the same vein, a recent study of 491 public employees from Korea was surveyed (Park 2020). The study found a positive association between PSM and organizational commitment (Park, 2020).

Accordingly, Meyer and Allen (1991) came up with three dimensions of organizational commitment, namely: affective commitment, continuance commitment, and normative commitment. The first dimension, affective commitment, deals with the emotional attachment an employee has to the organization, the identification of an employee to the organization, and how involved he/she feels with the organization (Camilleri, 2006). In an earlier study, the affective commitment was found to be positively related to PSM (Perry & Wise, 1990). Furthermore, in Camilleri's (2006) work, the study found PSM an important antecedent of affective commitment. Similarly, Casting's (2006) study also found PSM to be positively related to affective commitment. In the same vein, a study in South Korea which surveyed 5012 public service employees found that PSM was positively related to affective commitment (Kim, Henderson, and Eom, 2015). However, Liu and Zhang (2019) found PSM and affective commitment relationship to be insignificant in their study. Still, Gamassou's (2015) study did not find any support for PSM and organizational commitment relationship.

The second dimension, the continuance commitment, is the cost the employee feels he/she will incur if he/she leaves the organization (Camilleri, 2006). Liu and Zhang (2019) PSM showed a positive relationship with continuous commitment in their research. The third dimension, normative commitment, on the other hand, is the compulsion to stay in the organization (Camilleri, 2006). Liu and Zhang (2019) found PSM showed a positive relationship with normative commitment in their study. An empirical study undertaken in France based on a sample size of 754 public service employees found that PSM to be strongly related to normative commitment (Castaing & Roussel, 2006 as cited in Gamassou, 2015). Both theory and empirical studies suggest that PSM has a positive relationship with organizational commitment and its three dimensions; however, the strength of the association may vary.

### Organizational citizenship behavior

Organizational citizenship behavior (OCB) is another important area of study, as it is linked to PSM and impacts an organization's overall productivity. There are a number of studies that have looked at the PSM to OCB relationship in the public sector (Bottomley, Mostafa, Gould-Williams & León-Cázares, 2016; Christensen & Whiting, 2009; Igrams, 2020; Kim, 2006). OCB includes those actions and behaviors of public service employees that are not part of their job but focuses on the extra initiatives undertaken that are good for the organization (Harari et al., 2017). In other words, these actions of employees are discretionary behaviors and can

range from actions such as volunteering services that are not part of one's job description or helping newcomers settle into the organization. Alotaibi describes OCB as an extra-role behavior (2001). In their seminal article, Perry and Wise (1990) argue that public service employees with high PSM will resort to help their communities, sacrificing their own interests in the process. Hence, a study using structural modeling studied the relationship between PSM and OCB in the Korean public service context (Kim, 2006). The study surveyed 1739 public employees from the central and local governments and concluded that PSM has a positive relationship with OCB (Kim, 2006). According to Jin, McDonald, and Park (2018), OCB is beneficial to co-workers and the organization, although it is not mandatory behavior. On the other hand, the authors state that a lack of OCB's is not a reason for punishment either (Jin et al., 2018). Researchers distinguish between two types of OCB's, namely, citizenship behaviors undertaken for the benefit of the organization (OCBO) and those that will benefit one's co-workers (OCBI) (Bottomley et al., 2016).

Accordingly, the literature identifies OCBI as actions of employees that directly benefit individuals within the organization and thus leads to benefiting the organization indirectly (Williams & Anderson, 1991). Tasks that are beyond an employee's job description, such as assisting other employees in their work or volunteering to show new employees around (Kim, 2005). Some academics argue that OCBI encourages higher productivity as well as promotes cohesiveness and employee morale (Podsakoff P.M., MacKenzie, Lee, & Podsakoff N.P., 2003). There are a number of studies that have looked at the relationship between PSM and OCBI (Bottomley et al., 2016; Gould-William et al., 2013; Pandey et al., 2008). For example, a study in the United States where 173 respondents were surveyed found a positive relationship between PSM and OCBI. Another study on a 671 sample of Egyptian public service employees found a direct positive relationship between PSM and OCBI (Gould-Williams, Mostafa & Bottomley, 2013). Similarly, a study that surveyed 1016 Mexican public service employees found a clear association between PSM and OCBI (Bottomley et al., 2016).

In addition, OCBO is defined as employees' actions that can directly positively impact the organization as a whole (Williams & Anderson, 1991). Hence, organizations depend on an employee's selfless actions that can directly have a positive impact on the proper functioning of the organization (Ingrams, 2020). Some examples of tasks public service employees may involve in is beyond their job description, such as maintaining a positive work environment (Kim, 2006). Hence, a survey in Egypt in the health and higher education sectors found a positive relationship between PSM and OCBO (Gould-Williams et al., 2013). In another study



in Mexico, a survey of 1016 public service employees revealed a positive relationship between PSM and OCBO (Bottomley et al., 2016). Academics theorize that public service employees who experience high PSM will be willing to assist their communities at the cost of their personal gains (Perry & Wise, 1990).

### Community citizenship behavior

An important outcome linked to PSM is community citizenship behavior (CCB), as it deals with employee actions beyond his/her job description. (Accordingly, CCB has been linked to a significant outcome identified earlier, OCB (Farh, Zhong & Organ, 2004). CCB is seen as positive actions of employees of public service organizations to communities existing outside their organization (Easterly & Miesing, 2009). Clearly, it can be seen that PSM and CCB share similar origins; that is, both are prosocial behavior and altruistic in nature (Liu & Perry, 2014; Liu, Zhang, Du & Hu, 2015). Hence, studies show that PSM has a direct positive impact on CCB (Liu et al., 2015). While PSM to CCB relationship is important, however, there are not many studies undertaken in the area. One of the studies that addressed the association between the two variables was, for example, a study of 241 public employees in China that was surveyed at two different times to investigate the relationship between PSM and CCB (Liu & Perry, 2014). The study found a significant positive association between PSM and CCB (Liu & Perry, 2014). In the same vein, another study administered a survey to 414 police officers and found a direct positive association between PSM and CCB (Liu et al., 2015). Evidence shows that employees that show higher levels of PSM would be expected to involve in discretionary activities.

### Knowledge sharing

Another important consequence of PSM has been through the study of knowledge sharing. Knowledge sharing is an important factor in public service (Kim & Lee, 2006). Organizational knowledge, according to Grant (1996), is a valuable competitive advantage for any organization. Knowledge is a combination of expert understanding and experiences that assists in analyzing new information and experience (Davenport & Prusak, 1998 as cited in Kim, 2018). Knowledge sharing, therefore, is defined as “individuals sharing organizationally relevant information, ideas suggestions, and expertise with one another” (Bartol & Srivastava, 2002, p.65). Furthermore, knowledge sharing is considered a voluntary action (Chen & Hsieh,

2015). However, employees may not be willing to share knowledge if they consider it highly valuable (Davenport & Prusak, as cited in Kim, 2018). Thus, given the importance of knowledge sharing, it is important to investigate factors that enhance knowledge sharing. One such relationship would be with PSM. Hence, a study on mid-level public service managers in Taiwan showed strong support for PSM to predict knowledge sharing (Chen & Hsieh, 2015). Another study undertaken in Korea has also shown a positive relationship between PSM and knowledge sharing (Kim, 2018). Therefore, implications from various studies above are that PSM is positively associated with knowledge sharing, and therefore there is a need to promote PSM.

### Mission valence

A public service organization's mission is an important aspect in driving and guiding its employees' actions and discretionary behavior and, therefore, can be an important consequence of PSM. Consequently, the more public service employees find their organization's mission attractive and worthy to follow, the more motivated the employees will be (Rainey & Steinbauer, 1999). Mission valence can be viewed as how attractive an employee perceives an organization's purpose is (Wright et al., 2012). Hence, it can be easier to link a public service organization's goals of community or societal benefit to an employee's aspirations of serving their community (Rainey & Steinbauer, 1999). It is important to note that employees with high PSM will associate with public organization's mission as it matches with their values (Pandey, Wright & Moynihan, 2008). Therefore, the makeup of the public service workforce naturally should be employees who desire to accomplish their prosocial needs by serving the public's needs (Wright, 2007). While the relationship between PSM and mission valence is important however, according to Wright, Moynihan, and Pandey (2012), it has not received the attention needed.

Literature suggests that aligning public service organization's mission to individual employees is critical (Rainey & Steinbauer, 1999; Wright & Pandey, 2007). There are a number of studies that show a positive relationship between PSM and mission valence. For example, a study of 1895 public service employees from the state personnel agency of the United States was surveyed (Pandey & Wright, 2007). Their study found a positive effect of PSM on mission valence (Pandey & Wright, 2007). Later studies also found a positive relationship between PSM and mission valence, such as Pandey, Wright, and Moynihan (2008), another study by

Stazyk (2010). In addition, work by Wright and Pandey (2011) in the United States confirmed a positive association between PSM and mission valence. A year later, Wright, Moynihan, and Pandey (2012) studied 1322 senior managers of the United States local government to determine the relationship between PSM and mission valence. Their results confirmed previous literature, a positive effect (Wright et al. 2012). More recently, the study by Desmidt and Prinzie (2019) focused on the lower end of the hierarchy of the Belgian social welfare organization. The 585 participant's responses showed PSM to be a significant predictor of mission valence. Thus, in light of various studies, PSM has a higher chance to impact mission valence positively.

Within the public administration literature, there is evidence of PSM's positive effect on a number of outcomes (Pandey et al., 2008; Pandey & Stazyk, 2008). For example, higher PSM levels in public service employees contribute to high performance (Bellé, 2012; Kim, 2008), organizational commitment, and job satisfaction (Stazyk, 2012; Park & Rainey, 2008). Furthermore, there is evidence that higher PSM leads to a positive effect on organizational citizenship behavior (Kim, 2006), mission valence (Desmidt & Prinzie, 2019; Wright & Pandey, 2011), and knowledge sharing (Chen & Hsieh, 2015). Despite the large body of research in the area of PSM's consequences, as identified in the earlier paragraphs, evidence on whether PSM has positive, or negative, or no effect is usually mixed. Therefore, it can be argued that while PSM is seen as a significant predictor of a number of outcomes in public service organizations, however, these associations were not always conclusive (Vandenabeele, 2009). Therefore, with these theoretical underpinnings for the argument that PSM will positively affect its outcomes, this study proposes the following hypothesis:

Hypothesis 2.4: PSM will have a direct positive effect on its consequences.

## 2.6 The adverse outcomes of PSM

A much-debated question in recent studies is whether PSM always leads to positive outcomes, or is there a dark side to PSM (Rayner, Reimers & Chao, 2018; van Loon, Vandenabeele & Leisink, 2015). In the past years' research on PSM has focused mostly on positive outcomes such as job satisfaction, organizational commitment, and individual performance (Kim, 2017; Liu & Perry, 2014; Park, 2020; Stefurak, Morgan & Johnson, 2020). As discussed in the preceding paragraphs, it is quite evident that scholars have linked PSM as an appealing psychological attribute and have tested PSM's association to desirable concepts. For example,

a systematic literature review (Ritz et al., 2016) found that most research identified a positive relationship between PSM and outcomes (job satisfaction, organizational commitment, mission valence, performance, etc.) but lacked studies that tested for the negative or undesirable consequences. Therefore, in the following paragraphs, the intention is to identify and study the different negative outcomes of PSM. In addition, try to see the impact PSM has on each of the adverse outcomes. Finally, see if there is a consensus in the literature on the relationship between PSM and its negative consequences.

It was not until 2012 that researchers ventured into studying the darker side of PSM (Giauque et al., 2012). However, Perry and Wise (1990), in their seminal work, did draw attention to the possibility of negative outcomes. Later, in a systematic literature review, Ritz et al. (2016) raised questions about the possibility of linking PSM to negative consequences. Hence, the question that needs to be asked is there a dark side to PSM. The negative outcomes of PSM have been identified as stress from the job (Giauque, Anderfuhren-Biget & Varone, 2013). Secondly, workers experiencing resigned satisfaction and over-engagement (Quratulain & Khan, 2015). Thirdly, recent studies have looked at absenteeism and presenteeism as the dark side of PSM (Jensen et al., 2019). Fourthly, several studies have looked at burnout (van Loon et al., 2015; Rayner, Reimers & Chao, 2018). Finally, some studies considered turnover intention a negative outcome of PSM (Borst, Kruijen & Lako, 2019). There is some evidence to suggest that detrimental effects can impact public service employees and organizations (Ritz et al., 2016). As seen in earlier paragraphs, one of the reasons is that the altruistic nature of employees with high PSM may induce them to overdo some tasks and services especially those tasks involved with interacting with the public. Therefore, identifying and understanding the negative consequences of PSM is important to study. The following paragraphs will try to bring to light the impact of PSM on the following variables: stress, resigned satisfaction, absenteeism and presenteeism, burnout, and turnover intention.

## Stress

A significant area in which there has been substantial research is the role of PSM on stress. Occupational stress is attracting a lot of attention as it can have a detrimental effect on an individual's health (De Simone, Cicotto, Pinna & Giustiniano, 2016). According to Kalia (2000), stress is often identified either as work-related stress or job-related stress. Stress is defined as "a condition that occurs when an employee realizes that the work demands and pressures of a situation exceed their knowledge or proficiency thereby challenging their ability

to copy” situation that arises from the realization of work pressure (Mansoor et al., as cited in Gould-Williams et al., 2013). Furthermore, stress is seen as having two dimensions: (1) hindrance stress includes those factors that have a negative impact on an individual’s ability to realize their personal aspirations; (2) challenge stress, on the other hand, has a positive impact on an employee and relates factors such as job responsibilities and time pressure (Deng, Sun, Lei & Yang, 2020).

A number of events such as an increase in workload, role conflict, or if an employee feels that he is not adequately compensated for his effort can result in stress. Thus, Giauque et al. (2013) were the first to test the relationship between PSM and stress with 859 Swiss municipal employees. Their study showed a positive and significant relationship between PSM and stress. Another study that looked at the relationship between PSM and stress was undertaken in Egypt in the higher education and health sector consisting of 671 participants (Gould-Williams et al., 2013). Their research showed similar results, although they found a weak positive correlation between PSM and work-related stress (Gould-Williams et al., 2013). One reason for the increase in stress could be attributed to workers placing more demand on themselves as PSM escalates. Similarly, in a recent study, stress was found to be positively related to work engagement and employee performance (Gross et al., 2019). On the contrary, a study found that being engaged and having a sense of purpose instilled in PSM may alleviate work-related stress in the public service (De Simone et al., 2016). This view is supported by Bakker (2015), who states that public servants are highly engaged as they enter public service, and PSM determines how one deals with job demands and resources. Earlier studies stated that PSM might work as a coping instrument (Giauque et al., 2012) or as a buffer (Quratulain & Khan, 2015). However, Gross et al. (2019) found that it was otherwise in their study. On the one hand, individuals with high PSM are said to be highly committed to their organizations; on the other hand, they may suffer from stress if they are not able to achieve organizational or personal goals. This line of analysis portrays PSM’s negative relationship to work outcomes, thus establishes that PSM may not always act as a job resource.

### Resigned satisfaction

Recently studies have focused on the relationship between PSM and resigned satisfaction. Resigned satisfaction is getting much interest now due to its possible negative impact on public service employees. A number of studies show PSM as an antecedent of job satisfaction (Taylor

& Westover, 2011). However, public service workers who encounter work situations that inhabit their professional and personal goals may eventually decrease their expectations from their jobs, are said to be satisfied but resigned (Giauque et al., 2012). Consequently, the authors argue that there is a likely chance of negative consequences of PSM (Giauque et al., 2012). Hence, it can be seen that individuals lower their aspirations. In addition, the individual may exhibit lower levels of expectations and motives, leading to a state of dissatisfaction (Quratulain & Khan, 2015). Similarly, a study undertaken in Pakistan looked at the relationship between PSM and resigned satisfaction. They found that there is some negative correlation between the two variables (Yousaf, Zafar & Ellahi, 2014). Although some articles such as Taylor and Westover (2011) indicate that PSM leads to increases in job satisfaction, however, there are studies that show the possibility of resigned satisfaction.

#### Absenteeism and Presenteeism

Another negative outcome of PSM is absenteeism and presenteeism, although little attention has been paid to either research in the area. Some recent studies on the relationship between PSM, absenteeism, and presenteeism, for example, by Deng, Sun, Lei, and Yang (2019), in their study of Chinese public hospitals, found PSM had a negative association with presenteeism. Similarly, other studies that studied the relationship between PSM, absenteeism, and or presenteeism include Gross et al. (2019) in Germany and a study undertaken by Jensen, Andersen, and Holten (2019), where they studied Danish employees from the public and private sector. When an employee is unable to turn up for work or fulfill their obligation to their employer due to sickness, it is treated as absenteeism (Yang and Liern, 2009). Absenteeism affects both the productivity of the employee as well as the organization. Absenteeism can be an expensive employee behavior an organization accommodates or incurs in the course of running a business. More so for public organizations, as Wright and Pandey (2011) note. On the other hand, presenteeism is when employees opt to come to work despite being unwell and not fit to work (meaning they should be resting at home on sick leave) (Gross, Thaler & Winter, 2019; Johns, 2010). Koumenta (2015) identified two forms of absenteeism: (1) involuntary absence, where the employee is unable to control, and (2) voluntary absence, which is linked to non-commitment and an intention to exit the organization. The author goes on to state that in the case of involuntary absence, the employee is trying to workplace demands and pressures at a practical level (Koumenta 2015).

One of the reasons individuals stay away from the workplace despite being well is to stay away from pressure and stressful work situations (Wright & Pandey, 2011). The author's study reported that PSM impacted mission valence positively, which in turn reduced absenteeism (Wright & Pandey, 2011). Hence, individuals with higher PSM would end up staying away from work more than those with lower levels of PSM. On the other hand, it could be totally the opposite, that individuals with higher PSM would feel obligated to remain at work despite being ill. Jensen et al. (2019) argue that presenteeism may be due to feeling a sense of obligation towards clients and co-workers. Many individuals feel that their skills or knowledge is indispensable and therefore feel a compulsion to turn up for work even when they are sick. Gross et al.'s (2019) findings from their study showed there was no significant impact of PSM on absenteeism while results on presenteeism did not indicate PSM as a determinant. PSM could act on employee's ability to manage their workplace pressures, thus making it important for absenteeism and presenteeism (Jensen et al., 2019). Consequently, their study supported the dark side of PSM as they found in their longitudinal analysis that employees with higher PSM were more likely to report to work in spite of being sick and leading to a higher probability of being absent due to illness (Jensen et al., 2019). While there are few studies that looked at the relationship between PSM and absenteeism, PSM and presenteeism, however, only a handful research has tried to consider the dark side of the relationship and that too with different outcomes. Hence, the need to further study the relationship between these variables.

## Burnout

Furthermore, another area of study that falls under the negative consequences of PSM is burnout. Burnout is defined as an experience an individual goes through whereby he feels mentally, emotionally, and physically drained due to job-related stress (Maslach, Schaufeli, & Leiter, 2001). Burnout construct has three dimensions: (1) emotional exhaustion occurs when individuals lack the energy to contribute productively and feel exhausted from work; (2) depersonalization, a result of exhaustion where individuals find they can no longer relate successfully with work or their clients; and (3) reduced personal accomplishment occurs when individuals start to feel incompetent and lack desire to achieve (Maslach et al., 2001; Lee, 2018). It is argued that emotional exhaustion can be attributed to a lot of interaction with clients that, at times, can be very exhausting, which can result in burnout. This experience of burnout is seen clearly in public service employees (Lee, 2018). Furthermore, a lot of employees in the

public service have a customer service role, thus, more prevalent with public service employees as they try to serve their client's needs. Bakker (2015) states that high job demands alongside low job resources can lead to an employee's low psychological resources, consequently leading to lower PSM. As a result of low PSM, one can experience burnout (Bakker, 2015).

While it is important to have a satisfied workforce, it is just as important that they are also healthy to be productive in their organizations. Recent studies indicate a possibility of negative outcomes of PSM on burnout. (Giauque et al., 2012). For example, the authors argue that as employees find lots of opportunities to contribute to work, consequently, a higher PSM probably will result in the person overcommitting both resources and capabilities and finally will result in experiencing burnout (van Loon et al., 2015). On the same note, they found that employees who directly worked with their clients (people processing) whilst were highly motivated experienced frustration and burnout when they felt they did not contribute to society (van Loon et al., 2015). In light of these findings, van Loon et al. (2015) question if PSM really causes positive outcomes. Accordingly, Maslach et al. (2001) argue that interventions to counter burnout have been centered on the employee (e.g., removing the individual from the role or providing training and education to the employee to cope) rather than correcting the organizational environment. Hence, there is a need to address both the individual as well as the organizational settings to be able to counter burnout. Finally, Rayner, Reimers, and Chao (2018), in their study of the Australian public service, found quite contradictory results where PSM is neither related to job satisfaction nor to burnout. According to Ritz et al. (2016), studies on PSM are not fully exhausted yet. Similar sentiments are expressed in various studies (Belle, 2013; Bozeman & Su, 2015; Charbonneau & Van Ryzin, 2017). Although it is not nearly as conclusive as other negative outcomes, mainly because some studies found a positive relationship between PSM and burnout and others found none, it can be seen that PSM will have a negative effect on burnout because there is greater evidence to suggest that this relationship will be present.

### Turnover intention

Finally, there is a need to look at the effects of turnover intention in the study of PSM. A major issue faced by organizations is when talented employees decide to leave, which consequently adds to the cost of replacing these workers. The public service is no exception to this phenomenon. While turnover intention has a negative association, it is seen as a passive



attitude (Borst, Kruyen & Lako, 2019). As a number of studies have shown that job satisfaction leads to lower levels of turnover intention, hence, becomes imperative to identify how to keep employees satisfied. Therefore, the turnover intention is defined as the probability that an employee of the organization may leave within a specific time period (Caillier, 2015). Literature shows there are three types of turnover: voluntary (when employees decide to leave the organization for various reasons); involuntary (when employees are terminated or laid off by the organization); and retirement (when an employee meets the retirement requirements) (Caillier, 2011). On the same note, it is important to state that turnover intentions differ from actual turnover. Also, turnover figures would probably be lower than turnover intention. Therefore, even more, the reason for organizations to assess their turnover intentions to be able to rectify any issues that may be contributing to their high-performing employees moving on.

Researchers have attempted to study the relationship between PSM and turnover intention to understand it better in various ways; for example, surveys in South Korea using 480 respondents (Campbell & Im, 2016) and 203 respondents (Kim, 2018) concluded that PSM had a negative relationship with turnover intention. Furthermore, a study in the Egyptian public health and education sector surveyed 671 employees revealed PSM impacted turnover intention (Gould-Williams et al., 2013). In another study, a survey of 913 employees of the federal government of the United States tested the relationship between PSM and turnover intention (Caillier, 2015). The research found that PSM had an effect on turnover (Caillier, 2015). Furthermore, an empirical study undertaken in the United States on teachers found that individuals who felt helping others is very important were highly satisfied; similarly, those who got involved in rectifying social inequity would stay on the job longer (Choi & Chung, 2018). The latest research that showed a negative association between PSM and turnover intention was undertaken in China, where 587 public employees were surveyed (Gan, Lin, & Wang, 2020).

Some recent literature has emerged that offers findings of the relationship between PSM and turnover intention, termed the dark side of PSM. A number of studies identified a positive correlation between PSM and turnover intention (Naff & Crum, 1999). One such study by Callier (2011) found that those individuals with high levels of PSM had higher chances of leaving the organization in comparison to those with lower levels of PSM. Similarly, a study undertaken in Pakistan found that the relationship between PSM and turnover intention was positive due to the indirect impact of red tape via resigned satisfaction (Quratulain & Khan, 2015). A second study was administered in the Netherlands with 9,503 participants; the

research found PSM to be positively correlated to turnover intention (Borst et al., 2019). Hence, a second study that also supports the finding of a positive association. These studies bring to light the complex relationship between PSM and turnover intention. However, research into the relationship between PSM and turnover intention is mixed, building on the need to investigate the relationship further.

On the other hand, studies found PSM did not influence turnover intention directly (Kim & Lee, 2007; Bright, 2008). A longitudinal study by Gamassou (2015) found that there was no support for the relationship between PSM and turnover intention. The reasons for the conflicting results can be attributed to the sample population as Naff and Crum (1999) studied federal government employees, while Cailler (2011) resorted to a sample that constituted local and state government employees. Overall, from the literature, it can be seen that there are more studies that support the negative relationship between PSM and turnover intention. Hence, in line with the literature, the adverse outcomes of PSM are predicted to have a negative relationship with PSM.

Hypothesis 2.5: PSM will have a negative impact on the adverse outcomes.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Overview of chapter**

What follows is an account of the methodology, methods, and analysis used in completing this study. Hence, this chapter provides an outline of the philosophical assumption and research paradigm considered in this study. The chapter begins with the researcher's choice of a philosophical position, then moves to elaborate on the research methodology utilized in the study. This part of the chapter provides an outline of the research method employed, as well as the justification for the research procedures employed. The chapter then provides justification for the choices made in the data collection, such as inclusion and exclusion criteria employed, and finally concludes with how the data were analyzed.

#### **3.2 Philosophical background**

In a given research, it is important to understand the theoretical foundations of the research and the philosophical stance taken by the researcher. Stating one's research paradigm is an important task in research as they indicate a researcher's philosophical assumptions alongside the logic of inquiry (Blaikie & Priest, 2017). A research paradigm is determined by its ontological position and its epistemological assumptions. For example, one study states that a research paradigm deals with how we obtain knowledge from the world (Grant & Giddings, 2002). Grant and Giddings (2002, pg. 11) brings about four research paradigms: "the positivist, interpretivist, radical and post-structural paradigms". Thus, it is paramount for the researcher to clearly state the study's ontological position as this provides the readers an opportunity to understand the researcher's perception of reality and how this is evaluated (Wahyuni, 2012). From an ontological position, objective reality exists outside or independent of human perception. According to Grant and Giddings (2002), ontology is about the kind of human being one is and how one sees the nature of reality. Epistemological assumption shows how to obtain, comprehend and use the knowledge that is considered acceptable and valid (Wahyuni, 2012).

In this study, the researcher accepts that knowledge in relation to social reality is independent and external of social actors. That is an objectivist stance. Therefore, in this study, the

researcher undertakes an outsider approach; thus, social reality is external and objective. Furthermore, the researcher's intention is to study a phenomenon without being directly involved; thus, will not influence or be influenced by it. A positivist approach focuses on being objective, systematic and undertakes a detailed observation (Grant & Gidding, 2002). Furthermore, as a positivist advocate, truth is consistent and unchanging in nature and what is known is testable. An important aspect of the study will be to use a number of strategies to avoid influence on outcomes of values and biases (Slevitch, 2011).

Hence, based on this ontological and epistemological position, this study chooses to use a positivist approach. The researcher applies the lens of natural science to social science and maintains an objective outlook on social reality; therefore, taking an outsider approach so that there is a separation of the research from the researcher (Wahyuni, 2012). By taking the position of a positivist, the researcher acknowledges that a detailed protocol of each step from the initial point of developing the hypotheses to the final stage of data analysis will need to be followed and documented (Wahyuni, 2012).

### 3.3 Methodology

Methodology, as one study defines, is the route or path one needs to follow in order to conduct research or study a phenomenon (Jonker & Pennink, 2010). Through the methodology section, the researcher stands to present to the reader relevant information in relation to how the study was conducted (Egbert & Sanden, 2015). Therefore, it is necessary for a researcher first thoroughly to understand methodology prior to commencing the study. Furthermore, the research methodology showcases how research is conducted within the research paradigm (Wahyuni, 2012). The understanding is that anyone else attempting to undertake the same research can replicate the steps. Therefore, a research design or a research methodology presumes that there is a logical pattern the researcher followed in order to arrive at a certain predetermined outcome. Thus, documenting each step is of utmost importance to the researcher. Consequently, a methodology determines methods, that is, procedures or techniques used in the study (Slevitch, 2011). In addition, correlational studies intend to establish relationships between variables and lead to theoretical understanding (Grant & Giddings, 2002).

Historically, the accumulation of knowledge and synthesis of findings was undertaken via narrative review, whereby the researcher would obtain information on a phenomenon, examine

several studies on similarities and differences, and arrive at a conclusion (Cheung & Vijayakumar, 2016). However, narrative reviews do not have access to a systematic instrument to integrate findings from multiple studies (Cheung & Vijayakumar, 2016). In addition, narrative review involves drawing conclusions from a set of studies that are arranged according to themes (Ritz et al., 2016). Furthermore, as stated by Cheung and Vijayakumar (2016, pp. 122), "...narrative reviews do not adequately correct for sample characteristics or design features in any explicit fashion". An important point highlighted by Homberg et al. (2015) is that PSM research has mostly been quantitative in nature. Furthermore, biological and physical sciences usually give way to straightforward research problem generation; use of common standardized methods and techniques, leading to straightforward answers (Wolf, 1996). On the other hand, the social and behavioral sciences are complex as it is more difficult to examine the nature of human behavior due to differences in definitions and methods and differences in sample leading to differing conclusions (Wolf, 1996). Hence, the use of a meta-analysis proposes to address some of the challenges noted above, such as due to differing answers furnished from different studies to one common research question (Rosenthal & DeMitto, 2001).

Scholars believe that meta-analysis was introduced to encounter the limitations of narrative review (Cheung & Vijayakumar, 2016; Cooper & Rosenthal, 1980). The term 'meta-analysis' is defined as the process of collecting data; however, over time, it has included statistical analysis and a combination of tools (Gerrish, 2015; Ritz et al., 2016). Cantarelli, Belardinelli, and Belle (2016) argue that meta-analysis is well placed for knowledge accumulation and easier to replicate. Therefore, making it even more important to synthesis the empirical results through meta-analysis methodology. Meta-analysis furnishes a more accurate and credible conclusion than compared to a primary study on its own (Rosenthal & DeMitto, 2001). In addition, accumulating a sufficient number of related studies would furnish a higher statistical power (Liu 2013). That is, the methodology of a meta-analysis outlines a strict and thorough search and analysis of published and unpublished (in some cases) articles rather than relying on one study or a narrative study (Rosenthal & DeMitto, 2001). It is well established now from a number of studies that meta-analysis is fast becoming a key instrument of choice in conducting exhaustive reviews in social sciences (Aguinis et al., 2011; Cantarelli et al., 2016; Cheung & Vijayakumar, 2016).

On the other hand, a line of argument suggests that meta-analysis accumulates different studies with different designs, measures, research objectives, and samples, better known as the "apples

and oranges” problem (Cheung & Vijayakumar, 2016). Notwithstanding, analyzing findings from multiple research designs, measures and samples is in its own right a strength (Schmidt & Hunter, 2015). Just as all published studies face biases, so to meta-analysis faces publication biases, which may, to some extent, affect the validity (Cheung and Vijayakumar, 2016). However, meta-analysis is particularly useful in explaining any inconsistencies in studies by combining results from a number of studies (Rosenthal & DiMatteo, 2001). Consequently, meta-analysis is becoming not only the preferred methodological tool in management studies and other similar fields but one of the most influential (Aguinis, Dalton, Bosco, Pierce & Dalton, 2011). The need to integrate findings is becoming more pronounced in research as the number of studies in a field expands, therefore, making meta-analysis the preferred method (Aytug, Rothstein, Zhou & Kern, 2012; Cantarelli, Belardinelli & Belle, 2016; Cheung & Vijayakumar, 2016; Harari et al., 2017; Pindek, Kessler & Spector, 2017).

Therefore, in this study, the researcher conducts a meta-analysis. The intention is to learn from prior researcher’s work in the past two decades on public service motivation. The objective of a meta-analysis is to compare the effect size and statistical significance of each study in the review (Cheung & Vijayakumar, 2016). One of the benefits of using a meta-analysis in a study is that it furnishes a pooled outcome alongside increased accuracy (Cleophas & Zwinderman, 2017). When correlations or patterns have been identified, further study can be used to broaden knowledge and implement practices in the field of PSM (Harari et al., 2017; Wright & Grant, 2010). Thus, the study intends to firstly identify the antecedents (such as red tape, job demand, and colleague support) and their effect on PSM. This is followed by identifying PSM’s outcomes (e.g., job satisfaction, organizational commitment, turnover intention, and resigned satisfaction) and the magnitude of these relationships.

### 3.4 Method

As mentioned in an earlier paragraph, methods are derived from methodology and specifically show the steps utilized for data collection. Therefore, the methods section lays down the tools for obtaining and analyzing data in research (Jonker & Pennink, 2010). Three basic principles are followed in this study: clear, accurate, and simple data collection and analysis in the meta-analysis (Rosenthal & DeMatteo, 2001). The authors go on to say that a simple meta-analysis will most likely lead to accuracy (Rosenthal & DeMatteo, 2001). Hence, this section plays an important role as it lays out the research process in detail.

### 3.4.1 Search strategies

According to Cheung and Vijayakumar (2016), when conducting a literature search, there is a need to be very comprehensive as well as ensure each step is documented, enabling other researchers to replicate. They go on to suggest that in order to reduce bias there is a need to include a number of databases (Cheung & Vijayakumar, 2016). A virtue of the systematic review, as cited by a number of researchers, is that when other individuals follow the same systematic method of collecting data, they too will end up with the same outcomes (Aguinis et al., 2011; Aytug et al., 2012). Hence, according to Aguinis et al. (2011), a systematic review is the way to go in order to undertake a meta-analysis.

For this study, a number of techniques were used to obtain empirical studies that focused on examining antecedents of PSM, consequences of PSM, or both antecedents and consequences of PSM. First, a systematic and comprehensive search was undertaken in the following databases: Business Source Complete (EBSCO), Emerald, IEEE Xplore, JSTOR, ProQuest, ProQuest Dissertations & Theses Global, SpringerLink, Taylor & Francis Online, Google Scholar, Wiley Online Library, AUT online Theses, and Dissertations. The key terms used in this search were “public sector motivation,” “public service motivation,” “public service,” “PSM,” “meta-analysis,” “quantitative analysis,” and “employee motivation in the public sector/service.” Second, from the above-searched articles, further searches were conducted by sourcing from an article’s reference list and locating those that relate to the study. Of particular importance was the previous meta-analysis conducted on the same or related area. Third, the search was made of conference papers and proceedings to identify unpublished articles. Fourth, the researcher emailed various frequent authors to PSM literature for unpublished and in-press work. The email addresses of various authors such as Claire Edey Gamassou, Ahmed Mohammed Sayed Mostafa, and Nina Mari van Loon were sought from their earlier publications, and a request for unpublished and working papers was sent to each. A number of the authors responded positively, and some even recommended and forwarded the other research work that they felt may interest this study. Fifth, the supervisors also recommended a few articles to consider. Finally, assistance from the librarian liaison officer was sourced in locating articles from the database. There were times when certain titles (articles) came up in the search, but the author could not either open the file or access the sites. During these times, the librarian liaison officer would provide the link or access, making it possible to download the article. The search for the primary studies began in October 2017 to August 2020 and looked at all years of publication. The search furnished articles from as early as 1997 and the

latest one being 2020. The initial search yielded 487 articles that included empirical and conceptual publications, books as well as chapters from books, conference papers, dissertations and unpublished work on PSM.

The study investigated each article in detail and completed a table reporting the following information: (a) Author, year of publication, PSM scale used in the study, and country the study was undertaken (b) variables included in the bivariate relationship replicated as in the original study. Based on the research question, one of the following variables was used: public service motivation, civil service motivation, public sector motivation, and employee motivation in the public service. (c) information indicating the sample size, (d) correlation between public service motivation and one other variable or factor, (e) hypotheses tested only on the public-sector employees. Next, the researcher used the following inclusion and exclusion criteria to finalize the selection of articles for the study.

#### 3.4.2 Inclusion/exclusion criteria

As stated in earlier paragraphs, meta-analysis has the ability to amalgamate multiple results in an area of study. However, if the process of meta-analysis is not followed strictly and correctly, it may eventually lead to misrepresenting research findings in the area of study (Swift & Wampold, 2018). Therefore, the authors argue that a study's inclusion and exclusion criteria will have the greatest impact on the quality of results presented in a meta-analysis (Swift & Wampold, 2018). The following paragraphs explain in detail the strategies used in selecting studies to be included in the meta-analysis and the reasons for the choices.

First, while it is noted that there are a number of databases such as Scopus and Web of Science that researchers use to locate published studies, a question one may ask is whether to include unpublished studies in their meta-analysis. When looking at the inclusion and exclusion criteria, a study by Rothstein and Bushman (2012) states that there is a higher chance of getting one's research accepted for publication if the study reports significant results rather than nonsignificant results; better known as publication bias. Unpublished articles, also termed grey literature includes such work as dissertations and conference papers that do not undergo thorough scrutiny by an editorial team (Nielsen et al., 2017). On the other hand, Ferguson and Brannick (2012) suggest that the inclusion of published and non-published articles is a method to correct for publication bias. Furthermore, Rothstein and Bushman (2012) propose focus should be on inclusion criteria instead. In cases where unpublished studies may have weak methodologies, it may be a better practice to remove a study instead of excluding all



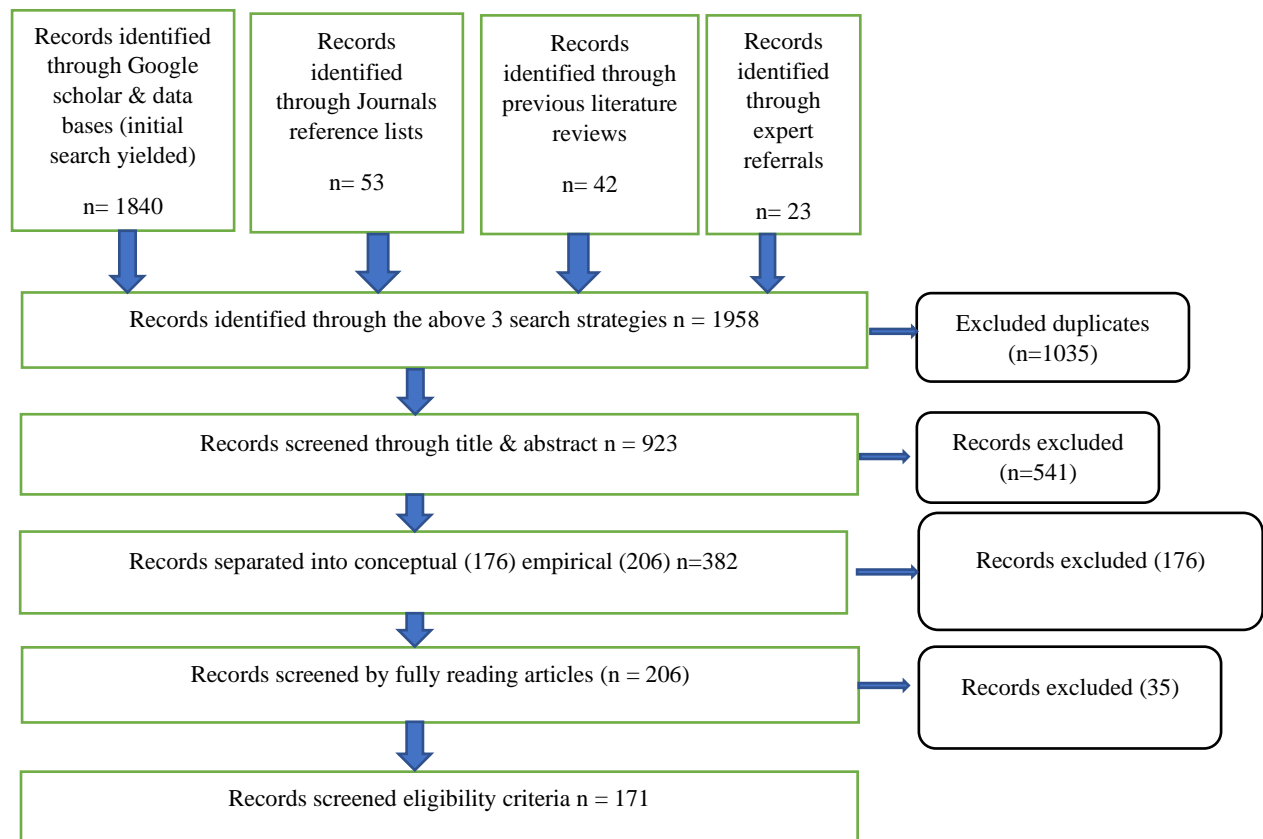
unpublished studies; that is, publication biases ought to be removed whenever possible (Rothstein & Bushman, 2012). For the thesis, the researcher has included both published and unpublished articles in order to remove publication or selection bias. The focus of this study was on selecting studies that were empirical, quantitative, and reported correlation coefficients with PSM. Furthermore, the study needed to either report PSM with its antecedents, or with its outcomes or both. In addition, the study excluded any conceptual papers as these cannot be integrated into a meta-analytical study.

Second, according to Cantarelli et al. (2016), a criterion for selecting an article in a meta-analysis can be from one of the following “means for experimentally treated groups, means of groups divided by any dichotomous comparison, or zero-order bivariate of correlation” (p.120). Hence, for this study, the articles included were only those that reported zero-order bivariate coefficients of correlation between PSM and another variable of interest, specifically an antecedent or an outcome. Hence, those studies that did not report a bivariate correlation with PSM were excluded. Third, the criterion for the selecting of a study was that it must use the PSM measure in their research. In his seminal article Perry (1996) developed a 24-item PSM scale which consisted of four dimensions (public policymaking, commitment to public interest, compassion, and self-sacrifice). However, some researchers have faced difficulties using the original 24-item measurement due to either lengthy questioners or issues with reliability, thus leading to a variation of the PSM scale (Wright et al., 2013). Hence, for this research, all studies that used Perry’s (1996) measurement as their basis were included. This study consequently included those articles that used a variation of the PSM scale; for example, studies by Taylor (2008) used a single construct of PSM, another study by Caillier (2016) used five items from Perry’s (1996) measurement making it an abbreviated version, and finally, a study by Gamassou (2020) employed Kim et al.’s measurement (2012). The different scales were noted in the coding process.

Fourth, according to Hunter and Schmidt (2011), it is very important the right type of reliability estimate is used as it corrects the biases in the data due to measurement error. In the thesis, each study had to report a reliability alpha (Cronbach alpha). In cases where reliability alpha was not reported, the author contacted the primary researchers to obtain the values. However, in situations where there was no response from the authors of primary research, an average was calculated from all the studies coded. Fifth, the study included articles that reported a sample size. In some studies, the primary authors opted to list sample size as a range, an email was sent to the primary authors, and the actual sample sizes were sourced. Finally, when more than

one independent sample was reported, the author coded them separately. Based on these inclusion and exclusion criteria, 171 articles were included in this study (Fig. 2 and Appendix). The next step was to code the different studies.

Figure 2. Data search and collection flowchart



### 3.4.3 Coding process

For each study selected, the author coded the following details and statistics: primary author's name and year of publication, key variables of the study, sample size, correlation coefficients, Cronbach alpha (reliability variable), the country where the study was undertaken, and PSM scale used. In cases where a study reported sub-dimensions and their reliability, the author would first email the primary, authors requesting the reliability. In instances there was no response from primary authors, then the correlation is calculated and reported, for example, is the report it is stated as 'PSM (calc)'. For example, if PSM sub-dimensions are reported: public policymaking, commitment to the public interest, compassion, and self-sacrifice along with relevant reliabilities, then the PSM correlation coefficient is calculated, and the reliability is

averaged across all the studies. The coding responsibility rested with the author. The reliability of the coding was assessed by the two supervisors independently throughout the study variables. Any differences found in the coding were resolved through discussions among the two supervisors and the author. Furthermore, in total, there were 171 samples identified in the study. From these 171 samples, 162 were from published articles, while 9 came from unpublished articles. From the unpublished articles, 3 were from unpublished dissertations and thesis and 6 were from unpublished papers.

#### 3.4.4 Meta-analytical process

Literature provides several approaches to meta-analysis to correlation coefficients, such as one developed by Biostats Inc (Borenstein, Hedges, Higgins & Rothstein, as cited in Nielsen et al. 2017) and one developed by Hunter and Schmidt (2014). Furthermore, according to Hunter and Schmidt (2014), there are a number of computer-based programs that researchers usually favor, such as D-Stat and Comprehensive meta-analysis (CMA). The CMA program is built on Hedges-Olkin work (1985). Hence, this study employed the CMA-based program to run the analysis.

The CMA program works in such a way that it undertakes the meta-analysis as well as publication bias analysis. In the process of performing a meta-analysis, the program creates inverse-variance weighting, a technique that aggregates the identified random variables making it proportional to its sample size, and this eventually reduces the variance of combined effect (Nielsen et al., 2017). Finally, a sensitivity analysis was undertaken using the ‘one-study-removed’ technique (Nielsen et al., 2017). This procedure allows identifying if estimates were impacted by outlier studies. The following chapter will discuss the results derived from the CMA program.

## **CHAPTER 4**

### **RESULTS**

#### **4.1 Introduction**

In this section, the study reports the results of the comprehensive meta-analysis (CMA) on

- (1) the effects of antecedents on PSM and
- (2) the effects of PSM on its consequences.

The results are displayed in Tables with some explanations for better understanding and interpretation. The results are displayed in tables broken down into antecedents and consequences. The antecedent results are further broken down into two parts, table 4.1, which displays sociohistorical and demographical variables, while motivational context is displayed in table 4.2. Next follows the consequences tables, again displayed in two tables: positive consequences in table 4.3 and negative consequences in table 4.4. Thereafter, chapter 5 provides a discussion and conclusion section.

#### **4.2 General results**

Table 4.1 lists down the meta-analytic findings for the bivariate relationships between sociohistorical antecedents and PSM; demographic antecedents and PSM included in the study. The results exhibit 9 different antecedents' relationships with PSM from 320 studies meta-analyzed. The table relates to hypothesis 2.1 proposed in chapter 2. Relationships between each antecedent and PSM are listed based on the absolute value of the average effect size computed using the fixed effects model. This table reports results of age, association, education, gender, hierarchy, income, job tenure, organizational tenure, and job security. The first column lists the independent variables studied, the second column reports the sum of the participants in the samples investigated in the meta-analytical study, the third column shows the average summary effect size.

Table 4.1 Meta-analysis of socio-historical and demographical antecedents of PSM

| Antecedent   | k  | N       | ES    | Z-value | P-value | 95% Confidence Interval |       | Significant Yes/No |
|--------------|----|---------|-------|---------|---------|-------------------------|-------|--------------------|
|              |    |         |       |         |         | Lower                   | Upper |                    |
| Age          | 79 | 133,802 | 0.178 | 65.894  | 0.000   | 0.172                   | 0.183 | Yes                |
| Association  | 5  | 536     | 0.203 | 14.388  | 0.000   | 0.175                   | 0.231 | Yes                |
| Education    | 56 | 177,656 | 0.115 | 48.778  | 0.000   | 0.110                   | 0.119 | Yes                |
| Gender       | 86 | 156,504 | 0.000 | 0.160   | 0.873   | -0.004                  | 0.005 | No                 |
| Hierarchy    | 7  | 23,127  | 0.175 | 26.827  | 0.000   | 0.162                   | 0.187 | Yes                |
| Income       | 19 | 55,384  | 0.209 | 49.852  | 0.000   | 0.201                   | 0.217 | Yes                |
| Job tenure   | 4  | 337     | 0.022 | 2.098   | 0.036   | 0.001                   | 0.043 | Yes                |
| Org tenure   | 60 | 125,013 | 0.043 | 15.325  | 0.000   | 0.038                   | 0.049 | Yes                |
| Job security | 6  | 4,523   | 0.101 | 6.770   | 0.000   | 0.072                   | 0.129 | Yes                |

k – number of samples across studies, N – number of observations in total, ES – Effect size, P-value – probability value

In relation to the antecedent age, overall, across 79 independent studies, there was a pooled sample size of 133,802. The hypothesis predicted that the relationship between age and PSM to be positively correlated. The study found support for the relationship between age and PSM, with a small effect size of 0.178. As the 95% confidence interval range was between 0.17 to 0.18, this finding is consistent with other similar studies showing a significant positive correlation.

Next, the study's results on the relationship between association and PSM showed fewer studies that reported the relationship between association and PSM. Overall, across 5 independent samples, there was a pooled sample size of 536. The study found support for the relationship between association and PSM, with a small effect size of 0.20. As the 95% confidence interval range was between 0.18 to 0.23, this finding is consistent with other similar studies showing a significant positive correlation. The result confirms hypothesis 2.1 of a positive relationship between professional association and PSM.

The next set of main effect predictions were about education and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 56 studies, 177,656 pooled sample sizes, education is positively and slightly correlated with PSM. The study found an effect size of 0.12. Hence, the study shows support for the relationship between education and PSM. As the 95% confidence interval range was between 0.11 to 0.12, this finding is consistent with other similar studies. Thus, the result confirms the hypothesis 2.1 of a positive relationship between education and PSM.

Next, the study's results on the hierarchy and PSM relationship revealed fewer studies that reported the hierarchy and PSM relationship. Overall, across 7 independent samples, there was a pooled sample size of 23,127. The study found support for the relationship between hierarchy and PSM, with a small effect size of 0.18. As the 95% confidence interval range was between 0.16 to 0.19, this finding is showing a significant positive correlation. The result confirms hypothesis 2.1 of a positive relationship between hierarchy and PSM.

In relation to the antecedent income, overall, across 19 independent studies, there was a pooled sample size of 55,384. The hypothesis predicted that the relationship between income and PSM to be positively correlated. The study found support for the relationship between income and PSM, with a small effect size of 0.21. As the 95% confidence interval range was between 0.2 to 0.22, this finding is consistent with other similar studies showing a significant positive correlation. The result confirms hypothesis 2.1 of a positive relationship between income and PSM.

In terms of job tenure, there are fewer studies reported. Overall, across 4 independent studies, there was a pooled sample size of 337. The hypothesis predicted that the relationship between income and PSM to be positively correlated. The study found support for the relationship between job tenure and PSM, with a small effect size of 0.02. As the 95% confidence interval range was between 0.001 to 0.04, this finding showed a significant positive correlation. The result confirms hypothesis 2.1 of a positive relationship between job tenure and PSM.

Another antecedent of PSM studied is organizational tenure. The set of main effect predictions were about organizational tenure and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 60 studies, 125,013 pooled sample size, organizational tenure is positively and slightly correlated with PSM. The study found an effect size of 0.04. Hence, the study shows weak support for the relationship between organizational tenure and PSM. As the 95% confidence interval range was between 0.04 to 0.05, this finding portrayed a positive significant positive correlation. The result confirms hypothesis 2.1 of a positive relationship between organizational tenure and PSM.

The next antecedent under sociohistorical and demographical listing was studied in relation to job security. Job security's relationship with PSM showed that fewer studies were reported. Overall, across 6 independent samples, there was a pooled sample size of 4,523. The study

found support for the relationship between job security and PSM, with a small effect size of 0.10. In terms of a *p*-value of 0.036, it is still lower than 0.05, therefore, it is considered significant. As the 95% confidence interval range was between 0.07 to 0.13, this finding shows a significant positive correlation. The result confirms hypothesis 2.1 of a positive relationship between job security and PSM.

The final antecedent under sociohistorical and demographical listing studied was in relation to gender. Gender's relationship with PSM overall, across 56 independent samples was a pooled sample size of 177,656. The study did not find support for the relationship between gender and PSM, an effect size of 0.00. As the 95% confidence interval range was between -0.004 to 0.005, the *p*-value of 0.873 was statistically not significant. An unexpected result as the hypothesis projected a positive relationship. The result, therefore, rejects hypothesis 2.1 of a positive relationship between gender and PSM.

Table 4.2 presents meta-analytic findings for the antecedents of PSM that fall under the motivational context. Weighted average relationships between antecedents and PSM as estimated with fixed effects model is displayed below. The results exhibit 10 different antecedents' relationships with PSM from 54 studies meta-analyzed. These antecedents fall under motivational and organizational contexts. The table relates to hypotheses 2.2 and 2.3 proposed in chapter 2. Relationships between each antecedent and PSM are listed based on the absolute value of the average effect size computed using the fixed effects model. This table displays the results on autonomy, empowerment, goal clarity, intrinsic reward, job characteristics, job demand, red tape, role ambiguity, transformational leadership, and trust. The first column lists the independent variables studied, and the second column reports the sum of the participants in the samples investigated in the meta-analytical study; the third column shows the average summary effect size

Table 4.2 Meta-analysis of antecedents of PSM

| Antecedent          | k  | N      | ES     | Z-value | P-value | 95% Confidence Interval |        | Significant Yes/No |
|---------------------|----|--------|--------|---------|---------|-------------------------|--------|--------------------|
|                     |    |        |        |         |         | Lower                   | Upper  |                    |
| Autonomy            | 9  | 40,263 | 0.301  | 62.345  | 0.000   | 0.292                   | 0.310  | Yes                |
| Empowerment         | 2  | 7,233  | 0.448  | 40.979  | 0.000   | 0.429                   | 0.466  | Yes                |
| Goal clarity        | 10 | 15,691 | 0.260  | 33.329  | 0.000   | 0.246                   | 0.275  | Yes                |
| Intrinsic reward    | 2  | 16,466 | 0.120  | 15.408  | 0.000   | 0.104                   | 0.135  | Yes                |
| Job characteristics | 3  | 753    | 0.311  | 8.772   | 0.000   | 0.245                   | 0.374  | Yes                |
| Job demands         | 3  | 5,333  | 0.226  | 16.795  | 0.000   | 0.201                   | 0.252  | Yes                |
| Red tape            | 8  | 32,417 | 0.028  | 5.061   | 0.000   | 0.017                   | 0.039  | Yes                |
| Role ambiguity      | 4  | 4,087  | -0.399 | -26.967 | 0.000   | -0.424                  | -0.373 | Yes                |
| Transformational LS | 10 | 17,128 | 0.313  | 42.351  | 0.000   | 0.299                   | 0.326  | Yes                |
| Trust               | 3  | 1,624  | 0.431  | 18.544  | 0.000   | 0.391                   | 0.470  | Yes                |

k – number of samples across studies, N – number of observations in total, ES – Effect size, P-value – probability value

An important antecedent of PSM studied is autonomy. The set of main effect predictions were about autonomy and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 9 studies, 40,263 pooled sample sizes, autonomy is positively and moderately correlated with PSM. The study found an effect size of 0.3. Hence, the study shows moderate support for the relationship between autonomy and PSM. As the 95% confidence interval range was between 0.29 to 0.31, this finding portrayed a significant positive correlation. The result confirms hypothesis 2.2 of a positive relationship between autonomy and PSM.

Another important antecedent of PSM studied is empowerment. The set of main effect predictions were about empowerment and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 2 studies, 7,233 pooled sample sizes, empowerment is positively and strongly correlated with PSM. The study found an effect size of 0.4. Hence, the study shows strong support for the relationship between empowerment and PSM. As the 95% confidence interval range was between 0.42 to 0.47, this finding portrayed a significant positive correlation. The result confirms hypothesis 2.2 of a positive relationship between empowerment and PSM.



Another critical antecedent of PSM studied is goal clarity. The set of main effect predictions were about goal clarity and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 10 studies, 15,691 pooled sample size, goal clarity is positively and weak correlation with PSM. The study found an effect size of 0.26. Hence, the study shows weak support for the relationship between goal clarity and PSM. As the 95% confidence interval range was between 0.24 to 0.28, this finding portrayed a significant positive correlation. The result confirms hypothesis 2.2 of a positive relationship between goal clarity and PSM.

The next vital antecedent of PSM that was studied was intrinsic reward's relationship to PSM. The set of main effect predictions were about intrinsic reward and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 2 studies, 16,466 pooled sample size, the intrinsic reward is positively and weak correlation with PSM. The study found an effect size of 0.12. Hence, the study shows really weak support for the relationship between intrinsic reward and PSM. As the 95% confidence interval range was between 0.10 to 0.14, this finding portrayed a significant positive correlation. The result confirms hypothesis 2.2 of a positive relationship between intrinsic reward and PSM.

Another important antecedent of PSM that was studied next was job characteristics. The set of main effect predictions were about job characteristics and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 3 studies, 753 pooled sample size, job characteristics are positive and moderate correlation with PSM. The study found an effect size of 0.3. Hence, the study shows moderate support for the relationship between job characteristics and PSM. As the 95% confidence interval range was between 0.25 to 0.37, this finding portrayed a significant positive correlation. The result confirms hypothesis 2.2 of a positive relationship between job characteristics and PSM.

Another important antecedent of PSM that was studied was the transformational leadership. The set of main effect predictions were about transformational leadership and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 10 studies, 17,128 pooled sample size, transformational leadership is positively and moderately correlated with PSM. The study found an effect size of 0.3. Hence, the study shows moderate support for the relationship between transformational leadership and PSM. As the 95% confidence interval range was between 0.23 to 0.33, this finding portrayed

a significant positive correlation. The result confirms hypothesis 2.2 of a positive relationship between transformational leadership and PSM.

An important antecedent that was studied in this research was the relationship between PSM and trust. The set of main effect predictions were about trust and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 3 studies, 1,624 pooled sample sizes, trust is positively and strongly correlated with PSM. The study found an effect size of 0.43. Hence, the study shows strong support for the relationship between trust and PSM. As the 95% confidence interval range was between 0.39 to 0.47, this finding portrayed a significant positive correlation. The result confirms hypothesis 2.2 of a positive relationship between trust and PSM.

The next antecedent of PSM that was studied was job demands. The set of main effect predictions were about job demands and PSM's relationship. The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 3 studies, 5,333 pooled sample size, job demands are positive and with weak correlation with PSM. The study found an effect size of 0.23. Hence, the study shows weak support for the relationship between job demands and PSM. As the 95% confidence interval range was between 0.2 to 0.25, this finding portrayed a significant positive correlation, contrary to expectations and hypothesis 2.3. The result does not accept hypothesis 2.3 of a negative relationship between job demands and PSM. Instead, the result shows a positive impact on PSM.

The next antecedent of PSM that was studied was red tape. The set of main effect predictions were about red tape and PSM's relationship. The hypothesis predicted that the relationship would be negatively associated. Hence, in a sample of 8 studies, 32,417 pooled sample size, red tape is positive and very weak correlation with PSM. The study found an effect size of 0.03. Hence, the study shows weak support for the relationship between red tape and PSM. As the 95% confidence interval range was between 0.02 to 0.04, this finding portrayed a significant positive correlation. An unexpected result as the hypothesis projected a negative relationship based on the literature (Kjeldsen & Jacobsen, 2013; Moynihan & Pandey, 2007; Quratulain & Khan, 2015). Therefore, hypothesis 2.3 is rejected, a negative relationship between red tape and PSM.

Table 4.3 presents meta-analytic findings for the positive consequences of PSM proposed in hypothesize 2.4 in chapter 2 (positive consequences of PSM). The results exhibit 12 different outcomes' relationship with PSM from 158 studies meta-analyzed. The table relates to hypothesis 2.4 proposed in chapter 2. Relationships between PSM and each consequence are listed below. Weighted average relationships between PSM and its consequences as estimated with fixed effects model is displayed below.

Table 4.3 Meta-analysis of positive consequences of PSM

| Consequence/ Outcome                       | k  | N       | ES    | Z-value | P-value | 95% Confidence Interval |       | Significant Yes/No |
|--|----|---------|-------|---------|---------|-------------------------|-------|--------------------|
|  |    |         |       |         |         | Lower                   | Upper |                    |
| Affective commitment                       | 14 | 38,769  | 0.439 | 92.803  | 0.000   | 0.431                   | 0.447 | Yes                |
| Continuous commitment                      | 3  | 3,120   | 0.166 | 9.362   | 0.000   | 0.132                   | 0.200 | Yes                |
| Community citizenship behavior             | 6  | 1,726   | 0.639 | 31.288  | 0.000   | 0.610                   | 0.667 | Yes                |
| Employee performance                       | 18 | 64,443  | 0.264 | 69.696  | 0.000   | 0.257                   | 0.271 | Yes                |
| Job satisfaction                           | 62 | 121,883 | 0.247 | 88.020  | 0.000   | 0.242                   | 0.252 | Yes                |
| Knowledge sharing                          | 2  | 1,020   | 0.629 | 23.582  | 0.000   | 0.591                   | 0.665 | Yes                |
| Mission valence                            | 6  | 3,939   | 0.354 | 23.198  | 0.000   | 0.327                   | 0.381 | Yes                |
| Normative commitment                       | 3  | 3,120   | 0.283 | 16.250  | 0.000   | 0.251                   | 0.315 | Yes                |
| Organizational commit                      | 22 | 16,650  | 0.320 | 42.657  | 0.000   | 0.306                   | 0.333 | Yes                |
| Organizational citizenship behavior        | 12 | 12,679  | 0.566 | 72.143  | 0.000   | 0.554                   | 0.578 | Yes                |
| Organizational citizenship behavior (OCBI) | 6  | 5,179   | 0.492 | 33.814  | 0.000   | 0.468                   | 0.515 | Yes                |
| Organizational citizenship behavior (OCBO) | 4  | 2,932   | 0.576 | 35.469  | 0.000   | 0.551                   | 0.600 | Yes                |

k – number of samples across studies, N – number of observations in total, ES – Effect size, P-value – probability value

The study found support for hypothesis 2.4, which predicted a positive relationship between PSM and its outcome affective commitment. In a sample of 14 independent studies and a pooled sample size of 38,769, PSM is positively correlated with affective commitment with a moderate effect size. The study found support for the relationship between PSM and affective commitment, with a moderate effect size of 0.44. As the 95% confidence interval range was between 0.43 to 0.45, this finding shows a significant positive correlation. Therefore, hypothesis 2.4 is accepted.

In relation to continuous commitment, overall, across 3 independent studies, there was a pooled sample size of 3,120. The hypothesis predicted that the relationship between PSM and continuous commitment to be positively correlated. The study found support for the relationship between PSM and continuous commitment, with a small effect size of 0.178. As the 95% confidence interval range was between 0.17 to 0.18, this finding is consistent with other similar studies showing a significant positive correlation. This result supports hypothesis 2.4.

In terms of community citizenship behavior, overall, across the 6 independent studies, there was a pooled sample size of 1,726. Hypothesis 2.4 predicted that the relationship between PSM and community citizenship behavior to be positively correlated. The study found support for the relationship between PSM and community citizenship behavior with a large effect size of 0.64. As the 95% confidence interval range was between 0.61 to 0.67, this finding is consistent with other similar studies showing a significant positive correlation. Therefore, this result is in line with hypothesis 2.4.

Another relationship investigated was PSM and employee performance. Overall, across 18 independent studies, there was a pooled sample size of 64,443. Hypothesis 2.4 predicted that the relationship between PSM and employee performance to be positively correlated. The study found support for the relationship between PSM and employee performance, with a small effect size of 0.26. As the 95% confidence interval range was between 0.26 to 0.27, this finding is consistent with other similar studies showing a significant positive correlation. Hence, hypothesis 2.4 is accepted.

Regarding the relationship between PSM and job satisfaction, overall, across 62 independent studies, there was a pooled sample size of 121,883. The hypothesis predicted that the

relationship between PSM and job satisfaction to be positively correlated. The study found support for the relationship between PSM and job satisfaction, with a small effect size of 0.25. As the 95% confidence interval range was between 0.24 to 0.25, this finding is consistent with other similar studies showing a significant positive correlation.

The next relationship investigated was PSM and knowledge sharing. Overall, across 2 independent studies, there was a pooled sample size of 1,020. The hypothesis predicted that the relationship between PSM and knowledge sharing to be positively correlated. The study found support for the relationship between PSM and knowledge sharing, with a large effect size of 0.63. As the 95% confidence interval range was between 0.59 to 0.67, this finding is consistent with other similar studies showing a significant positive correlation.

Turning to the study's results pertaining to PSM and mission valence relationship, the findings show support for a positive relationship. Overall, across 6 independent studies, there was a pooled sample size of 3,939. Hypothesis 2.4 predicted that the relationship between PSM and missing valence to be positively correlated. The study found support for the relationship between PSM and mission valence, with a medium effect size of 0.53. As the 95% confidence interval range was between 0.33 to 0.38, this finding is consistent with other similar studies showing a significant positive correlation.

In terms of normative commitment, overall, across 3 independent studies, there was a pooled sample size of 3,120. Hypothesis 2.4 predicted that the relationship between PSM and normative commitment to be positively correlated. The study found support for the relationship between PSM and normative commitment, with a small effect size of 0.28. As the 95% confidence interval range was between 0.25 to 0.32, this finding is consistent with other similar studies showing a significant positive correlation.

In relation to organizational commitment, overall, across 22 independent studies, there was a pooled sample size of 16,650. Hypothesis predicted that the relationship between PSM and organizational commitment to be positively correlated. The study found support for the relationship between PSM and organizational commitment, with a moderate effect size of 0.32. As the 95% confidence interval range was between 0.31 to 0.33, this finding is consistent with other similar studies showing a significant positive correlation.

Turning to the study's results on PSM and organizational citizenship behavior (OCB) relationship, there was 12 studies that reported the relationship between PSM and OCB. Overall, across the 12 independent samples, there were a pooled sample size of 12,679. The study found support for the relationship between PSM and OCB, with a large effect size of 0.57. As the 95% confidence interval range was between 0.55 to 0.58, this finding is consistent with other similar studies showing a significant positive correlation. Therefore, hypothesis 2.4 is accepted.

Next, the results relating to PSM and organizational citizenship behavior (OCBO) relationship, revealed fewer studies that reported the relationship between PSM and OCBO. Overall, across 4 independent samples, there was a pooled sample size of 2,932. The study found support for the relationship between PSM and OCBO, with a large effect size of 0.58. As the 95% confidence interval range was between 0.55 to 0.60, this finding is consistent with other similar studies showing a significant positive correlation. Again, results support hypothesis 2.4.

Finally, the set of main effect predictions were about PSM's relationship with organizational citizenship behavior – individual level (OCBI). The hypothesis predicted that the relationship would be positively associated. Hence, in a sample of 6 studies, 5,179 pooled sample sizes, PSM is positively and slightly correlated with OCBI. The study found a large effect size of 0.49. Hence, the study shows support for the relationship between PSM and OCBI. As the 95% confidence interval range was between 0.47 to 0.52, this finding is consistent with other similar studies.

Table 4.4 presents meta-analytic findings for the negative consequences of PSM proposed in hypothesize 2.5 in chapter 2 (the adverse outcomes of PSM). The results exhibit 6 different outcomes' relationship with PSM from 30 studies meta-analyzed. The table relates to hypothesis 4 proposed in chapter 2.3.4. Relationships between PSM and each negative consequence are listed below. Weighted average relationships between PSM and its consequences as estimated with fixed effects model is displayed below.

Table 4.4 Meta-analysis of negative consequences of PSM

| Consequence/ Outcome  | k  | N      | ES     | Z-value | P-value | 95% Confidence Interval |        | Significant Yes/No |
|-----------------------|----|--------|--------|---------|---------|-------------------------|--------|--------------------|
|                       |    |        |        |         |         | Lower                   | Upper  |                    |
| Absenteeism           | 2  | 8,056  | 0.002  | 0.186   | 0.853   | -0.021                  | 0.025  | No                 |
| Burnout               | 4  | 1,339  | 0.018  | 0.642   | 0.521   | -0.036                  | 0.071  | No                 |
| Presenteeism          | 2  | 8,486  | -0.013 | -1.170  | 0.242   | -0.034                  | 0.009  | No                 |
| Resigned satisfaction | 3  | 4,265  | -0.235 | -15.610 | 0.000   | -0.263                  | -0.206 | Yes                |
| Stress                | 5  | 3,551  | -0.168 | -8.135  | 0.000   | -0.168                  | -0.103 | Yes                |
| Turnover intention    | 14 | 28,586 | -0.053 | -8.899  | 0.000   | -0.064                  | -0.041 | Yes                |

k – number of samples across studies, N – number of observations in total, ES – Effect size, P-value – probability value

Considering the first set of results meta-analyzed between PSM and absenteeism, there were 2 studies reported. Overall, across the 2 independent samples, there was a pooled sample size of 8,056. The study did not find support for the relationship between PSM and absenteeism. The effect size reported was very small, a value of 0.002. As the 95% confidence interval range was between -0.02 to 0.03, the *p*-value of 0.853 was statistically not significant. An unexpected result as the hypothesis projected a positive relationship.

Next the study's results relating to PSM and burnout relationship, there were fewer studies that reported the relationship between PSM and burnout. Overall, across 4 independent samples, there was a pooled sample size of 1,339. The study did not find support for the relationship between PSM and burnout, with a very small effect size of 0.02, while the *p*-value was 0.521. The 95% confidence interval range was between -0.04 to 0.07, therefore, the result was not significant.

Considering the set of results meta-analyzed between PSM and presenteeism, there were 2 studies reported. Overall, across the 2 independent samples, there was a pooled sample size of

8,486. This study did not find support for the relationship between PSM and presenteeism. The effect size reported was very small, a value of -0.01. As the 95% confidence interval range was between -0.03 to 0.009, the  $p$ -value of 0.24 was statistically not significant. An unexpected result as the hypothesis projected a positive relationship.

The next relationship studied was PSM and resigned satisfaction. There were fewer studies that reported the relationship between PSM and resigned satisfaction. Overall, across 3 independent samples, there was a pooled sample size of 4,265. The study's findings were supported for the relationship between PSM and resigned satisfaction, with a small effect size of -0.24. Since the 95% confidence interval range was between -0.26 to -0.21, this finding is consistent with other similar studies showing a significant negative relationship.

The PSM and stress relationship was the next relationship that was studied. There were 5 studies that reported the relationship between PSM and stress. Overall, across 4 independent samples, there was a pooled sample size of 3,551. The study found support for the relationship between PSM and stress, with a small effect size of -0.17. As the 95% confidence interval range was between -0.17 to -0.1, this finding is consistent with other similar studies showing a significant negative correlation.

Finally, in the last study's result reported between PSM and turnover intention, there were 14 studies obtained. Overall, across 4 independent samples, there was a pooled sample size of 28,586. The study found support for the relationship between PSM and turnover intention, with a small effect size of -0.05. As the 95% confidence interval range was between -0.06 to -0.04, this finding is consistent with other similar studies showing a significant negative correlation.



## **CHAPTER 5**

### **DISCUSSION/CONCLUSION**

#### **5.1. Introduction**

This chapter is the concluding chapter, summarizes the overall findings, gives prominence to the theoretical and practical contributions of this research. With reference to the research question discussed in Chapter 1, the researcher undertook a preliminary literature review to acquire an understanding of the research topic from the existing literature review. Based on a meta-analysis, this study identified some of the antecedents; for example, age and tenure both had a significant positive relationship with PSM. Contrary to expectation, the gender and PSM relationship was not significant. In relation to consequences of PSM, for example, job satisfaction and mission valence showed a significant positive impact as expected. However, results pertaining to absenteeism and presenteeism were not significant; again, this was an unexpected result. The following paragraphs will elaborate on the findings, beginning with sociohistorical antecedents, then organizational antecedents, followed by positive outcomes, and finally negative outcomes of PSM.

#### **5.2 Discussion and contribution to literature**

The results from this study in relation to hypothesis 2.1 (socio-historical and demographical variables) for age, education, hierarchy, job security, income, professional association, and job tenure were reconfirmed with existing literature. For example, education has a positive impact on PSM (Battaglio Jr. & French, 2016). From the literature it is expected that PSM will increase with age because it is understood that public service employees have the desire to impact society positively (Chen & Chen, 2015; Parola et al., 2019; Ritz et al., 2016). Consequently, the results of this study were reconfirmed, the relationship between age and PSM was positive and significant. An important implication of this finding is that in light of global aging workforce, public service organizations is also faced with this predicament (Ng, Gossett & Winter, 2016). Ng et al. (2016) argue that younger employees, in particular, millennials, may be less likely to find public service organizations attractive as they do not find

the values linked to PSM appealing. Therefore, researchers and administrators may need to consider the change in values and attitudes due to changes in demographics (Ng et al. (2016).

However, in relation to gender, the relationship with PSM was non-significant. This result was unusual because the literature points to differences in the relationship between gender and PSM, that females exhibit higher PSM levels than their counterparts (Pandey, 2006; Ritz et al., 2016). The role of socialization leads females to be more compassionate and nurturing to others; therefore, they can exhibit higher PSM levels than their male counterparts (Bright, 2005 as cited in Parola et al., 2019). However, this study found that the relationship between gender and PSM was non-significant. One reason for the result could be due to cultural differences, as Parola et al. (2019) identified in their study. Therefore, this relationship needs to be further investigated.

The results relating to motivational context, with reference to hypothesis 2.2, looked at antecedents, such as autonomy, job characteristics, empowerment, goal clarity, intrinsic rewards, job characteristics, transformational leadership, and trust. The result showed a significant positive impact on PSM. These results were as expected. As such, this study confirms the literature. For example, similar studies reported positive relationships on autonomy, job characteristics and PSM (Battaglio Jr. & Gelgec, 2017); empowerment and PSM (Anderfuhren-Biget et al., 2010). Therefore, this study is the latest and comprehensive, thus the confirms literature.

In relation to results concerning hypothesis 2.3, role ambiguity, job demand, red tape, role ambiguity, and PSM relationship were negatively significant, and this result is as expected. For example, studies that reported the negative relationship, Camilleri's (2007). However, job demand and red tape result show a positive relationship with PSM. Red tape has become an important area of research in the public administration, particularly as researchers find both positive and negative associations with PSM. For example, according to Moynihan and Pandey (2007), employees with higher levels of PSM show, they are able to cope with bureaucratic procedures in their public organization. Their study suggests that the relationship between red tape and PSM is positive. On the other hand, Quratulain and Khan's (2015) study found a significant direct effect of red tape on PSM, calling this 'the dark side of PSM.' The findings of this study, in line with earlier studies of Moynihan and Pandey's work, show a significant positive relationship with PSM, although a small effect size of 0.028.

Results relating to the consequences of PSM were reported next. In line with other studies (Castaing, 2006; Kim, Henderson & Eom, 2015; Leisink & Steijn, 2009; Moynihan & Pandey, 2007; Taylor, 2008), this study also found PSM had a positive relationship with affective commitment. This finding leads to the proposition that hiring employees with high PSM is just as important. However, Liu and Zhang (2019) found PSM showed a positive relationship with continuous commitment and normative commitment.

In line with previous researchers, the significant positive relationship between PSM and job satisfaction holds across studies (Andersen & Kjeldsen, 2013; Kjeldsen & Hansen, 2018; Liu, 2008; Naff & Crum, 1999; Park & Rainey, 2008; Stazyk, 2012; Taylor, 2008; Vandenabeele, 2009). Similarly, this study found a significant positive relationship between PSM and job satisfaction. This study reconfirms previous literature's claim of a positive association between PSM and job satisfaction with a medium effect size of 0.247. The meta-analysis by Homberg and McCarthy (2015) found strong support for public service employees in the capacity to serve public needs, and these individuals show high job satisfaction. Therefore, there is strong support that employees with high PSM who serve the public find higher job satisfaction (Homberg & McCarthy, 2015).

Kim (2006) found the relationship between PSM and OCB to be significant. Similarly, this study found a significant positive impact of PSM on OCB. A large effect size of 0.566 is reported. Therefore, having public service employees with high PSM is crucial for public organizations. This finding leads to an important implication for public managers. Kim (2006) proposes that selection and retention of public employees with high levels of PSM is important.

According to earlier studies (Camilleri, Van Der Heijden, 2007; Qi & Wang, 2018; Zhu & Wu, 2016), a significant positive relationship between PSM and organizational performance is seen. Therefore, consistent with earlier studies, this research reports a positive and significant relationship between PSM and organizational performance. This result highlights the point that the role of PSM is an important key to performance in public organizations. An important point emphasized by Qi and Wang (2018) performance cannot keep increasing only due to employee morale, after some time performance increases, will be directly related to higher PSM levels.

Furthermore, in relation to PSM and turnover intention, Borst et al. (2019) and Quratulain and Khan (2015) found that PSM positively impacted turnover intention. One reason given by Quratulain and Khan (2015) is an incompatibility between employee and the organization therefor can lead to turnover intention. Still, Gamassou's (2015) study did not find any support for the PSM and turnover intention relationship.

Research into the motivations of the public service employees has been an area of great interest for both academics and practitioners for a long time (Perry & Porter, 1982). Parola et al. (2019) state there have been a huge number of empirical studies on PSM since its formalization. These studies point towards PSM as a salient predictor of a number of attitudes and behaviors in the workplace (Harari et al., 2019). According to Ritz et al. (2016), empirical research on the antecedents of PSM is not conclusive, probably due to differences in samples used as well as measures utilized may, to some extent, impact the differences in results. In addition, as Harari et al. (2017) argue, studying PSM and its relationships with its significant correlates will help enhance management practices in the public service. Therefore, this study has concentrated on a number of antecedents and outcomes of PSM for a number of reasons. Firstly, to critically study the relationships from literature to date and determine the strength of these relationships. Secondly, although there is a large body of research undertaken on the correlates of PSM, evidence is often mixed. Therefore, this study's intention was to make room to understand the antecedent's effect on PSM and PSM's impact on its consequences.

### 5.3 Limitations

Although this study tried its best to follow the best-practice recommendations in conducting this meta-analysis, a few limitations need to be listed. This meta-analysis faces similar limitations as any other meta-analysis study in terms of the methodological choices undertaken and judgement calls made in the selection and coding of the articles, from the early phase of selecting the search terms to identify and select studies to the coding process.

The first limitation of the study is that in some meta-analyses, a few studies were available for some of the relationships between antecedents (biased for action, deep acting, empowerment, friendship opportunity, intrinsic motivation, role conflict, surface acting, and task identity) and PSM. One reason for the few studies reported between antecedents and PSM is, as Perry, Brudney, Coursey, and Littlepage (2008) stated, research in this area is much limited compared to research on PSM and consequences relationship.

#### 5.4 Conclusion

PSM has had an enormous impact on research in the field of public administration. PSM research has come a long way in order to understand public service employees' attitudes and behavior. PSM overall has generated quite a bit of interest as it is perceived to have a positive effect on outcomes such as performance, job satisfaction, organizational commitment and mission valence. Knowledge of the relationships between antecedents and PSM has important implications for understanding PSM development. In the same vein, knowledge of the relationship between PSM and consequences has important implications for understanding PSM development.

The results from this study bear some similarities and, on occasions, differences to the existing literature on related studies, as highlighted in the above paragraphs. These findings can provide management implications; for example, public organizations need to pay close attention to PSM to improve individual and organizational performance, job satisfaction, and affective commitment (Zhu & Wu, 2016). The present study provides an insight into the determinants and consequences of PSM.

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## APPENDIX

| no: | Authors:  | Title:   | Journal: | country of study | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |       | Positive Outcomes |                      |             |                             |                 |     |               | sample size  |             |        |         |            |                       |        |                    |
|-----|---|--|----------|------------------|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|----------|----------------|-----|-------|-------------------|----------------------|-------------|-----------------------------|-----------------|-----|---------------|--------------|-------------|--------|---------|------------|-----------------------|--------|--------------------|
|     |   |  |          |                  | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape | role ambiguity | TFL | trust | JS                | intra-organizational | performance | performance-knowledge share | Mission valence | CCB | OCB/OCBI/OCBO | OC/JAC/CC/NC | absenteeism | stress | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover Intention |
| 1   | Anderfuehren-Biget, S., Varone, F., & Giaque, D. (2014)                           | Policy environment and public service motivation   | PA       | Switzerland      | x           | x   | x      | x         | x      |                  |            |            |              |          |             |              |           |            |          |                |     |       |                   |                      |             |                             |                 |     |               |              |             |        |         |            |                       |        | 5894               |
| 2   | Battaglio Jr., R.P., & French, P.E. 2016  | Public service motivation, public management reform and organisational socialization: Testing the effects of employment at-will and agency on PSM among municipal employees    | PPM      | United States    |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |       |                   |                      |             |                             |                 |     |               |              |             |        |         |            |                       |        | 927                |
| 3   | Battaglio Jr., R.P., & Gelgec, S. 2017  | Exploring the structure and meaning of public service motivation in the Turkish public sector: a test of the mediating effects of job characteristics                          | PMR      | Turkey           |             |     |        |           |        |                  |            |            | x            |          | x           |              |           |            |          |                |     |       |                   |                      |             |                             |                 |     |               |              |             |        |         |            |                       |        | 315                |
| 4   | Bottomley, P., Mostafa, A.M.S., Gould-Williams, J.S., & Le'on-C'azare, F. (2016). | The Impact of Transformational Leadership on Organizational Citizenship Behaviours: The Contingent Role of Public Service Motivation   | BLM      | Mexico           | x           | x   | x      |           |        |                  | x          |            |              |          |             |              |           | x          |          |                |     |       |                   |                      |             | x                           |                 |     |               |              |             |        |         |            |                       |        | 1,016              |
| 5   | Breaugh, J., Ritz, A., & Alfes, K. (2018).  | Work motivation and public service motivation: disentangling varieties of motivation and job satisfaction  | PMR      | Switzerland      |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |       |                   |                      |             |                             |                 |     |               |              |             |        |         |            |                       | 677    |                    |
| 6   | Caillier, J.G. (2010)   | Factors affecting job performance in public agencies   | PP&MR    | United States    |             |     |        |           |        |                  |            |            |              |          |             |              | x         |            |          | x              | x   |       |                   |                      |             |                             |                 |     |               |              |             |        |         |            |                       |        | 369                |
| 7   | Caillier, J.G. (2014)   | Toward a better understanding of the relationship between transformational leadership, public service motivation, mission valence and employee motivation: A preliminary study | PPM      | United States    | x           | x   | x      |           |        |                  | x          |            |              |          |             |              |           |            | x        |                | x   | x     |                   |                      | x           |                             |                 |     |               |              |             |        |         |            |                       |        | 778                |
| 8   | Caillier, J.G. (2015)   | Towards A Better Understanding of Public Service Motivation and Mission Valence in Public Agencies   | PMR      | United States    |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |       |                   |                      | x           |                             |                 |     |               |              |             |        |         |            | x                     |        | 913                |
| 9   | Caillier, J.G. (2016)   | Does public service motivation mediate the relationship between goal clarity and both organisational commitment and extra-role behaviours?                                     | PMR      | United States    |             |     |        |           |        |                  |            |            |              |          | x           |              |           |            |          |                |     |       |                   |                      |             |                             | x               |     |               |              |             |        |         |            |                       |        | 913                |
| 10  | Camilleri, E. (2006)  | Towards Developing an Organisational Commitment - Public Service Motivation Model for the Maltese Public Service Employees   | PP&A     | Malta            | x           | x   | x      |           | x      |                  | x          | x          |              |          |             |              |           |            |          |                |     |       |                   |                      |             |                             | x               |     |               |              |             |        |         |            |                       |        | 1217               |
| 11  | Camilleri, E. (2007)  | Antecedents affecting public service motivation  | PR       | Malta            |             |     |        |           |        |                  |            |            | x            |          |             |              |           |            | x        | x              |     |       |                   |                      |             |                             |                 |     |               |              |             |        |         |            |                       |        | 2135               |
| 12  | Camilleri, E. & Van Der Heijden, B.I.J.M. (2007)                                  | Organizational Commitment, Public Service Motivation, and Performance Within the Public Sector   | PP&MR    | Malta            |             |     |        |           |        |                  |            |            | x            |          |             |              |           |            | x        | x              |     |       |                   |                      |             |                             | x               |     |               |              |             |        |         |            |                       |        | 1217               |
| 13  | Campbell, J. W. & Im, T. (2016)   | PSM and Turnover Intention in Public Organizations: Does Change-Oriented Organizational Citizenship Behavior Play a Role?  | RPPA     | South Korea      | x           | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |       |                   |                      |             | x                           |                 |     |               |              |             |        |         |            | x                     |        | 456                |
| 14  | Castaing, S. (2006)   | The effects of psychological contract fulfilment and public service motivation on organisational commitment in the French civil service  | PP&A     | France           | x           | x   |        |           |        |                  | x          | x          |              |          |             |              |           |            |          |                |     |       |                   |                      |             |                             | x               |     |               |              |             |        |         |            |                       |        | 754                |

| no. | Authors   | Title  | Journal | country of study | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     | Positive Outcomes |    |       |     |             |                 |                 | Sample Size |            |             |             |              |         |            | sample size |                       |                                |                    |
|-----|---|--|---------|------------------|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|----------|----------------|-----|-------------------|----|-------|-----|-------------|-----------------|-----------------|-------------|------------|-------------|-------------|--------------|---------|------------|-------------|-----------------------|--------------------------------|--------------------|
|     |   |  |         |                  | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape | role ambiguity | TTL | trust             | JS | invol | org | performance | knowledge share | Mission valence | CCB         | OCB/OCB/OC | OC/AC/CC/NC | absenteeism | presenteeism | Burnout | Exhaustion |             | Resigned satisfaction | Stress                         | Turnover intention |
| 15  | Chen, C.-A., Hsieh, C.-W. (2015)                            | Knowledge sharing motivation in the public service motivation  | IRAS    | Taiwan           | x           |     | x      |           |        |                  | x          |            |              |          |             |              |           |            | x        |                |     |                   | x  |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       |                                | 514                |
| 16  | Cheng, K-T. (2015)  | Public service motivation and job performance in public utilities An investigation in a Taiwan sample  | UPSM    | Taiwan           |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       | N1=1169 & N2=1070 total = 2239 |                    |
| 17  | Cooke, D.K., Brant, K.K., & Woods, J.M. (2018)              | The role of public service motivation in employee work engagement: a test of the job demands-resources model   | UPA     | United States    |             |     |        |           |        |                  |            |            |              |          |             | x            |           |            |          |                |     |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       |                                | 388                |
| 18  | De Simone, S., Pinna, R., Giustiniano, L. (2016).           | Engaging public servants Public service motivation, work engagement and work-related stress  | MD      | Italy            |             |     |        |           |        |                  | x          |            |              |          | x           |              |           |            |          | x              |     |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       |                                | 137                |
| 19  | DeHart-Davis, L., Marlowe, J., & Pandey, S.K. (2006).       | Gender dimensions of public service motivation   | PAR     | United States    | x           | x   | x      |           | x      | x                |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       |                                | 570                |
| 20  | Gamassou, C.E. (2015).                                      | What drives personnel out of public organisations  | POR     | France           |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     |             | x               |                 |             |            |             |             | x            |         |            | x           |                       | N1=1,152 N2=81                 |                    |
| 21  | Gould-Williams, J.S., Mostfa, A.M.S., & Bottomly, P.(2013). | Public service motivation and employee outcomes in the Egyptian Public Sector: Testing the Mediating Effect of Person-Organization Fit   | JP&T    | Egypt            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     | x           |                 |                 |             |            |             |             |              |         | x          | x           |                       | 671                            |                    |
| 22  | Hsieh, C-W., Yang, K., & Fu, K-J. (2011).                   | Motivational Bases and Emotional Labor: Assessing the Impact of Public Service Motivation  | PAR     | United States    | x           | x   | x      |           | x      |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       |                                | 208                |
| 23  | Hsieh, C-W. (2018).   | No One Can Serve Two Masters: Revisiting the Interaction Effect of Love of Money and Public Service Motivation on Job Satisfaction   | PP&MR   | Taiwan           | x           |     | x      |           |        |                  | x          |            |              |          |             |              |           |            |          |                | x   |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       |                                | 181                |
| 24  | Jang, C-L. (2012).  | The effect of personality traits on public service   | SB&P    | Taiwan           |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       |                                | 277                |
| 25  | Jin, M.H., McDonald, B. & Par, J. (2018)                    | Does Public Service Motivation Matter in Public Higher Education? Testing the Theories of Person–Organization Fit and Organizational Commitment Through a Serial Multiple Mediation Model  | ARPA    | United States    |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     | x           |                 | x               |             |            |             |             |              |         |            |             |                       |                                | 692                |
| 26  | Kim, J. (2015).   | What increases public employees' turnover intention  | PPM     | South Korea      |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             | x                     |                                | 203                |
| 27  | Kim, J. (2018)  | The contrary effects of intrinsic and extrinsic motivations on burnout and turnover intention in the public sector   | IJM     | South Korea      |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     | x           |                 |                 |             |            |             |             |              |         |            |             | x                     |                                | 203                |
| 28  | Kim, S. (2006)  | Public service motivation and organizational citizenship behavior in Korea   | IJM     | South Korea      |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |       |     |             |                 | x               |             |            |             |             |              |         |            |             |                       |                                | 1,584              |
| 29  | Kim, S. (2009).   | Revising Perry's Measurement Scale of Public Service Motivation  | TARPA   | South Korea      |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |       |     |             |                 |                 |             |            |             |             |              |         |            |             |                       |                                | N1=690 N2=498      |
| 30  | Kim, S. (2012).   | Does Person-Organization Fit Matter in the Public Sector? Testing the Mediating Effect of Person-Organization Fit in the Relationship between Public Service Motivation and Work Attitudes | PAR     | Korea            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |       |     |             |                 | x               |             |            |             |             |              |         |            |             |                       |                                | 814                |
| 31  | Kim, S. (2018).   | Public service motivation, organisational social capital, and knowledge sharing in the Korean public sector  | PP&MR   | Korea            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |       |     |             |                 |                 | x           |            |             |             |              |         |            |             |                       |                                | 506                |
| 32  | Kim, T., Henderson, A.C., & Eom, T.H. (2015)                | A the frontline: examining the effects perceived job significance, employee commitment, and job involvement on public service motivation   | IRAS    | South Korea      | x           |     | x      |           |        |                  | x          |            |              |          |             |              |           |            |          |                |     |                   |    |       |     |             |                 | x               |             |            |             |             |              |         |            |             |                       |                                | 5012               |

| no: | Authors:   | Title:  | Journal: | country of study   | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |             |            |          |                |     | Positive Outcomes |    |        |           |             |                 |                 | sample size |          |             |             |              |         |            |                       |        |                         |        |
|-----|--|---|----------|--|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-------------|------------|----------|----------------|-----|-------------------|----|--------|-----------|-------------|-----------------|-----------------|-------------|----------|-------------|-------------|--------------|---------|------------|-----------------------|--------|-------------------------|--------|
|     |  |   |          |  | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job charact | job demand | red tape | role ambiguity | TFL | trust             | JS | inflow | org. life | performance | knowledge share | Mission valence | CCB         | OCB/OCBW | OC/AC/CC/NC | absenteeism | Presenteeism | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover intention      |        |
| 32  | Kim, S., Vandenabeele, W. Wright, B.E., Andersen, L.B., Cerase, F.P., Christensen, R.K., Desmarais, C., Koumenta, M., Leisink, P., Liu B., Palidaukaite, J., Pedersen, L.H., Perry, J.L., Ritz, A., Taylor, J., & De Vivo, P. (2012) | Investigating the Structure and Meaning of Public Service Motivation across Populations: Developing an International Instrument and Addressing Issues of Measurement Invariance | JPAR&T   | Australia, Belgium, China, Denmark, France, Italy, Korea, Lithuania, Netherlands, Switzerland, UK, US. |             |     |        |           |        |                  |            |            |              |          |             |              |             |            |          |                |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            |                       |        | 2,868                   |        |
| 34  | Lee, C. & Kim, S. (2014)   | Making the quality of government better: the possibility of public service motivation (PSM) change  | IRPA     | South Korea  |             |     |        |           |        | x                |            |            |              |          |             |              |             |            |          |                |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            |                       |        |                         | 1,393  |
| 35  | Levitats, Z., & Vigoda-Gadot, E. (2017)  | Yours emotionally: How emotional intelligence infuses public service motivation and affects the job outcomes of public personnel  | PA       | Israel   | x           | x   | x      |           |        |                  |            |            |              |          |             |              |             |            |          | x              |     |                   |    |        |           |             |                 | x               |             |          |             |             |              |         |            |                       |        |                         | 200    |
| 36  | Liu, B., Li-Ping, T., & Yang, K. (2015).   | When does public service motivation fuel the job satisfaction fire? The joint moderation of person-organisation fit and needs supplies-fit                                      | PMR      | China  | x           |     | x      |           |        |                  |            | x          |              |          |             |              |             |            |          | x              |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            |                       |        |                         | 623    |
| 37  | Liu, B., & Perry, J.L. (2014).   | The psychological mechanisms of public service motivation A two-wave examination  | RPPA     | Eastern China  | x           | x   | x      |           |        |                  |            | x          | x            |          |             |              |             |            |          | x              |     |                   |    |        |           | x           |                 |                 |             |          |             |             |              |         |            |                       |        | 241                     |        |
| 38  | Liu, B., Perry, J.L., Tan, X., & Zhou, X. (2017)   | A Cross-Level Holistic Model of Public Service Motivation   | IPMU     | China  | x           |     | x      |           |        |                  |            | x          |              |          |             |              |             |            |          |                |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            |                       |        | individual 189 group 63 |        |
| 39  | Liu, B-C., & Tang, T.L-P. (2011)   | Does the Love of Money Moderate the Relationship between Public Service Motivation and Job Satisfaction? The Case of Chinese Professionals in the Public Sector                 | PAR      | China  | x           |     | x      |           |        |                  |            | x          |              |          |             |              |             |            |          | x              |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            |                       |        |                         | 172    |
| 40  | Liu, B., Tang, N., & Zhu, X. (2008).   | Public service motivation and job satisfaction in China An investigation of generalisability and instrumentality  | UM       | China  | x           |     | x      |           |        |                  |            |            |              |          |             |              |             |            |          | x              |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            |                       |        |                         | 191    |
| 41  | Liu, B., Yu, W., Fan, B., & Du, L. (2012).   | The Psychological Mechanism of Public Service Motivation: A Pilot Study   | CONF     | Eastern China  | x           | x   | x      |           |        | x                |            |            |              |          |             |              |             |            |          |                |     |                   |    |        |           |             | c               |                 |             |          |             |             |              |         |            |                       |        |                         | 414    |
| 42  | Mostafa, A.M.S., & Leon-Cazares, F. (2015).  | Public Service Motivation and Organizational performance in Mexico: Testing the Mediating effects of Organizational Citizenship Behaviors                                       | UPA      | Mexico   |             |     |        |           |        |                  |            |            |              |          |             |              |             |            |          |                | x   |                   |    |        |           |             | x               |                 |             |          |             |             |              |         |            |                       |        | 1,016                   |        |
| 43  | Mostafa, A.M.S., Gould-Williams, J.S., & Bottomley, P. (2015).   | High-Performance Human Resource Practices and Employee Outcomes: The Mediating Role of Public Service Motivation  | PAR      | Egypt  |             |     |        |           |        |                  |            |            |              |          |             |              |             |            |          |                |     |                   |    |        |           |             | x               | x               |             |          |             |             |              |         |            |                       |        |                         | 671    |
| 44  | Pan,N., & Zhu, L-Y. (2010).  | Does Public Service Motivation Really Make a difference on the Job Satisfaction and Turnover Intention of U.S. Federal Senior Professional Employees?                           | CONF     | United States  | x           |     |        |           |        |                  |            |            |              |          |             |              |             |            |          | x              |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            | x                     |        | 780                     |        |
| 45  | Pandey, S.K., Wright, B.E., & Moynihan, D.P. (2008).   | Public Service Motivation and Interpersonal Citizenship Behavior in Public Organizations: Testing a Preliminary Model   | IPMU     | United States  |             |     |        |           |        |                  |            |            |              |          |             |              |             |            |          |                |     |                   |    |        |           |             | x               |                 | x           | x        |             |             |              |         |            |                       |        |                         | 173    |
| 46  | Perry, J.L. (1997).  | Antecedents of public service motivation  | JPAR&T   | United States  | x           | x   | x      |           |        | x                | x          |            |              |          |             |              |             |            |          |                |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            |                       |        |                         | 375    |
| 47  | Petrovsky, N., & Ritz, A. (2014).  | Public service motivation and performance: a critical perspective   | E-BHRM   | Switzerland  |             |     |        |           |        |                  |            |            |              |          | x           |              |             |            |          |                |     |                   |    |        |           |             |                 |                 |             |          |             |             |              |         |            |                       |        |                         | 14,835 |
| 48  | Potipiroon, W., & Ford, M.T. (2017)  | Does public service motivation always lead to organisational commitment? Examining the moderating roles of intrinsic motivation and ethical leadership                          | PPM      | Thailand   | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |             |            |          | x              |     |                   |    |        |           |             |                 | x               |             |          |             |             |              |         |            |                       |        |                         | 196    |





| no. | Authors:   | Title:   | Journal: | country of study                                  | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            | Positive Outcomes |                |     |       |    |               |             | sample size     |                 |     |               |             |             |              |         |            |                       |        |                    |     |
|-----|--|--|----------|---|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|-------------------|----------------|-----|-------|----|---------------|-------------|-----------------|-----------------|-----|---------------|-------------|-------------|--------------|---------|------------|-----------------------|--------|--------------------|-----|
|     |  |  |          |   | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape          | role ambiguity | TFL | trust | JS | Indiv perform | Org perform | knowledge share | Mission valence | CCB | OCB/OCBI/OCBO | OC/AC/CC/NC | absenteeism | Presenteeism | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover intention |     |
| 49  | Oj, F., & Wang, W. (2018)                            | Employee involvement, public service motivation, and perceived organizational performance: testing a new model   | IRAS     | China   |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |                   | x              |     | x     |    |               |             |                 | x               |     |               |             |             |              |         |            |                       |        | 711                |     |
| 50  | Quratulain, S., & Khan, A.K. (2015).                 | Red Tape, Resigned Satisfaction, Public Service Motivation, and Negative Employee Attitudes and Behaviors: Testing a Model of Moderated Mediation                        | RPPA     | Pakistan  | x           | x   | x      |           |        |                  |            | x          |              |          |             |              | x         |            |                   |                |     |       |    |               |             |                 |                 |     |               |             |             |              | x       | x          | x                     |        | 217                |     |
| 51  | Rayner, J. Reimers, V. & Chao, C-W. (2018)           | Testing an International Measure of Public Service Motivation: Is There Really a Bright or Dark Side?  | AJPA     | Australia   |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |                   | x              |     |       |    |               |             |                 |                 |     |               | x           |             |              |         |            |                       | 455    |                    |     |
| 52  | Ritz, A. (2009)                                      | Public service motivation and organizational performance in Swiss federal government   | IRAS     | Switzerland                                       | x           |     | x      |           | x      |                  |            | x          |              |          |             |              |           |            |                   | x              |     |       |    |               |             |                 | x               |     |               |             |             |              |         |            |                       |        | 13,532             |     |
| 53  | Scott, P.G., & Pandey, S.K. (2005).                  | Red Tape and Public Service Motivation Findings from a National Survey of Managers in State Health and Human Services Agencies   | RPPA     | United States                                     |             |     |        |           | x      |                  |            |            |              |          |             |              | x         |            |                   |                |     |       |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 274                |     |
| 54  | Shim, D.C., Park, H.H., & Eom, T.H. (2015).          | Street-level bureaucrats' turnover intention: does public service motivation matter?   | IRAS     | Korea   |             |     | x      |           |        | x                |            |            |              |          |             |              | x         |            |                   |                |     |       |    |               |             |                 |                 |     |               |             |             |              | x       |            |                       | x      | 4,974              |     |
| 55  | Shrestha, A.K., & Mishra, A.K. (2015).               | Interactive Effects of Public Service Motivation and Organizational Politics on Nepali Civil Service Employees' Organizational Commitment                                | BP&R     | Nepal   |             |     |        |           |        | x                |            |            |              |          |             |              |           |            |                   |                |     |       |    |               |             |                 |                 | x   |               |             |             |              |         |            |                       |        | 443                |     |
| 56  | Stazyk, E.C. (2012)                                  | Crowding Out Public Service Motivation? comparing Theoretical Expectations with Empirical Findings on the Influence of Performance-Related Pay                           | RPPA     | United States                                     |             |     |        |           |        | x                |            |            |              |          |             |              | x         |            |                   | x              |     |       |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 1,538              |     |
| 57  | Stritch, J.M., & Christensen, R.K. (2014).           | Looking at a job's social impact through PSM-tinted lenses: probing the motivation-perception relationship   | PA       | United States                                     | x           | x   |        |           |        |                  |            | x          |              |          |             |              |           |            |                   |                |     |       |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 843                |     |
| 58  | Taylor, J. (2007).                                   | The impact of public service motives on work outcomes in Australia: a comparative multi-dimensional analysis   | PA       | Australia   | x           | x   | x      |           | x      |                  | x          | x          |              |          |             |              |           |            |                   | x              |     |       |    |               |             |                 |                 | x   |               |             |             |              |         |            |                       |        |                    | 203 |
| 59  | Taylor, J. (2014).                                   | PSM, Public service motivation, relational job design and job satisfaction in local government   | PA       | Australia   | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |                   | x              |     |       |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        |                    | 233 |
| 60  | Taylor, J., & Westover, J.H. (2011).                 | Jobsatisfaction in the public service The effects of public service motivation, workplace attributes and work relations  | PMR      | US, Canada; UK; Germany; France; Denmark; Norway. | x           | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |                   | x              |     |       |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 4,595              |     |
| 61  | van Loon, N.M. (2017).                               | Does Context Matter for the Type of Performance-Related Behavior of Public Service Motivated Employees?  | RPPA     | Netherlands                                       |             |     |        |           | x      |                  |            | x          |              |          |             |              |           |            |                   |                | x   |       |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 459 & 461          |     |
| 62  | van Loon, N, Vandenabeele, W., & Leisink, P. (2015). | Clarifying the Relationship Between Public Service Motivation and In-Role and Extra-Role Behaviors: The Relative Contributions of Person-Job and Person-Organization Fit | ARPA     | Netherlands                                       | x           | x   |        |           |        |                  |            |            |              |          |             |              |           |            |                   |                |     |       |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 1,031              |     |
| 63  | Vandenabeele, W. (2009)                              | The mediating effect of job satisfaction and organizational commitment on self-reported performance: more robust evidence of the PSM-performance relationship            | IRAS     | Belgium   |             |     |        |           | x      |                  |            |            |              |          |             |              |           |            |                   | x              | x   |       |    |               |             |                 |                 | x   |               |             |             |              |         |            |                       |        | 3,506              |     |
| 64  | Wright, B.E., Pandey, S.K. (2008).                   | Public Service Motivation and the Assumption of Person-Organization Fit Testing the Mediating Effect of Value Congruence   | A&S      | United States                                     | x           | x   |        |           | x      |                  | x          | x          |              |          |             |              |           |            |                   | x              |     |       |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 206                |     |

| no: | Authors:  | Title:  | Journal: | country of study | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     | Positive Outcomes |    |               |             |                 |                 |     |               | sample size |             |              |         |            |                       |        |                    |        |
|-----|---|---|----------|------------------|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|----------|----------------|-----|-------------------|----|---------------|-------------|-----------------|-----------------|-----|---------------|-------------|-------------|--------------|---------|------------|-----------------------|--------|--------------------|--------|
|     |   |   |          |                  | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape | role ambiguity | TFL | trust             | JS | indiv perform | Org perform | knowledge share | Mission valence | CCB | OCB/OCBI/OCBO | OC/AC/CC/NC | absenteeism | Presenteeism | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover intention |        |
| 65  | Wright, B.E., Moynihan, D.P., & Pandey, S.K. (2012).              | Pulling the Levers: Transformational Leadership, Public Service Motivation, and Mission Valence   | PAR      | United States.   |             |     |        |           |        |                  |            |            |              | x        |             |              |           |            | x        |                |     |                   |    | x             |             |                 |                 |     |               |             |             |              |         |            |                       |        | 1,538              |        |
| 66  | Wright, B.E., & Pandey, S.K. (2011).                              | Public Organizations and Mission Valence: When Does Mission Matter?   | A&S      | United States.   |             |     |        |           |        |                  |            |            |              | x        |             |              |           |            |          | x              |     |                   |    | x             |             |                 | x               |     |               |             |             |              |         |            |                       |        | 173                |        |
| 67  | Giauque, D., Ritz, A., Varone, F., & Anderfuhren-Biget, S. (2012) | Resigned but satisfied: the negative impact of public service motivation and red tape on work satisfaction  | PA       | Switzerland      | x           | x   | x      | x         | x      |                  |            | x          |              |          |             |              | x         |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              | x       |            |                       |        |                    | 3754   |
| 68  | Caillier, J.G. (2016)   | Do teleworkers possess higher levels of public service motivation   | POR      | United States    |             | x   |        |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        |                    | 42,020 |
| 69  | Alreshoodi, S.A. (2016)   | Negative institutional influences in the Saudi Public Sector: wasta, public service motivation and employee outcomes  | PD&TG    | Saudi Arabia     |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 | x               |     |               |             |             |              |         |            | x                     |        | 206                |        |
| 70  | Deng, J., Sun, Y., Lei, R., & Yang, T. (2019).                    | Public service motivation as mediator of relationship between job stress and presenteeism: a cross-sectional study from Chinese public hospitals  | BMCHSR   | China            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     | x             |             |             |              |         | x          |                       |        |                    | 1392   |
| 71  | Miao, Q., Eva, N., Newman, A., & Schwarz, G. (2018)               | Public service motivation and performance: The role of organizational identification  | PM&M     | China            | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     | x                 |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        |                    | 281    |
| 72  | Zhu, C., & Wu, C. (2016).   | Public service motivation and organizational performance in Chinese provincial governments  | CMS      | China            | x           | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     | x                 |    |               |             |                 | x               |     |               |             |             |              |         |            |                       |        |                    | 761    |
| 73  | Mostafa, A.M.S. (2014)  | The relationship between high performance HR practices and employee attitudes: the mediating role of public service motivation and person-organisation fit  | E-BHRM   | Egypt            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 | x               |     |               |             |             |              |         |            | x                     |        | 671                |        |
| 74  | Alford, W.A. (2014)   | Effects of leader-member exchange and public service motivation on job satisfaction and organisational commitment in a public workforce sample  | PD&TG    | United States    |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 | x   |               |             |             |              |         |            |                       |        |                    | 903    |
| 75  | Kim, E. (2018)  | Organisational antecedents of public service motivation in the Korean national assembly staff workforce   | PD&TG    | South Korea      | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            | x        |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        |                    | 221    |
| 76  | Kim, S. (2017).   | Comparison of a multidimensional to a unidimensional measure of public service motivation: Predicting Work Attitudes  | LPA      | Korea            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 | x   |               |             |             |              |         |            |                       |        |                    | 929    |
| 77  | Li, M., & Wang, Z. (2016)   | Emotional labour strategies as mediators of the relationship between public service motivation and job satisfaction in Chinese teachers   | LJP      | China            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        |                    | 317    |
| 78  | Zheng, Y., Wu, C-H., & Graham, L. (2020).                         | Work-to-non-work spillover: the impact of public service motivation and meaningfulness on outcomes in work and personal life domains  | PMR      | United Kingdom   |             |     |        | x         | x      |                  |            | x          |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        |                    | 253    |
| 79  | Yudiatmaja, W.E. (2019)   | How does public service motivation contribute to service orientation? Testing mediation models  | JIP      | Indonesia        |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 | x   |               |             |             |              |         |            |                       |        |                    | 160    |
| 80  | Potipiroon, W., & Faerman, S. (2020)                              | Tired from working hard? Examining the effect of organisational citizenship behaviour on emotional exhaustion and the buffering roles of public service motivation and perceived supervisor support | PP&MR    | Thailand         | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 | x   |               |             |             |              | x       |            |                       |        |                    | 214    |
| 81  | Liu, B., & Zhang, Z. (2019)                                       | Motivational bases of commitment to organisational change in the Chinese public sector  | SB&P     | China            | x           |     | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 | x   |               |             |             |              |         |            |                       |        |                    | 231    |

| no: | Authors:   | Title:   | Journal: | country of study | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     | Positive Outcomes |    |               |             |                 |                 |     | Sample size   |             |             |              | sample size |         |            |                       |        |                    |
|-----|--|--|----------|------------------|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|----------|----------------|-----|-------------------|----|---------------|-------------|-----------------|-----------------|-----|---------------|-------------|-------------|--------------|-------------|---------|------------|-----------------------|--------|--------------------|
|     |  |  |          |                  | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape | role ambiguity | TFL | trust             | JS | indiv perform | Org perform | knowledge share | Mission valence | CCB | OCB/OCBI/OCBO | OC/AC/CC/NC | absenteeism | Presenteeism |             | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover intention |
| 82  | Wang, W., & Seifert, R. (2020)   | BAME staff and public service motivation: the mediating role of perceived fairness in English local government   | JBE      | United Kingdom   | x           |     | x      |           |        | x                |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 2580   |                    |
| 83  | Desmidt, A., & Prinzie, A. (2019)  | Establishing a mission-based culture: analysing the relation between intra-organisational socialisation agents, mission valence, public service motivation, goal clarity and work impact | IPMU     | Belgium          | x           | x   | x      |           |        |                  |            |            |              |          | x           |              |           |            |          |                |     |                   |    | x             |             |                 |                 |     |               |             |             |              |             |         |            |                       | 585    |                    |
| 84  | Cailler, J.G. (2011)   | Are state government workers satisfied with their jobs when the organisation is effective?   | PAQ      | United States    |             |     |        |           |        |                  |            |            |              |          |             |              | x         |            |          | x              |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 366    |                    |
| 85  | Moynihan, D.P., & Pandey, S.K. (2007)  | Finding workable levers over work motivation: comparing job satisfaction, job involvement, an organisational commitment  | A&S      | United States    | x           |     |        |           |        |                  | x          | x          |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 | x               |     |               |             |             |              |             |         |            |                       | 274    |                    |
| 86  | Park, S.M., & Rainey, H.G. (2008)  | Leadership and public service motivation in U.S. federal agencies  | IPMU     | United States    |             | x   | x      |           | x      |                  |            |            |              | x        | x           |              |           |            | x        |                | x   |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 6918   |                    |
| 87  | Bangcheng, L. (2009)   | Evidence of public service motivation of social workers in China   | IRAS     | China            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 474    |                    |
| 88  | Ritz, A. & Fernandez, S. (2011)  | Intended and non-intended effects of managing organisational change in public organisations.   | CONF     | Switzerland      |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 | x               |     |               |             |             |              |             |         |            |                       | 14835  |                    |
| 89  | Anderfuhren-Biget, S., Varone, F., Giauque, D., & Ritz, A. (2010).   | Motivating employees of the public sector: does public service motivation matter?  | IPMU     | Switzerland      |             |     |        |           | x      |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 3754   |                    |
| 90  | Braender, M., & Andersen, L.B. (2013).   | Does Deployment to war affect public service motivation? A panel study of soldiers before and after Their Service in Afghanistan   | PAR      | Denmark          | x           |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 211    |                    |
| 91  | Caillier, J.G. (2015)  | Transformational leadership and whistle-blowing attitudes: Is this relationship mediated by organizational Commitment and Public Service Motivation?                                     | ARPA     | United States    |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 | x               |     |               |             |             |              |             |         |            |                       | 913    |                    |
| 92  | Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2013)  | HRM Practices, Intrinsic motivators, and organisational performance in the public sector   | PPM      | Switzerland      | x           | x   | x      | x         | x      |                  |            | x          | x            |          |             |              |           |            |          |                |     |                   |    |               |             | x               |                 |     |               |             |             |              |             |         |            |                       | 3131   |                    |
| 93  | Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2010)  | HRM practices sustaining PSM: when values congruency matters   | UPSPM    | Switzerland      | x           | x   | x      | x         | x      |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 6885   |                    |
| 94  | Gould-williams, J.S., Bottomley, P., Redman, T., Snape, E., Bishop, D.J., Limpanitgul, T., Mostafa, (2014) | Civic duty and employee outcomes: do high commitment human resources parctices and work overload matter?   | PA       | United Kingdom   |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 | x               |     |               |             |             |              |             |         | x          |                       | 1713   |                    |
| 95  | Jacobsen, C.B., Hvitved, J., & Andersen, L.B. (2014)   | Command and motivation: how the perception of external interventions relates to intrinsic motivation and public service motivation   | PA       | Denmark          |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 3230   |                    |
| 96  | Vandenabeele, W. (2008)  | Development of a Public Service Motivation Measurement Scale: Corroborating and Extending Perry's Measurement Instrument   | IPMU     | Belgium          |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 3506   |                    |
| 97  | Song, M., Kwong, I., Cha, S., & Min, N. (2017)   | The Effect of Public Service Motivation and Job Level on Bureaucrats' Preferences for Direct Policy Instrument   | JPAR&T   | Korea            |             |     | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       | 1320   |                    |
| 98  | Prismakova, P. (2016)  | From compliance to commitment Centralization and public service motivation in different administrative regimes   | IJM      | Poland           | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |             |         |            |                       |        | 390                |

| no. | Authors:  | Title:  | Journal: | country of study      | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     | Positive Outcomes |    |               |             |                 |                 |     | sample size  |             |             |              |         |            |                       |        |                    |
|-----|---|---|----------|-----------------------|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|----------|----------------|-----|-------------------|----|---------------|-------------|-----------------|-----------------|-----|--------------|-------------|-------------|--------------|---------|------------|-----------------------|--------|--------------------|
|     |   |   |          |                       | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape | role ambiguity | TFL | trust             | JS | indiv perform | Org perform | knowledge share | Mission valence | CCB | OCB/OCB/OCBO | OC/AC/CC/NC | absenteeism | Presenteeism | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover intention |
| 99  | Park, S. (2014)   | Motivation of public managers as raters in performance appraisal: developing a model of rater motivation  | PPM      | United States & Korea |             | x   |        |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 236                |
| 100 | Park, S.M., & Kim, M.Y. (2015)                              | Accountability and public service motivation in Korean government agencies  | PM&M     | Korea                 | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 255                |
| 101 | Palma, R., Hinna, A., & Mangia, G. (2017)                   | Improvement of individual performance in the public sector Public service motivation and user orientation as lever  | E-BHRM   | Italy                 |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       | 617    |                    |
| 102 | Moynihan, D.P., & Pandey, S.K. (2010)                       | The Big Question for Performance Management: Why Do Managers Use Performance Information?   | JPAR&T   | United States         |             |     |        |           |        | x                |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       | 1538   |                    |
| 103 | Abdelmotaleb, M., & Saha, S.K. (2019)                       | Corporate Social Responsibility, Public Service Motivation and Organizational Citizenship Behavior in the Public Sector   | UPA      | Egypt                 |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             | x               |                 |     |              |             |             |              |         |            |                       | 229    |                    |
| 104 | Kim, S. (2014)  | Testing a Revised Measure of Public Service Motivation: Reflective versus Formative Specification   | JPAR&T   | Korea                 |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 2497               |
| 105 | Liu, B., Zhang, X., Lv, X. (2014)                           | Compassion as the affective dimension of public service motivation in a Chinese context   | SB&P     | China                 | x           |     | x      |           |        |                  |            |            | x            |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 552                |
| 106 | Johnson, B.J. (2012)  | Public Service Motivation and the Technical, Political, and Facilitator Roles of City Planners  | UPA      | United States         | x           |     | x      |           |        | x                |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 256                |
| 107 | Jang, C-L. (2014)   | Psychological Capital as Predictor of Public Service Motivation: Evidence from Taiwan   | CONF     | Taiwan                |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 311                |
| 108 | Borst, R.T. (2018)  | Comparing Work Engagement in People Changing and People Processing Service Providers: A Mediation Model With Red Tape, Autonomy, Dimensions of PSM, and Performance | PPM      | Netherlands           | x           | x   | x      |           |        | x                |            |            | x            |          |             |              |           |            |          | x              | x   |                   |    |               |             |                 | x               |     |              |             |             |              |         |            |                       |        | 13513&10175        |
| 109 | Ritz, A., Schott, C., Nitzl, C., & Alfes, K. (2020)         | Public service motivation and prosocial motivation: two sides of the same coin?   | PMR      | Switzerland           |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 747                |
| 110 | Karolidis, D., & Vouzas, F. (2019)                          | From PSM to Helping Behavior in the Contemporary Greek Public Sector: The Roles of Organizational Identification and Job Satisfaction                               | PP&MR    | Greece                | x           | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 | x               |     |              |             |             |              |         |            |                       |        | 322                |
| 111 | Vandenabeele,W., & de Vries, J.P. (2016)                    | A global measure of public service motivation : comparing a global scale of PSM to the Kim et al measure  | CONF     | Netherlands           |             |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       | 993    |                    |
| 112 | Ugaddan, R.G., Park, S.M. (2017)                            | Quality of leadership and public service motivation   | UPSM     | United States         |             | x   |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 42,020             |
| 113 | Vogel, F., Homberg, F., & Gericke, A. (2016)                | Abusive supervision, public service motivation, and employee deviance: The moderating role of employee sector   | E-BHRM   | Germany               | x           |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 150                |
| 114 | Van Loon, N.M., Vandenabeele, W., & Leisink, P. (2015).     | On the bright and dark side of public service motivation. The relationship between PSM and employee wellbeing.  | PM&M     | Taiwan                | x           | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 467                |
| 115 | 115 Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2013) | Stress perception in public organisations - expanding the job demands-Job Fresource Model by Including Public Service Motivation                                    | RPPA     | Switzerland           | x           | x   | x      | x         |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            | x                     |        | 859                |
| 116 | Chen, C-A., Hsieh, C-W., Chen, D-Y. (2014)                  | Fostering public service motivation through workplace trust Evidence from Public Managers in Taiwan   | PA       | Taiwan                |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 774                |
| 117 | Schwarz, G., Newman, A., & Eva, N. (2020)                   | Can public leadership increase public service motivation.   | PAR      | China                 |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |              |         |            |                       |        | 64 & 300           |

| no. | Authors:   | Title:   | Journal: | country of study                         | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     | Positive Outcomes |    |               |             |                 |                 |     | sample size |               |             |             |              |         |            |                       |        |                    |
|-----|--|--|----------|--|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|----------|----------------|-----|-------------------|----|---------------|-------------|-----------------|-----------------|-----|-------------|---------------|-------------|-------------|--------------|---------|------------|-----------------------|--------|--------------------|
|     |  |  |          |  | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape | role ambiguity | TFL | trust             | JS | indiv perform | Org perform | knowledge share | Mission valence | CCB |             | OCB/OCBI/OCBO | OC/AC/CC/NC | absenteeism | Presenteeism | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover intention |
| 118 | Teo S.T.T. Pick D. & Xerri M. (2016)                       | Person–Organization Fit and Public Service Motivation in the Context of Change   | PMR      | United States                            |             |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       | 308    |                    |
| 119 | Removed  |  |          |  |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        |                    |
| 120 | Jensen, U.T., Andersen, L.B., & Holten, A-L. (2019)        | Explaining a dark side - public service motivation, Presenteeism, and Absenteeism  | RPPA     | United States                            | x           |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     | x           | x             |             |             |              |         |            |                       |        | 7,094              |
| 121 | Westover, J.H. (2010)                                      | International differences in job satisfaction  | UP&PM    | Germany, UK, US, Hungary, Norway, Israel | x           |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       | 14,195 |                    |
| 122 | Taylor, J. (2008)  | Organisational influences, public service motivation and work outcomes: An Australian Study  | IPMJ     | Australia                                | x           | x   | x      |           | x      | x                |            |            |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 |                 | x   |             |               |             |             |              |         |            |                       |        | 2,274              |
| 123 | Schott, C., & Pronk, J.L.J. (2013)                         | Investigating and explaining organisational antecedents of PSM   | E-BHRM   | Germany                                  |             |     |        |           | x      |                  |            |            |              | x        |             |              | x         |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 251                |
| 124 | Piatak, J.S., & Holt, S.B. (2020)                          | Disentangling altruism and public service motivation who exhibits organizational citizenship behaviour   | PPM      | United States                            |             | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 | x               |     |             |               |             |             |              |         |            |                       |        | 761                |
| 125 | Kjeldsen, A.M., & Hansen, J.R. (2018)                      | Sector differences in the public service motivation-job satisfaction relationship: Exploring the Role of Organizational Characteristics                      | RPPA     | Denmark                                  | x           | x   | x      |           |        |                  |            | x          |              | x        |             |              |           |            |          | x              |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 1,018              |
| 126 | Wright, B.E., Christensen, R.K., & Isett, K.R. (2013)      | Motivated to Adapt? The Role of Public Service Motivation as Employees Face Organizational Change  | PAR      | United States                            |             |     |        |           |        |                  | x          |            | x            |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |             |               | x           |             |              |         |            |                       |        | 449                |
| 127 | Andersen L.B. & Kjeldsen A.M. (2013)                       | Public service motivation user orientation and job satisfaction: A Question of Employment Sector   | IPMJ     | Denmark                                  | x           | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 2,611              |
| 128 | Vigoda-Gadot, E., Zalmanovitch, Y., & Belonogov, A. (2012) | Public servants trust in citizens: An Extension of Theory and an Empirical Examination with Structural Equation Modeling (SEM)                               | POR      | Israel                                   |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          | x              | x   |                   |    |               |             |                 |                 |     |             |               | x           |             |              |         |            |                       |        | 219                |
| 129 | Bright, L. (2011)  | Does Public Service Motivation Affect the Occupation Choices of Public Employees   | PPM      | United States                            | x           | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 181                |
| 130 | Bright, L. (2016)  | Is public service motivation a better explanation of nonprofit career preferences Than Government Career Preferences   | PPM      | United States                            | x           |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 421                |
| 131 | Carpenter, J., Doverspike, D., & Miguel, R.F. (2012)       | Public service motivation as a predictor of attraction to the public sector  | JVB      | United States                            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 236                |
| 132 | Charbonneau, E., & Van Ryzin, G.G. V. (2017)               | Exploring the deep antecedent of public Service Motivation   | UPA      | United States                            | x           |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 191                |
| 133 | Ingrams, A. (2020)   | Organizational Citizenship Behavior in the Public and Private Sectors: A Multileve Test of Public Service Motivation and Traditional Antecedents             | RPPA     | Netherlands                              |             |     |        |           |        |                  |            |            |              |          |             |              | x         |            |          | x              |     |                   |    |               |             |                 | x               |     |             |               |             |             |              |         |            |                       |        | 2,407              |
| 134 | Kim, S. (2005)   | Individual-Level Factors and OrganizationalPerformance in Government Organizations   | JPAR&T   | Korea                                    | x           | x   | x      | x         |        |                  |            | x          |              |          |             |              |           |            |          | x              |     | x                 |    |               |             |                 |                 |     |             |               |             | x           |              |         |            |                       |        | 1,739              |
| 135 | Koumenta, M. (2015)  | Public service motivation and organizational citizenship   | PM&M     | United Kingdom                           | x           | x   | x      |           | x      |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 517                |
| 136 | Liu, B., Zhang, X., Du, L., & Hu, Q. (2015)                | Validating the construct of public service motivation in for-profit organisations  | PMR      | China                                    | x           |     | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 348                |
| 137 | Luu, T. (2018)   | Discretionary HR practices and proactive work behaviour - the mediating role of affective commitment and the moderation roles of PSM and abusive supervision | PMR      | Australia                                | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 1026               |
| 138 | Quratalain, S., & Khan, A.K. (2015)                        | How does employees public service motivation Get Affected? A Conditional Process Analysis of the Effect of Person–Job Fit and Work Pressure                  | PMR      | Pakistan                                 | x           | x   | x      | x         |        |                  |            | x          |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 |                 |     |             |               |             |             |              |         |            |                       |        | 213                |

| no. | Authors:   | Title:   | Journal: | country of study   | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     | Positive Outcomes |    |               |             |                 |                 |     |              |             |             | sample size |              |         |            |                       |        |                    |     |
|-----|--|--|----------|--|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|----------|----------------|-----|-------------------|----|---------------|-------------|-----------------|-----------------|-----|--------------|-------------|-------------|-------------|--------------|---------|------------|-----------------------|--------|--------------------|-----|
|     |  |  |          |  | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape | role ambiguity | TFL | trust             | JS | indiv perform | Org perform | knowledge share | Mission valence | CCB | OCB/OCB/OCBO | OC/AC/CC/NC | absenteeism |             | Presenteeism | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover intention |     |
| 139 | Quratulain, S., Khan, A.K., & Sabhanwal, M. (2019)                   | Procedural fairness, public service motives and employee work Outcomes: Evidence From Pakistan Public Service Organizations  | RPPA     | Pakistan   | x           | x   | x      | x         |        |                  |            |            |              |          |             |              |           |            |          | x              |     |                   |    |               |             | x               |                 |     |              |             |             |             |              |         |            |                       |        | 232                |     |
| 140 | Stefurak, T., & Morgan, R. (2020)                                    | The relationship of public service motivation to job satisfaction and job performance of Emergency Medical Service Professionals   | PPM      | United States  |             |     | x      |           |        | x                |            |            |              |          |             |              |           |            |          | x              | x   |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 1,403              |     |
| 141 | van Loon, N., Kjeldsen, A.M., Vandenabeele, W., & Leisink, P. (2018) | Only when societal impact potential is high. A panel study of the Relationship Between Public Service Motivation and Perceived Performance                                   | RPPA     | Denmark  | x           |     | x      |           | x      |                  |            | x          |              |          |             |              |           |            |          |                | x   | x                 |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 13,967             |     |
| 142 | Vandenabeele, W. (2011)  | Who wants to deliver public service? Do Institutional Antecedents of Public Service Motivation Provide an Answer?  | RPPA     | Belgium  |             | x   | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 3,506              |     |
| 143 | Brewer, G.A., & Selden, S.C. (1998)                                  | Whistle blowers in the federal civil service: New Evidence of the Public Service Ethic   | JPAR&T   | United States  |             |     |        |           |        |                  | x          |            |              |          |             |              |           |            |          | x              | x   |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 2,188              |     |
| 144 | Ki, N. (2020)  | Public service motivation and government officials' willingness to learn in public sector benchmarking process   | PMR      | United States  | x           | x   | x      |           |        |                  | x          |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        |                    | 195 |
| 145 | Kai-Peng, Gan, Lin, Y., & Wang, Q. (2020)                            | Public service motivation and turnover intention: Testing the Mediating Effects of Job Attitudes   | FP       | China  | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                | x   |                   |    |               |             | x               |                 |     |              |             |             |             |              |         | x          |                       |        | 587                |     |
| 146 | Bao, Y., & Ge, L. (2019)   | Linking transformational leadership and value congruence among Chinese police force: The mediating role of goal clarity and the moderating role of public service motivation | AJPA     | China  | x           | x   | x      |           |        |                  | x          |            |              |          | x           |              |           |            | x        |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 420                |     |
| 147 | Campbell, J.W., Im, T., & Jeong, J. (2014)                           | Internal efficiency and turnover intention: Evidence From Local Government in South Korea  | PPM      | South Korea  |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         | x          |                       | 1,407  |                    |     |
| 148 | Yousaf, M., Zarar, S., & Ellahi, A.A. (2014)                         | Do public service motivation, red tape and resigned work satisfaction tirangulate together   | IUP&PM   |  Pakistan |             |     |        |           |        |                  |            |            |              |          |             |              |           |            | x        |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              | x       |            |                       | 294    |                    |     |
| 149 | Homburg, F., Vogel, R., & Weiherl, J. (2019)                         | Public service motivation and continuous organisational change: Taking Charge behaviour at police services   | CONF     |  Germany  |             |     |        |           |        |                  |            |            |              |          | x           |              |           |            | x        |                | x   |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 1,165              |     |
| 150 | Borst, R.T., Kruijen, P.M., & Lako, C.J. (2019)                      | Exploring the Job Demands-Resources Model of Work Engagement in Government: Bringing in a Psychological Perspective  | RPPA     | Netherlands  | x           | x   | x      |           |        |                  | x          |            |              |          |             |              |           |            |          |                |     |                   |    |               |             | x               |                 |     |              |             |             |             |              |         |            | x                     |        | 9,65               |     |
| 151 | Hattie, F., Vogel, R., & Znanewitz, J. (2018)                        | Satisfied with red tape? Leadership, civic duty, and career intention in the military  | PMR      | Germany  |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                | x   |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 1,331              |     |
| 152 | Moynihan, D.P., & Pandey, S.K. (2007)                                | The role of organisations in fostering public service Motivation   | PAR      | United States  | x           | x   | x      |           | x      | x                |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 274                |     |
| 153 | Park, S. (2020)  | Determinants of the Job Satisfaction of Public Officials: Testing the Mediation Effect of Organizational Commitment  | POR      | South Korea  |             |     |        |           |        |                  |            |            |              |          | x           |              |           |            |          | x              |     |                   |    |               |             | x               |                 |     |              |             |             |             |              |         |            |                       |        | 187                |     |
| 154 | Park, J., & Lee, K-H. (2020).  | Organizational politics, work attitudes and performance: the moderating role of age and public service motivation (PSM)  | IRPA     | United States  | x           |     | x      |           |        |                  |            | x          |              |          |             |              |           |            |          | x              |     | x                 |    |               |             | x               |                 |     |              |             |             |             |              |         |            |                       |        | 190                |     |
| 155 | Sun, X., Wu, M., & Chen, Q. (2019)                                   | Ego depletion and self-control. The moderating role of public service motivation   | SB&P     | China  | x           |     | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 95                 |     |
| 156 | Ackerina, J. (2012)  | THE CALL OF PUBLIC SERVICE: MOTIVATION AND PROFESSIONAL COMMITMENT IN EDUCATION  | PD&TG    | United States  | x           | x   |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 258                |     |
| 157 | Anderfuhren-Biget, S. (2012)   | Profiles of Public Service Motivated Civil Servants Evidence from a Multicultural Country  | IUPA     | Germany & Switzerland  | x           | x   | x      | x         | x      | x                |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 3,018              |     |
| 158 | Andersen, L.B., & Serritzlew, S. (2012)                              | Does Public Service Motivation Affect the Behavior of Professionals  | IUPA     | Denmark  | x           |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |              |             |             |             |              |         |            |                       |        | 556                |     |



| no: | Authors:  | Title:   | Journal: | country of study | Antecedents |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     | Positive Outcomes |    |               |             |                 |                 |     | sample size   |             |             |              |         |            |                       |        |                    |
|-----|---|--|----------|------------------|-------------|-----|--------|-----------|--------|------------------|------------|------------|--------------|----------|-------------|--------------|-----------|------------|----------|----------------|-----|-------------------|----|---------------|-------------|-----------------|-----------------|-----|---------------|-------------|-------------|--------------|---------|------------|-----------------------|--------|--------------------|
|     |   |  |          |                  | age         | edu | gender | hierarchy | income | prof association | job tenure | org tenure | job security | Autonomy | empowerment | goal clarity | job chart | job demand | red tape | role ambiguity | TFL | trust             | JS | indiv perform | Org perform | knowledge share | Mission valence | CCB | OCB/OCBI/OCBO | OC/AC/CC/NC | absenteeism | Presenteeism | Burnout | Exhaustion | Resigned satisfaction | Stress | Turnover intention |
| 159 | Azhar, A. (2012)  | Pro-environmental behavior in public organisations - empirical evidence from Florida City Governments  | PD&TG    | United States    | x           | x   | x      |           | x      |                  |            |            |              |          |             |              |           | x          |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       | 642    |                    |
| 160 | Berman, E., Chen, D-Y., Jan, C-Y., & Huang, T-Y. (2012)                                 | Public agency leadership: the impact of informal understandings with political appointees on perceived innovation in Taiwan                                  | PA       | Taiwan           | x           |     | x      |           |        |                  | x          |            |              |          |             |              |           |            | x        |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 604                |
| 161 | Liu, B., Hu, W., & Cheng, Y-C. (2015)   | From the West to the East: Validating Servant Leadership in the Chinese Public Sector  | PPM      | Taiwan           | x           |     | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 659                |
| 162 | Park, J. (2012)   | Exploratory Study on the Applicability of the Public Service Motivation Concept to South Korea   | PD&TG    | South Korea      | x           | x   | x      |           |        |                  |            | x          | x            |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 974,776            |
| 163 | Prismakova, P. (2018)   | Understanding relationships between public service motivation and involvement in socio political organizations: Perspectives of organizational field theory  | PA       | Poland & Belarus | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 174 & 210          |
| 164 | Andersen, L.B., Jorgensen, T.B., Kjeldsen, A.M., Pedersen, L.H., & Vrangbaek, K. (2012) | Public Values and Public Service: Motivation: Conceptual and Empirical Relationships   | TARPA    | Denmark          |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 501                |
| 165 | Taylor, J. (2010)   | Public service motivation, civic attitudes and actions of public, nonprofit and private sector employees   | PA       | Australia        |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 2274               |
| 166 | Cheng, K-T., Chang, Y-C., & Lee, C. (2020)  | The Effect of Public Service Motivation at Individual, Group, and Organisational Levels of Citizenship Behaviour   | IRMU     | Taiwan           |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 | x               |     |               |             |             |              |         |            |                       |        | 1087               |
| 167 | Shim, D.C., & Faerman, S. (2017)  | Government Employees' Organizational Citizenship Behavior: The Impacts of Public Service Motivation, Organizational Identification, and Subjective OCB Norms | IPMU     | Korea            |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 | x               |     |               |             |             |              |         |            |                       |        | 452                |
| 168 | Liu, B., Yang, K., & Yu, W. (2015)  | Work-Related Stressors and Health-Related Outcomes in Public Service: Examining the Role of Public Service Motivation  | ARPA     | China            | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          |                |     |                   |    |               |             |                 |                 |     |               |             |             |              |         |            | x                     |        | 412                |
| 169 | Riba, C., & Ballart, X. (2016)  | Public Service Motivation of Spanish High Civil Servants: Measurement and Effects  | REIS     | Spain            |             |     | x      |           |        |                  |            |            |              |          |             |              |           |            |          | x              |     |                   |    |               |             |                 |                 | x   |               |             |             |              |         |            |                       |        | 423                |
| 170 | Naff, K.C., & Crum, J. (1999)   | Working for America Does Public Service Motivation Make a Difference?  | RPPA     | US               | x           | x   | x      |           |        |                  |            | x          |              |          |             |              |           |            |          | x              | x   |                   |    |               |             |                 |                 |     |               |             |             |              |         |            |                       |        | 9710               |
| 171 | Ritz, A., Giaque, D., Varone, F., & Anderfuhren, S. (2009)                              | Leadership and Extra-Role Behavior in Public Sector: The Effect of Public Service Motivation   | CONF     | Switzerland      |             |     |        |           |        |                  |            |            |              |          |             |              |           |            | x        |                |     |                   |    |               |             |                 | x               |     |               |             |             |              |         |            |                       |        | 8086               |
| 172 | Andrew, S.A., & Leon-Cazares, F. (2015)   | Mediating Effects of Organizational Citizenship Behavior on Organizational Performance: Empirical Analysis of Public Employees in Guadalajara, Mexico        | EQ       | Mexico           |             |     |        |           |        |                  |            |            |              |          |             |              |           |            |          |                |     | x                 |    |               |             |                 | x               |     |               |             |             |              |         |            |                       |        | 1016               |

**KEY:**

| Journal   | Abbreviated |
|---|-------------|
| Administration & Society  | A&S         |
| American Journal of Health Behavior                                       | AJHB        |
| American Review of Public Administration                                  | ARPA        |
| American Sociological Association   | ASA         |
| Australian Journal of Public Administration                               | AJPA        |
| BMC Health Services Research  | BMCHSR      |
| British Journal of Management   | BJM         |
| Business Perspectives and Research  | BP&R        |
| Cardiff University  | CU          |
| Chinese Management Studies  | CMS         |
| Conference paper (unpublished)  | Conf        |
| EconoQuantum  | EQ          |
| Evidence-based HRM: a Global Forum for Empirical Scholarship              | E-BHRM      |
| Frontiers Research Foundation   | FRF         |
| ICSSSM International Conference on Service Systems and Service Management | ICSS&SM     |
| Information Resource Management Journal                                   | IRMJ        |
| International Conference on Management Science & Engineering (17th)       | ICMS&E      |
| International Journal of Manpower   | IJM         |
| International Journal of Productivity and Performance Management          | JP&PM       |
| International Journal of Psychology                                       | JP          |
| International Journal of Public Administration                            | JP&A        |
| International Journal of Public Sector Management                         | JP&PSM      |
| International Public Management Journal                                   | IPMJ        |
| International Research Society for Public Management                      | IRSM        |
| International Review of Administrative Sciences                           | IRAS        |
| International Review of Public Administration                             | IRPA        |
| Journal for Public & Nonprofit Services                                   | JP&NS       |
| Journal Ilmu Pemerintahan   | JIP         |
| Journal of Business Ethics  | JBE         |
| Journal of Public Administration and Theory                               | JPA&T       |
| Journal of Public Administration Research                                 | JPAR        |
| Journal of Vocational Behavior  | JVB         |
| Management Decision   | MD          |
| Personnel Review  | PR          |
| Proquest Dissertations & Theses Global                                    | PD&TG       |
| Psychotherapy Research  | PR          |
| Public Administration   | PA          |
| Public Administration Quarterly   | PAQ         |
| Public Administration Review  | PAR         |
| Public Management Research Association Conference                         | PMRAC       |
| Public Management Review  | PMR         |
| Public Money & Management   | PM&M        |
| Public Organisations Review   | POR         |
| Public Performance & Management Review                                    | PP&MR       |
| Public Personnel Management   | PPM         |
| Public Policy and Administration  | PP&A        |
| Review of Public Personnel Administration                                 | RPPA        |
| Revista Espanola de Investigaciones Sociologicas                          | REIS        |
| Social Behavior and Personality   | SB&P        |
| The International Journal of Human Resource Management                    | TJHRM       |



