Perceived Proximity to Decision-Making Within Organizational Hierarchy: How Public Service Motivation Moderates Its Effect on Employee Job Satisfaction and Engagement of Federal Agencies in Australia and the United States

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ABSTRACT

This research will discuss the moderating and mitigating effects on employee job satisfaction and employee engagement for employees with public service motivation (PSM) characteristics from the impact of the perceived distance from policy developers and policy implementers. Specifically, the employees of federal agencies in Australia and the United States are assessed for this research. Data for this research will be obtained from the results of existing longitudinal employee surveys. The use of data sets, both from a Westminster parliamentary based systems and the U.S. representative democracy system, will help to increase the level of validation and model applicability.

Aspects of the organizational structure, including fit and culture, are assessed as a combined independent variable. Agency structure is being studied through a lens of employee perception, which provides the framework for job satisfaction and engagement. PSM is evaluated through certain human resource management (HRM) practices which, in turn, act as antecedents.

The outcome of this research is important, as it will provide governments with a better understanding of how their organizational structure affects employee job satisfaction and employee engagement for employees that demonstrate PSM characteristics. Further, the use of HRM actions as PSM antecedents will allow for a more efficient analysis of PSM congruence. In turn, this will allow for a more insightful design of the organizational structure, better hiring protocols, and employee retention.

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Chapter I

INTRODUCTION

The study and research into employee motivation continue to expand in both the amount of research and the complexity of the theories. Federal agencies often attract employees with PSM characteristics. The organizational structure of certain agencies may conflict with PSM employees, thus impacting employee job satisfaction, employee engagement, and successful program goal obtainment. This research will demonstrate the effect of perceived distance to decision-making (the degree of influence employees perceive they have over the decision-making process) in the federal agencies of Australia and the United States on employee job satisfaction and engagement; specifically, for the moderating effect of employees that demonstrate PSM characteristics. Public agencies are the basis for this research because of the importance of providing the desired services and outcomes for the public. Australia and the United States are the basis of this research because of their underlying similarities (both are democratic governments) and their differences, such as the different democratic systems in place and the associated cultural, administrative, and political differences, such as the resurgent use of New Public Management themes. Further, both of these countries are ranked fairly high with respect to their environmental programs. According to the 2018 Environmental Performance Index report, which is jointly produced by Yale University and Columbia University, Australia is ranked 21st and the United States is ranked 27th (Yale Center for Environmental Law & Policy & Columbia University

Center for International Earth Science Information Network, 2018) out of 180 countries for overall environmental performance of the country measured via 24 performance indicators.

The means of how public services are provided have a direct connection to the employees that are entrusted to provide those services. Impacting or adversely affecting employee job satisfaction and employee engagement for employees with PSM (Campbell, Im, & Jeong, 2014) can have negative impacts on the services provided.

PSM, as first discussed by Perry and Wise (1990), is "an individual's predisposition to respond to motives grounded, primarily or uniquely, in public institutions and organizations" (p. 368). Within this theory, employee motivation is important as it helps to satisfy the needs and expectations of an employee and, as in the case of public sector agencies, helps to ensure that the services needed by the citizens are sufficiently delivered (Vaisvalaviciute, 2009). This research will incorporate multiple other theories of employee motivation to help demonstrate the correlation between organizational structure and employee satisfaction and engagement. This includes a discussion about the progression of employee motivation theory that is reflective of the change in production methods of work, which are less effective today because of a far more globally connected and diverse workforce (Rishipal, 2014). Stated differently, the idea of scientific management being applied to work motivation and production as seen in the first half of the 20th century is no longer as viable an approach (Scandura, 2016). This combination and progression of motivational theories allow a more complete methodology to address the value-oriented attitudes of public sector employees (Vaisvalaviciute, 2009). Further, the implementation of these actions may moderate the effect of the organizational structure on employee job satisfaction and employee engagement.

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Organizational structure is a multifaceted area of study that incorporates many different aspects, including the size of the business, the nature of the work, geographical regions, workflow, leadership style, and hierarchy (Rishipal, 2014). This research will focus on agency size, employee position, overall fit, and culture to develop a clearer framework to define the importance of the perceived distance to decision-making, which, in part, can also be described as the distance from the employee to the manager (Rishipal, 2014). Hierarchical structure is defined as how an organization is arranged with respect to its senior managers, middle managers, and staff level employees (Rishipal, 2014), especially for achieving desired tasks and for the flow of communication and subsequent decisions. Overall fit is described as how congruent an employee's (individual) characteristics are to the characteristics of the organization. Li (2015, p. 1) describes culture as "the collective programming of the mind that distinguishes the members of one group or category of people from others" (Hofstede, Hostede, & Minkov, 2010, p. 344), or as "a set of beliefs, values and behaviors commonly held by a society, being derived from social anthropology as a framework for understanding 'primitive' societies" (Kotter & Heskett, 1992. Deal and Kennedy (1982) may best describe culture as the way things are done around here.

While there is not extensive literature on the concept of decision-making perception, there is an argument that the perception of this variable may be more important than the actual distance (Gonda, 2013; Lambert, Qureshi, Klahm, Smith, & Frank, 2017). Another way to address distance to decision-making is influence over power, where the decisionmaking is coming from and what degree of power those decision-makers have (Rishipal, 2014). Further, the influence in affecting these decisions, coupled with the organizational structure (Rishipal, 2014), allows individual employees to frame their perceived distance to decision-making. The fewer levels of bureaucracy there are, the more flexibility there is for decisions (Rishipal, 2014) and the more likely these decisions will support employee job satisfaction and employee engagement for those with PSM. Similarly, there is extant literature that demonstrates the positive effect of making employees feel they are part of the decision-making process (Anderson & Brown, 2010; Greenberg, 1987; Leavitt, 2005; Locke & Schweiger, 1979; Miller & Monge, 1986; Schweiger & Leana, 1986; Wagner & Gooding, 1987). The perceived distance to decision-making can have both a mitigating and moderating effect on the levels of employee job satisfaction and employee engagement, in part, because of the degree of perceived influence in shaping policy and achieving program goals/outcomes. This is not to say that the organizational structure discussion is reserved for the size of the organization or employee position, as the complexity of the structure proceeds far deeper. As an example, the habits of the leadership/managers of the organization can directly mitigate the effects on the employees (Nekola & Kohoutek, 2016; West & Berman, 2011).

In addition to the "physical" organizational structure, Kumar (2015) discusses the six types of organizations as originally described and expanded on by Mintzberg (1992, 2007) that are based upon three organizational dimensions, which are (1) the part of the organization that plays the foundational role in determining success or failure, (2) the method the organization uses to coordinate its activities, and (3) the degree that subordinates are utilized to make decisions and implement policy. Again, these organizational structural attributes are directly related to employee job satisfaction and employee engagement, and this research will discuss how employees with PSM moderate these variables. Policy implementation is a dependent variable within this assessment. Developing, shaping, and implementing policy are directly correlated to both employee job satisfaction and employee engagement for employees with PSM (Ivanko, 2013). Perceived proximity to decision-making (perceived influence on decision-making) shall be evaluated by the data from the existing employee surveys, specifically for the questions on participation in the decision-making process. This part of the research is not singular in its focus, and a broader spectrum of types of policy implementation and decision-making perceptions will be evaluated.

A robust sample of existing employee surveys from Australia and the United States is used. The data from the sample populations are aggregated (as appropriate) before they are analyzed. Certain agency differences will be collected and used as demographic independent variables.

The outcome of this research is important as it will provide governments with a better understanding of how their agency's organizational structure (perceived distance to decision-making) affects employee job satisfaction and employee engagement for employees that demonstrate PSM characteristics. In turn, this will allow for a more insightful design of the organizational structure, better hiring protocols with a focus on organizationally specific inclusion of employees with PSM, and employee retention. Having a more engaged and satisfied workforce will allow for a more congruent outcome of the agency's goals.

The research questions for this study are the following:

1. Does the organizational structure (perceived proximity to decision-making) affect employee engagement?

- 2. Does the organizational structure (perceived proximity to decision-making) affect employee job satisfaction?
- 3. Does PSM moderate the effects of organizational structure (perceived proximity to a decision-making) on employee job satisfaction and employee engagement?
 The following hypotheses will answer the preceding questions:

HO1: The perceived proximity to decision-making does not affect employee engagement.

HO2: The perceived proximity to decision-making does not affect employee job satisfaction.

Ha1: PSM moderates the effect of perceived proximity to the decision-making on employee engagement.

Ha2: PSM moderates the effect of perceived proximity to the decision-making on employee job satisfaction.

Chapter 2 of this research, the literature review, is divided into five functional areas: employee motivational theory, employee job satisfaction, employee engagement, organizational structure, and the similarities and differences between the federal government systems of Australia and the United States. The approach to explaining motivational theory is a quasi-linear progression that outlines the basic employee motivational theory and then includes specific discussion on Scientific Management Theory, Hierarchy of Needs Theory, Two-Factor/Hygiene-Motivation Theory, Expectancy Theory, Self-Determination Theory, and Public Sector Motivation Theory. The employee job satisfaction and employee engagement functional area discusses both an overview and functional importance of both measures. Finally, organizational structure is discussed with a focus on the overall general structure, decision-making, agency size, and culture and fit. Extant research in these functional areas lays the theoretical framework for the question asked and answered by this research. Chapter 3 will go into detail on the approach and methodology for the research itself, which will include the discussion of utilizing existing employee surveys. Figure 1 represents the linear flow of the analytical framework in this research.



Figure 1: Analytical Framework

Chapter II

REVIEW OF LITERATURE

Motivational Theories

If employees are the engine of an organization, then motivation is the fuel that drives them. "Motivation is the process of energizing behavior by activating people's needs and drives" (Scandura, 2016, p. 169). Increased employee motivation can result in increased performance, which is related to a higher level of employee job satisfaction and employee engagement (Ivanko, 2013). Motivation can present itself in different ways, from intrinsic motivators to extrinsic motivators. Regardless of the origin and nature of the motivation, they are generally rooted in the concept of goals (Ivanko, 2013). The complexity and difficulty of the goals allow for a moderating effect, either negative or positive, on how well the employee is motivated. Too easy or too difficult and the employee is less motivated; striking the right level of complexity will result in a motivated employee (Ivanko, 2013). A foundational point made by Ivanko (2013) is "it is both the perception and the reality of the greater needs associated with a challenging goal that leads to the motivation and commitment to exert more effort" (p. 75). Stated different, perception is reality.

Motivation is a main tenant of PSM and in order to discuss PSM, one must have an overall understanding and appreciation for employee motivation and the progression thereof (Vaisvalaviciute, 2009). There are numerous examples of motivation that affect employees such as money, status, comfort, security, influence, and ego. Decision-making, or rather the amount of influence an employee has over decision-making, addresses and affects many of these motivation variables. Organizations can make hundreds or thousands of decisions of varying types every day. The relational aspects of an organization's decision-making process—which are known by other terms such as organizational structure, organizational hierarchy, span of control, among others—dictate the amount of real and, more importantly, perceived influence an employee has over decisions being made. For this research, decision-making is focused on two aspects of public policy: policy development and policy implementation. How close or rather the proximity (Bates & Peynircioğlu, 2017) an employee is to the decision-making for both aspects of public policy can influence the levels of employee motivation, thus affecting the employee's job satisfaction and employee engagement. Figure 2 demonstrates a generic organizational hierarchy with decision-making conversations using a hub and spoke orientation, which graphically illustrates where and how decisions may be made and the potential proximity that an employee may perceive.



Figure 2: Hub and Spoke Organizational Structure

Public administration research on employee motivation extends back to the early 20th century. The earliest such studies on employee motivation were almost entirely focused on productivity and largely or completely ignored employee job satisfaction and employee engagement. As the United States moved from an agrarian society to an industrialized society, the importance of increased efficiency took hold and, in fact, was a call to action by President Roosevelt (Taylor, 1911). The foundation for what Taylor (1911) termed *scientific management* was his realization that "the search for better, for more competent men, from the presidents of our great companies down to our household servants, was never more vigorous than it is now. And more than ever before is the demand for competent men in excess of the supply" (p. 6). This indicates that efficiency through scientific management.

Taylor's approach to scientific management centered on three points:

- To describe and illustrate the great loss the country was experiencing because of inefficiency
- 2. To propose systematic management as the solution for this malady
- 3. To prove that best management is a science that should be governed by laws, rules, principles, and policies (Taylor, 1911)

F. W. Taylor (1911) identifies some key principles within the concept of scientific management, such as working together in teams, focused job tasks, clear distinction and roles between staff and management, training, and workforce development. Another important tenet of scientific management is that workers, left to their own devices, tend to do as little work as they have to unless they are led to do otherwise. With a century having passed since the publication of F. W. Taylor's *Principles of Scientific Management*, the

concept of work productivity has grown extensively to include multiple related principles such as employee motivation and organizational behavior (Scandura, 2016).

The Hawthorne experiments (also termed the Hawthorne effect), is a welldocumented and somewhat disputed example of applied scientific management with an unforeseen result (Denhart & Catlaw, 2015; Scandura, 2016). The original study by Elton Mayo took place at the Western Electric Company near Chicago. The goal was to evaluate the effects of changes in lighting within the plant. The study had a control group of employees whose work lighting was not touched or changed at all and an experimental group that had changes made to their work environment. The experimental group had their lights dimmed, which was expected to show a decrease in productivity. However, this test group actually had an increase in productivity. As the data were evaluated, it was determined that the lighting had far less to do with productivity than interaction and the employees. The attention the researchers paid to the employees while changing the lighting and work environments was appreciated by the employees and served to increase their productivity (Scandura, 2016). This study has often been cited as the beginning of employee motivational theory.

Not long after the Hawthorne experiments, Abraham Maslow developed his concepts of intrinsic and extrinsic motivation via his research on the Hierarchy of Needs (Pardee, 1990; Scandura, 2016). While the basis for his research is on human psychology, the implications of his research have been far-reaching. Maslow, through his Hierarchy of Needs Theory, divides motivation into intrinsic and extrinsic (Pardee, 1990).

As depicted in Figure 3, people first need to meet their most basic, life-supporting requirements, expressed as food, water, warmth, and rest (Pardee, 1990; Rabinowitz, 2016b;

Scandura, 2016). Once these minimal life-supporting needs are achieved, people require or at least want safety. This is followed by the desire and need, socially, for close relationships with friends and family; this is considered the next higher order of needs on Maslow's pyramid (Pardee, 1990; Rabinowitz, 2016a, 2016b). Esteem, a feeling of importance, is the next progression of basic human needs. The pinnacle of Maslow's pyramid is when a person achieves their ultimate level of happiness by the culmination of meeting their highest potential of achievement (self-actualization) (Pardee, 1990; Rabinowitz, 2016a, 2016b).



Figure 3: Maslow's Hierarchy of Needs *Source:* http://www.simplypsychology.org/maslow-pyramid.jpg

A debated aspect of Maslow's hierarchical needs theory, which is often viewed as one of its major flaws, is that each level of need must be achieved in sequential order. However, Maslow's presumption that as each lower-level order need is met, the next higher need becomes the determining behavioral factor, is more widely accepted (Pardee, 1990; Rabinowitz, 2016b).

The transition from psychology to public administration comes from transferring the underlying theories of Maslow to individuals within a work setting. Evaluating each level of need as it relates to management/professional motivation, we find Figure 4 to be a potential interpretation of Maslow's original work (Rabinowitz, 2016b).



Figure 4: Maslow's Hierarchy of Needs Applied to Employees

From an employee motivational perspective, employees first need to have gainful employment, which is closely followed by having a satisfactory level of salary and benefits, along with job security (Pardee, 1990; Rabinowitz, 2016b). Following this, having a work environment that allows and even encourages social interactions results in a feeling of belonging (Pardee, 1990; Rabinowitz, 2016b). Social interactions can lay a strong foundation for both social belonging as well as institutional belonging, although this is not guaranteed. "Belonging to an overall purpose is a component of esteem, which also includes job satisfaction, making a difference, understanding organizational goals and feeling important" (Rabinowitz, 2016b, p. 7). Once again, the pinnacle of the pyramid is self-actualization, but within the professional setting this is defined as achieving one's professional maximum potential, helping the organization to the maximum extent practicable, and having the intrinsic knowledge that one is utilized to one's fullest capacity (Pardee, 1990; Rabinowitz, 2016b).

Frederick Herzberg continued the work completed by Maslow and, in so doing, developed his Motivation-Hygiene Theory, which more formally translates Maslow's Hierarchy of Needs into a work function theory. The hygiene factors are in essence the same as Maslow's extrinsic motivations (the must-haves) (Pardee, 1990; Rabinowitz, 2016a, 2016b). Examples of hygiene factors are company policies, supervision, working conditions, interpersonal relations, salary, benefits, status, job security, and personal life (Rabinowitz, 2016a). The motivation factors are similar to the intrinsic motivations discussed by Maslow (the wants) (Pardee, 1990; Rabinowitz, 2016a, 2016b) with examples of motivational factors being achievement, recognition, work itself, responsibility, advancement, and growth (Pardee, 1990; Rabinowitz, 2016a).

One of the more substantial differences between the two theories is that Herzberg's Motivation-Hygiene Theory allows for motivations to be achieved in a nonlinear fashion (Pardee, 1990; Rabinowitz, 2016b). Further, the Motivation-Hygiene Theory states that the hygiene components are required for an employee to not be dissatisfied with their work situation while the motivation components are required if an employee is to achieve extreme satisfaction with their work situation (Broedling, 1977; Pardee, 1990; Rabinowitz, 2016b). "The concept of intrinsic and extrinsic factors is a theoretical bridge between Maslow and Herzberg" (Rabinowitz, 2016a, p. 7) that helps provide a level of independent distinction to

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employees' needs versus employees' wants (Broedling, 1977). Evaluating the hygiene factors further, the focus on employee satisfaction can be found in the following three factors:

- Experiencing the meaningfulness of the work itself
- Experiencing the given responsibility for the work itself and its associated outcomes
- Knowledge of the final results and performance feedback

(Pardee, 1990; Rabinowitz, 2016a)

The inclusion of intrinsic factors (Maslow) and/or motivation factors (Herzberg) functions to progress the broadening discussion of employee motivation and satisfaction through McGregor's Theory X and Theory Y. Theory X (which McGregor did not agree with) proposes that employees are lazy and only work for a paycheck, which results in a productivity focus of management (scientific management). Theory Y suggests a progression from Maslow and Herzberg that focuses on employee needs (Denhart & Catlaw, 2015; Pardee, 1990; Rabinowitz, 2016a). These needs include the following:

- Physical and mental efforts are natural actions for employees.
- Employees will often exercise self-directing behaviors and self-control to achieve organizational objectives.
- Employee commitment to these objectives is correlated to the rewards associated with their achievements.
- Most employees learn to seek out additional responsibility.
- Most employees have the capacity and desire to use a high degree of imagination, ingenuity, and creativity to solve the organization's problems and assist in goal obtainment.
- Most employees are not having their intellectual potential fully utilized.

(Denhart & Catlaw, 2015; Rabinowitz, 2016a)

The pursuit of these needs complements and extends Maslow's concept of self-actualization (Pardee, 1990).

Employee motivation and satisfaction, as shown, are part of an intricate web of intrinsic and extrinsic factors that differ for different people. Not all theories are simply tied to employee motivation and the assumption that all public sector employees are altruistic (Li, Kirkman, & Porter, 2014). Victor Vroom, via his Expectancy Theory, describes the different motivational factors of people (employees). The foundation of Expectancy Theory is that employees will work harder because they foresee a just reward that is of adequate and acceptable personal value to them (Rabinowitz, 2016b; Scandura, 2016). One of the more interesting correlations is that an increase in effort equates to an increase in activity, which ultimately means an increase in production (Rabinowitz, 2016b). This is a reminder that employee motivation is not simply to make employees happy but to achieve a desired outcome (production), perhaps laying the groundwork for a shared goal-setting approach. Within formal organizational settings, this equates to the tenet that trying harder (expectancy) will pay off for the employee. However, this payoff should not be construed to mean just money or benefits (extrinsic motivation); it can also be addressed by higher-level intrinsic motivation factors such as freedom, trust, creative expression, influence over decisionmaking and outcomes, and these payoffs need to be desirable to the individual employee (Rabinowitz, 2016b; Scandura, 2016). This speaks to customization of the motivational factor and that the leadership messaging must allow for this variation. Leadership messaging, in this context, is expressed by a clear messaging of an organization's mission, vision, values, and support (Deschamps, Rinfert, Lagacé, & Privé, 2016; Rabinowitz, 2016b).

Vroom's use of the normative decision-making model (Scandura, 2016) and the leadership behind the decision-making process (individual consultation, group consultation, facilitate or delegate) provides a basis for incorporating motivational theory into organizational goal achievement. Over half of all decisions (Scandura, 2016) fail within two years, most often because they have failed to properly involve the input of key stakeholders, including internal employees. Seeing that organizational outcomes are largely based on employee buy-in, the proper degree of employee involvement and influence within a decision-making framework is imperative (Scandura, 2016).

Mission valence within Expectancy Theory stresses the importance of decisionmaking and employee involvement to help produce the desired organizational outcomes. Valence, within this theory, refers to the level of importance an individual places on the expected outcome (Caillier, 2015) and addresses both the employee's expected outcome for their effort and the organization's expected goal outcome. Mission valence is the combination of these—where the organization's goals (mission) satisfy the employee's values and goals and is an acceptable outcome (intrinsically) for their efforts (Caillier, 2015; Rainey & Steinbauer, 1999; Vroom, 1964). The organization's mission, goal, and related decision-making process can be a realized reward for an employee's efforts (outcome expectancy), which in the case of the public sector may very well be an individual with characteristics of PSM. The individual employee rather than the organization, however, may more so determine the amount or quality of the reward.

Self-Determination Theory builds on the concept that rewards do not necessarily have to be extrinsic in nature and may be demotivating if they are (Deci, Ryan, & Koestner, 1999; Scandura, 2016). Self-Determination Theory established that a person's motivation is based upon an intrinsic measure where autonomy and competence are the driving factors (Deci et al., 1999; Ryan & Deci, 2000; Scandura, 2016), where the rewards for the employee's effort is purported to be based upon a level of support rather than a controlling type of reward. Further, a more paramount aspect to supporting both Expectancy Theory and PSM, the "reward," in this case, substantive feedback, should be in the form of open and productive communication, which furthers the ultimate organizational mission and goals. This acts as the propelling motivation for the employee and supports the characteristics of PSM when placed within the public sector (Scandura, 2016). The value placed upon the inclusive participation and contribution of the employee satisfies the intrinsic motivational needs of the employee.

Self-Determination Theory, as has been established, is built upon three needs: (1) autonomy, (2) relatedness, and (3) competence (Ryan & Deci, 2003; J. Taylor, 2014). The needs can act as a mediating or a moderating effect on PSM to employee job satisfaction in response to the need for competence by self-assessing one's work (J. Taylor, 2014). Further, how the employee is given autonomy, and the expected effort is congruent to the employee's intrinsic needs, allows for the mitigating or moderating effects of Self-Determination Theory on an employee with PSM characteristics. Stated differently, the satisfaction of employees with characteristics of PSM, their need for autonomy, their need to relate to the organizational mission and goals, and their need for competence impact their overall level of job satisfaction.

These needs, especially with employees that have characteristics of PSM, often manifest themselves with parallel public values (at least pro–public sector values) and prosocial behaviors that have defined outcomes that benefit the public (Andrews, 2016). The context of the work, its value, and how it can be completed all impact the employee's job satisfaction, in part because of self-determination (Andrews, 2016). The manner of how they can satisfy the three needs of Self-Determination Theory is exemplified by the "opportunity to self-regulate their work through empowerment and participatory decision-making" (Andrews, 2016, p. 245). The ability to influence the decision-making process feeds into the employee's intrinsic motivation based on the employee's expectancy of self-defined rewards for his or her effort. The reward, in the case of employees with PSM, can in part be defined as an intrinsic drive based on a desire for civic duty and to help the general public by the placement of a value-oriented approach to public service (Vaisvalaviciute, 2009; Vandenabeele, 2008).

Public Service Motivation (PSM) is theorized to be a driving motivational force of many public sector employees (S. Kim et al., 2011; Perry, 1996; Perry & Porter, 1982; J. Taylor, 2014; Vaisvalaviciute, 2009; Vandenabeele, 2008). PSM should not be confused with Public Sector Motivation, which can include a different set of motivators such as job security, benefits, work–life balance, and advancement through training (Battaglio, 2015; Perry & Hondeghem, 2008). Interestingly, although there is wide support for the theory of PSM, there is not a completely unified definition of what PSM is or what specific characteristics employees must show to be placed under the PSM umbrella. Vaisvalaviciute (2009) provides a detailed and broad overview of the prevailing theories of PSM.

PSM is an individual's predisposition to respond to motives within the public sector (Perry & Wise, 1990). The primary motives of PSM are instrumental or rational, norm-based, and affective.

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- 1. Instrumental or rational motives, where an individual believes that their motives are congruent with that of the majority of the population
- 2. Norm-based motives, where an individual's desires are to serve the public and the public interest and often display loyalty to the government, patriotism (which can be different than support for a political administration), and duty
- Affective motives, where the individual desires and has a willingness to help others (Brewer, 2002; Perry & Wise, 1990; Vaisvalaviciute, 2009)

Through additional research and analysis, other motives have been suggested that explain PSM, including the attractiveness of policy and the desire to participate in it, commitment to public interest, compassion, and self-sacrifice (Perry, 1996; Vaisvalaviciute, 2009). However, there is not a universal agreement to these motives. Others, such as Brewer (2002) and Vandenabeele (2008) evaluate individual conceptions of PSM and the manifesting characteristics (Vaisvalaviciute, 2009). These include the following:

- 1. Samaritans are described as the self-defined saviors of the at-risk population.
- 2. Communitarians are driven by a sense of civic duty.
- 3. Patriots put duty above themselves and believe in personal sacrifice.
- 4. Humanitarians are righteous in the pursuit and belief in social justice.

Vaisvalavicute (2009) discusses Wise's (1999) propositions of six principles of how PSM supports effective democratic governance.

- 1. The importance and relevance of PSM vary over time.
- 2. PSM is strongly related to organizational context and environmental factors, which affect the organization's goal achievement.
- 3. "PSM is positively related to quality and effectiveness of task performance."

- 4. People with PSM will tend to look past rewards for achieving short-term efficiency metrics for the more laborious effort of educating the greater public.
- 5. People with strong PSM often rely on the application of personal values to ultimately achieve the organizational goals.
- 6. People with PSM tend to engage in administrative tasks with a bias toward implementing innovative solutions.

There is further debate on the incorporation of altruism within the motivation framework of PSM. Rainey and Steinbauer (1999) strongly include altruism as a central tenet of PSM, whereas Vandenabeele (2008) believes this is too general a definition and crosses into both political and ideological realms. This supports Wise's inclusion of personal values. The paradox of altruism cannot be completely ignored with the rational argument that if altruism satisfies a person's ego, as Plato stated, people are most happy when they live up to their rational potential (Somerville & Santoni, 1963). They are not engaging in the activity because it is the clearly the best for society but because in doing so they are satisficing their own need to give.

Wise (1999) discusses the influence that the organizational context, external environmental factors, and organizational goals have on interactions with employees that have PSM characteristics. This is supported by the idea that public service organizations, through their policies, procedures, goals, and governance, can help to foster PSM (Moynihan & Pandey, 2007; Wright & Pandey, 2008). However, the inverse also holds true in that an employee with PSM will probably choose to work in an environment that they believe supports their interests and needs, which acts as a motivator (Vaisvalaviciute, 2009). Further, as also stated by Wise (1999) and Vaisvalaviciute (2009), changing environments (internal and external to the work organization) may cause the employee to reassess their priorities, values, and needs. To draw a parallel to chemistry, this is not unlike having to balance an equation where the addition of electrons (–) will cause a change in the movement of protons (+) to offset and equalize the change in charge to create a stable environment. This supports the idea that PSM characteristics and influences within any given organization are not static. As will be discussed later within this research, this dynamic aspect to organizations may be moderated by PSM.

Measuring PSM within a given person or organization is difficult because of changing variables, not unlike the Heisenberg Theory (to keep with the scientific analogies), as the speed and position of a particle, or in this case PSM, is never static. Measuring and assessing PSM have often been conducted by surveys utilizing one of Perry's PSM scales; however, it is plausible to assess some HRM practices, which act as antecedents to PSM (Giauque, Anderfuhren-Biget, & Varone, 2013). Specifically, job enrichment, participation, individual appraisal, and professional development, which are all intrinsic work motivators, show positive PSM association; further, fairness, which is an extrinsic work motivator, also shows positive PSM association (Giauque et al., 2013). Thus, the use of these practices by an organization or the employee's recognition of the practices being positively employed by an organization supports the concept of treating these practices as viable antecedents. These antecedents should not be not be confused with the five sets of PSM correlates: parental socialization, religious socialization, professional identification, political ideology, and individual demographic characteristics (Perry, 1997) although there may be some minor overlapping, such as professional development (Giauque et al., 2013; Perry, 1997).

Moynihan and Pandey (2007) highlight the findings of Perry (2000) where the PSM is not just associated with rational choice but is also rooted in normative and affective motives. These, as Perry discusses, are based within a sociohistorical perspective. Organizations impact PSM via aspects of group culture, development culture, hierarchical culture, rational culture, red tape, reform orientation, hierarchical authority, and length of organizational membership; all are part of the overall equation that affects, both negatively and positively, PSM (Moynihan & Pandey, 2007). Related, the overall work environment, organizational beliefs, values and ideologies (as partially manifested in its culture), and job characteristics all influence PSM, as do personal characteristics (J. Taylor, 2014). This supports the theory that proximity to decision-making, within the overarching concept of organizational institutions, interacts with how PSM relates to job satisfaction. The decisionmaking itself depends upon the specific organization. One aspect that transcends the specific organization is the concept of principal-agent relationships, which encompass all levels of government from citizen to politician, from politician to high-level bureaucrat, from highlevel bureaucrat to mid-level manager, and so on, until it reaches the lowest level of employees that produce or, rather, deliver the services to the public (Moe, 1984). It is at this level of service delivery that the impact and effect of PSM are greatest as the employees within the delivery levels of bureaucracy tend to be more motivated by extrinsic and nonmonetary factors (Moe, 1984; J. Taylor, 2014).

Service delivery supports PSM as increasing levels of PSM support pro-social behaviors (S. Kim et al., 2011). It is in part because of this that the fluid nature of PSM is relevant when evaluating the mitigating effects it has on decision-making proximity (S. Kim et al., 2011). Further, S. Kim et al. (2011) point out the importance of shared values (again placing a focus on the value-oriented aspect of the delivery of public services) as it increases the PSM and "that PSM can be learned and fostered through the provision of public services and recognition of the impact of these services on others' well being" (p. 727). This concept is not completely agreed upon across the literature as others believe the degree of PSM is more intrinsic to the individual and less likely to be impacted from external forces (S. Kim, 2012; Perry & Wise, 1990). This is not to say the mitigating impact of PSM on work attitude is not able to fluctuate, especially based upon the person-organization (P-O) fit.

Related to the concept of P-O fit is valence (Vroom, 1964) and mission valence (Caillier, 2015; Rainey & Steinbauer, 1999). Vroom's concept of valence is tied to the level of importance an employee places on expected outcomes, which is a foundational aspect of Expectancy Theory and supports the concept that PSM is an extension of and progression from it (Caillier, 2015). Mission valence is the "summation of its societal contribution" (Caillier, 2015, p. 1220) and can be found to be attractive or unattractive to employees and potential employees. This attractiveness can directly become a motivating force. Decisionmaking, and the proximity to it, can be included within the overall employee expectation, that is, mission valence.

Related to this aspect of mission valence, an emphasis on efficiency is shown to increase employee turnover; however, higher levels of PSM have been shown to moderate this impact (Campbell et al., 2014). Because materialistic extrinsic rewards are less of a concern with employees with PSM, the offset from pressure for increased efficiency is a tangible increase in public value/benefit (Campbell et al., 2014; Scott & Pandey, 2005). Concurrently, this relates to perceived proximity to decision-making as employees with higher PSM maintain a feeling of some control through the red tape and bureaucratic processes, whereas those with less or no PSM feel as they have no or little control over the same (Campbell et al., 2014). Thus the focus on efficiency, if it can be related to an increase in public value, is tolerable for employees with PSM (Campbell et al., 2014).

New Public Management

Public sector employees are under increasing pressure to show the value of what they do. A quick review of newspaper and cable news programs, along with political debates and pundit discussions, shows that there is still a perception of the government as the enemy (Hilton, 2018), and a "do more with less" attitude still reigns as evidenced by comments like "We don't need government to live" and "I'll bet at least half those 'essential' government workers are no such thing—let the market sort out whether they're useful" (Stossel, 2018). New Public Management (NPM) saw an increase in popularity in the 1980s and 1990s with a mantra of "Run government like a business" and measure the outcomes by performance metrics and efficiency ratings (Andrews, 2016). NPM began to wane in popularity and public service, increased public value, and meeting desired outcomes became the greater focus (Andrews, 2016; Scandura, 2016). However, NPM is having a bit of a resurgence and this is once again placing increased pressure on public sector employees to justify and show the public value they bring via metrics and efficiency (Andrews, 2016; Ritz, 2009). It is the competing goals of public value, increased efficiency, maintaining historical and organizational knowledge, focus of servant leadership, engaged employees, satisfied employees, and participatory decision-making (Andrews, 2016) that is forcing public sector management to better understand the relationship between outcomes and outputs and how to keep current employees focused on and motivated to produce the services the public needs. Some aspects of PSM, specifically a "great interest in public service," show a positive

relationship to an increase in internal efficiency (Ritz, 2009). Conversely, employees with a higher affinity for public policy do not show the same positive relationship to goal orientation or an increase in internal efficiency. The type of leadership within these organizations is also highly influential. Transformational leaders, and leaders that focus on employee development and provide feedback, also show a positive correlation to increased efficiency of employees with PSM characteristics like interest in public service (Ritz, 2009). The size and span of control of the organizational units, which is related to organizational structure, further indicates a positive correlation to NPM and PSM (Ritz, 2009). This all tangentially suggests that the perceived influence on decision-making, because of how timely a decision is made and the level of the person making the decision, is part of the overall equation (Ritz, 2009).

As stated above, NPM is seeing a resurgence in many countries, including the United Kingdom, Ireland, Italy, China, India, and Australia, because of a renewed focus on austerity measures, nationalism, and populism (Chandler, 2014; Chowdhury & Shil, 2016; Johnston, 2000). It has even been asserted that NPM has never fully gone away and, to some degree, has been kept alive and well, especially in the United Kingdom (Hyndman & Lapsley, 2016) and Australia (Chowdhury & Shil, 2016; Johnston, 2000). The support stems from attributes of a right-of-center political environment, which includes the following actions (Hyndman & Lapsley, 2016):

- 1. Unbundling the public sector into units organized by their product
- 2. Increase in contract-based provisions that rely on market drivers such as competition
- 3. Private sector management styles
- 4. Fiscal discipline and frugality on resource expenditures
- 5. Hands-on senior management approach
- 6. Explicit measures of performance and success
- 7. Increased focus on output controls

These attributes, while specifically for the United Kingdom, can certainly be observed in other countries, including those within the European Union (EU). The foundation of the EU allows for policy diffusion across geopolitical boundaries (Esposito, Gaeta, & Trasciani, 2017). Again, the NPM type focus comes with an increase of right-of-center politics, where the focus is first on the political state and second on the administrative state (Esposito et al., 2017). NPM has shown resilience in Australia and New Zealand (O'Donnell, O'Brien, & Junor, 2011). Within these two countries, there has been a struggle to balance the principles of NPM with public sector unions. This balance has been within a homeostatic state of constant flux that ebbs and flows based upon which ruling party is in power and the state of the economy (O'Donnell et al., 2011).

Job Satisfaction and Employee Engagement

Scandura (2016) describes two outcome variables related to work-related attitudes; these are employee job satisfaction and employee engagement. Job satisfaction is defined as "the totality of an employee's feelings about the various aspects of his or her work; an emotional appraisal of whether a job lives up to an employee's values" (Shafritz, Russell, & Borick, 2013, p. 294). Employee values, as it has already been shown, are included within PSM (Wise, 1999) as well as being included within the overall organizational fit (Kotter & Heskett, 1992). Employee job satisfaction differs from employee engagement; employee engagement is defined "as a relatively enduring state of mind refers to the simultaneous investment of personal energies in the experience or performance of work" (Scandura, 2016, p. 12). These work-related attitudes can provide the magnitude for the implementation of an employee's effort based on PSM. Stated differently, PSM is the driver to do the type of work, whereas employee job satisfaction and job engagement affect the quality and quantity of the work outcome.

Job satisfaction has direct implications for productivity (higher), organizational commitment (greater), absenteeism (lower), and employee turnover (lower), all of which culminate in organizational effectiveness (Ellickson & Logsdon, 2002). This is all to say that increased job satisfaction positively impacts organizational effectiveness (Ellickson & Logsdon, 2002). The relationship to one's supervisor has been shown to impact an employee's job satisfaction; however, it should be noted that most demographic variables do not play a statistically important role in job satisfaction (Błoński & Jefmański, 2013; Ellickson & Logsdon, 2002). In addition to the supervisory relationship, the stability of professional development, material working conditions, and collaboration in the providing of services all impact employee job satisfaction (Błoński & Jefmański, 2013). These variables are also related to the position held within the organization, which indicates the different proximity to decision-making within the specific organizational structure.

Employee job satisfaction is driven by many variables, as already discussed. Values of the organization, which can be expressed as the organizational culture, are related to organizational leadership behavior, which, in turn, is correlated to job satisfaction (Tsai, 2011). One aspect of leadership behavior is communication, especially as related to goals and decision-making. This is where the proximity to the decision can take on a dimensional perspective. This means that proximity to the decision-making and the ability to influence a decision (Bates & Peynircioğlu, 2017) is partially dependent on the leader's ability and desire to communicate (Błoński & Jefmański, 2013). One example of this type of communication is termed Leader-Member Exchange (LMX) (Matta, Scott, Koopman, & Conlon, 2015). LMX provides one avenue to expound on an organization's mission, vision, and values (Rabinowitz, 2016a). This communication allows for the member (employee) to determine if the organization's values align with their own, thus increasing the mission valence (Caillier, 2015; Rainey & Steinbauer, 1999; Vroom, 1964). Congruency between the employee and the organization's values increases the employee's job satisfaction (Tsai, 2011).

PSM is often confused with simple altruism although the extant literature already described clearly shows that PSM involves far more than simple altruism. Altruism is just one variable that impacts intrinsic motivation. However, there are some extrinsic variables that play a role as well. A recent study indicated that pay is still a major concern as it is related to employee effort (Leider, Harper, Shon, Sellers, & Castrucci, 2016). This supports Vroom's Expectancy Theory in that an employee's perception of their efforts is directly related to their perception of their worth. In this example, an intrinsic variable affects an extrinsic variable of employee motivation. This impact on job satisfaction, as indicated by this study, manifests itself in a statistically significant plan to leave the organization (40%). The study by Leider et al. (2016) indicates future research is needed that supports the direction of this research. Specifically, "it may be worth exploring supervisor versus nonsupervisory differences, and why organizational satisfaction is frequently higher than job satisfaction" (Leider et al., 2016, p. 1787). The difference between supervisors and nonsupervisors may, in part, be explained by the proximity to decision-making.

The focus of the organizational goals as related to an increase in efficiency also indicates a negative relationship to employee job satisfaction (Campbell et al., 2014). However, research indicates that employees with higher PSM are less likely to be as affected by demands for increased efficiency, especially when they can see, understand, and buy into the organization's goals and values; as long as the employee also feels they have "some level of control" over the process (Campbell et al., 2014). This level of control, as will be discussed later in this research, is partially dependent on the employee's proximity to decision-making.

The relationship with the public that is served is an important aspect of PSM. More so than just the relationship is the realized impact of the work on the public. Contact with the citizen is less important to employees with PSM than the realized or perceived impact (J. Taylor, 2014). Table 1 shows the interactions of these variables on the employee. Table 1: Job Contact and Interaction

	PSM	Job Satisfaction
Job Impact	+	+
Job Contact	+/-	-

The impact of the job is positive for both employees' PSM and their job satisfaction. However, the interaction of job contact (contact with the end-user of the service) is more mixed as it can be positive or negative on PSM, and research indicates that it tends to be somewhat negative on overall job satisfaction. The reasons for this are complex and are not salient for this particular research. The main point is that job impact and job contacts are included to help frame the importance of proximity to both decisions being made and to the service-level outcome. PSM is significantly correlated to employee job satisfaction (Li, 2009; Zhu, Wu, & Yan, 2014). As can be expected, although not really discussed in detail within this research, is how the underlying culture also interacts with PSM. As an example, the research conducted by Zhu, Wu, and Yan (2014) focuses on provincial governments within China, where Confucianism is an underlying part of the culture, whereas the main focus of this research is on countries that operate under the Westminster form of government (Australia) (Lijphart, 2012) and the non-Westminster form of government (United States).

As stated, employee engagement is summarized by the magnitude of personal energy an employee devotes to performing their job. Using more common vernacular, is an employee bringing a lot of energy and "knocking it out of the park," or are they just sort of "mailing it in?" The following exchange is a satirical example of employee engagement as it intersects with employee motivation (Judge, 1999):

Peter Gibbons: The thing is, Bob, it's not that I'm lazy, it's that I just don't care.

Bob Porter: Don't ... don't care?

Peter Gibbons: It's a problem of motivation, all right? Now if I work my ass off and Initech ships a few extra units, I don't see another dime; so where's the motivation? And here's something else, Bob: I have eight different bosses right now.

Bob Slydell: I beg your pardon?

Peter Gibbons: Eight bosses.

Bob Slydell: Eight?

Peter Gibbons: Eight, Bob. So that means that when I make a mistake, I have eight different people coming by to tell me about it. That's my only real motivation is not to be hassled; that, and the fear of losing my job. But you know, Bob, that will only make someone work just hard enough not to get fired. Clearly, the exchange depicted in the film *Office Space* (Judge, 1999) is not directly based on peer review research, but it does anecdotally encapsulate the importance and power of employee engagement and motivation.

Employee engagement is partially dependent on the effectiveness of the employee to see their efforts realized as a positive benefit, which, in the case of public sector employees, is delivering a service to the public they serve (Ben-Ner & Ren, 2008). The higher the level of PSM, the more likely the employee will be to engage in pro-social behaviors and deliver the public services (S. Kim et al., 2011). An increase in the employee's perceived job significance (S. Kim et al., 2011) and how the public services provided by the employees are allocated for delivery positively impact intrinsic motivation and employee engagement (Ben-Ner & Ren, 2008). Similarly, the employee task and contexts of performance, which are related to decision-making, allow for a significant positive correlation between PSM and employee engagement (Li, 2009). The delivery allocation (i.e. who delivers the service and, to a lesser degree, how it is delivered) (Ben-Ner & Ren, 2008) is, in part, based on the employee's perception of where they see themselves within the overall organizational structure from a control/input standpoint (Georgescu, 2011). This is an adaptation of Miles' Law: Where one stands depends on where one sits. In this case, how engaged an employee is depends on where they perceive themselves within the organizational framework.

The organizational framework (also organizational structure and organizational hierarchy) impacts an employee's engagement because of the employee's location within the organization. This suggests that a flat organization may afford more direct employee influence, whereas a taller hierarchy may cause more stratification and isolation (Anderson & Brown, 2010). In addition to the organizational structure, the culture of an organization

affects employee behaviors, including employee engagement and overall motivation (Li, 2015). Further, the "power distance" (Hofstede et al., 2010; Li, 2015) provides the stage for the discussion of the power or, rather, the power inequalities based upon where, within society or in this case, an organization, an employee is located or perceives themselves to be located. Beyond the organizational framework, the organizational culture and the prime coordinating mechanisms (coordination of activities) are also variables that affect employee engagement and motivation (Kumar, 2015).

Related to organizational hierarchical structure is the size of the organization. While they are many different definitions for what constitutes a small, medium, or large organization with respect to the number of employees, there is a correlation between size of the organization and numerous organizational values (Westwood & Posner, 1997). Further, foundational research clearly indicates that the size of the organization is usually inversely related to job satisfaction (Beer, 1964; Idson, 1990; Kucharska & Bedford, 2019; Su, Baird, & Blair, 2009). It should be noted that most references to job satisfaction and organizational size are implicit in research utilizing organizational size as a control variable; however, organizational size is often combined within other organizational variables. The size of an organization also has a predictable correlation to dimensions of organizational culture (Kucharska & Bedford, 2019). Extant literature indicates that the larger the agency, the lower the degree of job satisfaction, which can also be argued to similarly extend to employee engagement as well (Nimon, Shuck, & Zigarmi, 2016). Interestingly, a review of extant literature shows that organizational size is also utilized as a control variable for research on technological advances in communication. There does not seem to be extensive research of technology mitigating organizational size, which is most likely due to the variable ways and types of technology that can be employed. Some research exists that indicates an indirect correlation when technology directly supports the job function of the employee (Limbu, Jayachandran, & Babin, 2014). Conversely, there is much anecdotal evidence and some research that too much information, an abundance of email for example, lowers job satisfaction (Merten & Gloor, 2009).

Organizational Structure, Culture, and Fit

Employee motivation and employee engagement as influenced by PSM cannot be evaluated within the boundless ether but, rather, should be researched with "structural" boundaries. In the case of this research, these boundaries are the organizational culture, organizational structure, organizational fit, and the decision-making processes that are enacted within the organizations. The structural boundaries influence employee motivation as well as employee job satisfaction and employee engagement because job positions and classification do not exist in a vacuum (Perry & Porter, 1982). Further, the relationship between the organizational structure and employee motivation can be evaluated by (1) individual characteristics, (2) job characteristics, (3) work environment characteristics, and (4) external environment characteristics (Perry & Porter, 1982). Individual characteristics can be partially expressed within PSM. The impact of job characteristics and work environment characteristics are seen in employee job satisfaction and employee engagement. Work environment characteristics are also part and parcel to the decision-making hierarchy.

Organizational structure is "a means to achieve the organization's aim ... how authority and responsibility for decision-making are distributed within the entity" (Ivanko, 2013, p. 218). Organizational structure can also be defined as "the way in which a group of people is formed, its lines of communication and its means for channeling authority and making decisions" (Barahemah, 2015; Gibson, 2011; Verma, 2013). Six main elements comprise organizational structure: specialization of work, departmentalization, standardization, span of control, centralization and decentralization, and chain of command (Ivanko, 2013, p. 218). Span of control and centralization and decentralization are of primary interest to this research as they involve the organization's decision-making process. The nature of the supervision and associated decision-making process can be considered a hygiene characteristic need as described by Herzberg (Ivanko, 2013). This, along with other organizational and institutional variables such as values and commitment, can extrinsically influence employee motivation, especially those within the public sector that have PSM (Arney, 2007).

Mintzberg, as described by Kumar (2015, p. 18), details six types of organizations:

- The entrepreneurial organization—smaller staff with less hierarchy and powerfocused at the very top along with a more fluid division of labor.
- The machine organization—highly specialized for formal communication and routine tasks with a central decision-making construct and clear distinction between management and staff levels. This is somewhat exemplified by the traditional Weberian organization (Barahemah, 2015; Lunenburg, 2012).
- The diversified organization—semi-autonomous division housed under a central senior command. Examples of these are many state environmental agencies where divisions are broken into functional disciplines.
- The professional organization—routine work with a standardized output of goods or services.

- The innovative organization—flexible to the degree where formal bureaucracy is rejected with a low emphasis on control and command. Employing experts with a significant level of authority and placing them in multi-disciplinary teams. The focus is on output, and not formal structure, to get there.
- The missionary organization—the outcome (i.e. the mission) is the most important thing. Passion and enthusiasm are shared across the organization, as is the end goal. There are other types of organizations that have been defined beyond the six

developed by Mintzberg. One such example is the matrix structure where authority and decision are transferred both vertically and horizontally (Barahemah, 2015; Burton et al., 2015; Gibson, 2011; Lunenburg, 2012). This includes the now highly used concept of the dotted line within the organizational chart where an individual is managed in a human resource way by one person, but the project they are working on is managed by a different manager. The type of organization is an important independent variable that helps to set the basis for the perceived distance to decision-making communication and ultimately employee job satisfaction and employee engagement ((Barahemah, 2015; Gibson, 2011; Lunenburg, 2012). Environmental agencies should, in theory, have an organizational structure that both correlates and complements their budget structure and services delivered (O'Hare, 2006), which in turn, should be more congruent to the type of person employed by the agency.

PSM is a result of not only the personal belief and value system of the employee but also the organizational environment in which they find themselves (Moynihan & Pandey, 2007). The organization's impact on PSM comes from multiple areas, such as amount of red tape, goal clarification, clear and enforced values, and most importantly to this research, the ability for the employee to feel they are contributing and that they have the ability to impact the decisions that result from those contributions (Moynihan & Pandey, 2007). It is the combination of the red tape and hierarchical (organizational) structure that frames the authority (and influence) of the employee within that hierarchy. The result is often perceived by the employee based on their interactions and communications with the managers that are above them within the hierarchy. This stresses the importance of the matching of an employee's work goals and the goals of the organization, with a higher level of job satisfaction coming from a positive and congruent matching of goals (Perry & Porter, 1982).

Organizational structure is a complex and often dynamic set of systems. The structure, as already discussed, impacts the employee's perception of where they fit not only within the organization but within the multitude of subsystems (Perry & Porter, 1982). How the organization or sub-organization makes decisions is an integral aspect of the organizational structure with the two major types of decision-making variations being centralized and decentralized (Tran & Tian, 2013). An organization with a centralized decision-making construct tends to reserve decision-making power at the highest levels, whereas a decentralized organization more evenly distributes the decision-making power throughout the organization (Tran & Tian, 2013). This research intends to show that decentralization of decision-making better engages employees, especially those with PSM. It also needs to be recognized that organizational structure is often influenced by the intersection with politics (Potoski, 1999; Potoski & Woods, 2001). The organizational structure and associated decision-making power can be a direct result of the desire for political control over the administrative processes (Potoski, 1999; Potoski & Woods, 2001). This adds a complex variable to the equation as the implicit or explicit nature of the political influence can be masked by the organizational structure. Further, the implementation of the

political influence within the administrative process (Woodrow Wilson would not approve of this) may be done with intentional disregard of how it affects employee motivation, specifically PSM (Potoski, 1999).

Decision-making is more than just about the origination of organizational structural power or influence; it also has a direct correlation to how the decision-making authority is implemented and enforced. Meaning, does management state that employees are empowered to make a decision but then often second-guess employees, berate decisions they deem wrong, or often renege of the decentralization of decision-making authority (Stea, Foss, & Foss, 2015)? The answers have clear motivational consequences on the employees, which supports the concept that perception to decision-making proximity is more influential on PSM than what is formally written down as an organization's decision-making policies. However, established managers within the administrative bureaucracy may be able to employ certain mitigating actions to reduce the negative impacts on PSM (Potoski, 1999; Potoski & Woods, 2001). This is dependent on how far down within the organizational structure the political influence extends. Again, the political influence on the organization is not specifically part of this research, although it does lend strong credence to the overall concept of the importance of the perception of the employee's proximity to decision-making. Another variable discussed by Potoski and Woods (2001) is the ability or inability for nongovernmental actors to influence agency decisions. While this type of ability can fall under the umbrella of political, it does not necessarily have to. An anecdotal example of this is when an influential person outside of an agency has access and the ear of a senior manager, whereas an internal mid-level employee does not have access to the same senior manager. This may result in the employee perceiving their proximity to decision-making as further

away than is shown on an organizational chart. This perception can impact an employee's job satisfaction and engagement.

Research conducted by Borman and Motowidlo (1997) evaluated task performance and contextual performance where individual performance helps the organization obtain its goals. It was determined that leader-controlled decision-making and the degree to which they invite subordinate participation is highly influential to the task and contextual performance (Bergman, Donovan, Drasgow, Overton, & Henning, 2008). The degree of leader-supported participation is described as little input permitted, partial participation, and full empowerment. The more decision-making, the higher the degree of task and contextual performance. In addition to leader-supported participation, individual characteristics of adaptation and personality traits impact both task and contextual performance, whereas task skills are directly related to decision-making (Motowidlo, Borman, & Schmit, 1997).

Organizational design (or redesign) is the precursor to having an organizational structure and related organization hierarchy. The organizational design essentially lays the building blocks for how the organization will employ its values, mission, and goals (U.S. Government Accountability Office, 2017). Table 2 offers insight into how a federal agency from the United States can design a regulatory and enforcement program.

Type of regulatory	Regulatory design options	Definition	Selected illustrative examples and corresponding agency
design			
Prescriptive	Means-based (also referred to as design standards)	Specifies the means of achieving a certain requirement or outcome	Export licensing requirements allow or prohibit the sale of products exported from the United States to purchasers in foreign countries (Bureau of Industry and Security)
Hybrid	Hybrid standards	Uses combination of prescriptive and more flexible regulatory designs	Pathogen Reduction; Hazardous Analysis and Critical Control Point (HACCP) Systems Rule combines management-based requirements for meat and poultry facilities

			to develop and implement plans to mitigate hazardous bacterial contamination and performance-based standards mandating food safety outcomes (Food Safety and Inspection Service)
Generally more flexible	Performance	Specifies an outcome but allows flexibility in how to achieve it	Workplace health standards establish targets for healthful working conditions that employers are required to sustain while allowing discretion for how those targets are achieved (Occupational Safety and Health Administration)
	Market	Provides incentives through market signals (such as tradeable permits, taxes, and fees) to promote a desired outcome	Emissions trading programs distribute a finite number of emission allowances among regulated sources that can be monetized and traded as a means of incentivizing the reduction of overall emissions (Environmental Protection Agency, Office of Air and Radiation)
	Management	Mandates plans to identify and respond to hazards	Emergency Response Plans require mine operators to develop and gain approval for plans to prepare for emergency situations that put workers' lives and safety at risk (Mine Safety and Health Administration)
	Mandated information disclosure	Requires public disclosure of information	Toxic Release Inventory Program requires regulated facilities to provide toxic release information that the Environmental Protection Agency makes available through a publicly accessible database. (Environmental Protection Agency, Office of Chemical Safety and Pollution Prevention)
Nonregu- latory	Voluntary	Voluntary requirements or reporting	Aviation Safety Action Program encourages aviation employees to voluntarily report potential safety issues (Federal Aviation Administration)
	Deference to industry standards	Defers to requirements set by industry or standards-setting bodies	Industry consensus standards developed by nongovernmental Standards Development Organizations are adopted in some instances—such as with machinery and industrial equipment—in lieu of creating government-unique standards. (Occupational Safety and Health Administration)
	Deference to states and localities	Defers to the regulatory authority of state and local governments	(N/A – Outside the scope of this engagement)

Reproduced from U.S. Government Accountability Office (2017).

Table 2 is just one example of how an agency can formalize their process and goals, which, in turn, should help to frame the decision-making process of that agency (or sub-

agency division). This allows for a potential alignment of employee and organization goals (Perry & Porter, 1982), which can have a positive effect on employee job satisfaction and employee engagement. However, agencies' design and values often change or need to change over time (Olden, 2018), which can allow for a change in employee job satisfaction and employee engagement (i.e., a new administration changes an agency's goals before the agency design can be addressed).

There is no one best method for an organizational structure as it must take in the variables mentioned in this research, in addition to other mitigating and moderating factors. The multitude of hierarchical controls now utilized have distorted and complicated the overall process via the division of labor, transactional costs, and inclusion or exclusion of moral hazards (Moe, 1984).

Decision-making is a core component of the overall formal and informal communication policies as well as the delegation of authority. Further, decision-making, within itself, is an extremely complex discipline, one that this research will not delve into beyond tangentially discussing that the process is part of an organization's structure, communication, and culture. Whatever the chosen method of communication, it is almost guaranteed to be an imperfect choice, depending on who is assessing the method. Decisionmaking is based on some degree of rational thought as well as inherent biases (Dawes & Kagan, 1988; Scandura, 2016).

Policies, procedures, directions, and goals are all communicated from one level to another within an organization (M. Barahemah, personal communication, November 8, 2015). This research does not address or focus on the specific method of decision-making, be it collaborative, authoritative, democratic, participative, bottom-up, or top-down (Hammond & Thomas, 1990). However, the perceived proximity to the decision-making (Bates & Peynircioğlu, 2017) does overlap with whatever method of decision-making is employed by the organization via the degree of influence an employee has (or believes they have) on the decision. An important aspect of decision-making is the perceived proximity employees have to the decision being made. Stated differently, it is the degree of influence employees perceive they have over the decision-making process. As an example, employees that perceive they do not have much control (influence) over decision-making (or other aspects of their work) may engage in deviant behavior within the organization (Marasi, Bennett, & Budden, 2018), which indicates lower job satisfaction. The concept of perceived proximity to decision-making is not solely focused on where within the organizational structure the employees fit but rather where within the decision-making process they believe (perceive) they exist. The concept of decisions being made by "them" (Belling, 2009) is another way to express this concept: Who do employees perceive are making decisions or at what level do employees perceive decisions are being made, and, concurrently, how do employees perceive their level of influence over those decision-making processes?

One way to measure the perception of decision-making influence (involvement) is described in research conducted by Wooldridge and Floyd (1990), where mid-level managers were asked, on a Likert-like scale, their involvement in (1) identifying problems and proposing objectives, (2) generating options, (3) evaluating options, (4) developing details about options, and (5) taking the action steps to enact the required change. This particular study did not address staff-level positions; however, the process used in evaluating the level of perceived influence in decision-making is certainly transferable. Extant research shows a positive correlation between job satisfaction and active participation in the decision-making process (Jomah, 2016; Muindi, 2011). This is supported, both implicitly and explicitly, by McGregor's Theory Y (Muindi, 2011) and supports Maslow's concept of employee self-actualization. The efficacy of decision-making participation on employee motivation is anecdotally and intuitively positive for affecting motivation (Perry & Porter, 1982). Also, the type of organization and where, within that organizational sector, employees are structurally located impacts the manner of how they perceive their ability to influence decision-making (Kingsley & Reed, 1991). A future aspect of continuing research on this topic is evaluating the type of decision-making process compared to the perceived proximity to the final decision and if that variable impacts an employee's job satisfaction and engagement.

In this research, the degree of inclusiveness and collaboration of the decision-making process is discounted with the focus simply being on how close the employee perceives they are to making or influencing the final decision. However, the size and complexity of the organization does affect who makes decisions; as the size and complexity increase, the number of people ultimately making decisions decreases (Hammond & Thomas, 1990). For this research, this suggests that our ultimate findings will show that smaller and less complex organizational structures will have employees with higher job satisfaction and engagement when compared to larger, more complex organizations. In part, this is because of a less dynamic and developed number of sub-cultures, which stratify the decision-making processes (Hammond & Thomas, 1990). This does not suggest, however, that the moderating effect of PSM is positively or negatively impacted by the size and complexity of the organizational structure.

Organizational structures are often described in a two-dimensional manner as tall (many levels of management) or flat (fewer levels of management) (Figures 5 and 6). The decision for implementing a tall or flat organizational structure is made not on a whim but because of the organizational needs, including the speed in which change can be implemented, the type and complexity of work being done, and desired outcomes (Rishipal, 2014). For purposes of this research, the assumption will be made that the basis for the organizational structure was intentional.



Figure 5: Tall Organizational Structure



Figure 6: Flat Organizational Structure

Rishipal (2014) presents a nonexhaustive list of types of organizational structures that organizations may choose, in whole or in combination, which depends on the organization's size, type, output focus, and values. The point made about values is highly insightful as it demonstrates the connectedness of the organizational structure to employee motivation, employee job satisfaction, and employee engagement. The organizational structural types include (Rishipal, 2014):

- Line and Line and Staff
- Functional
- Divisional and Market
- Product and Process
- Project and Matrix
- Bureaucratic
- Network/Virtual

This is a clear shift away from the scientific organizational structure of Taylor or the purer bureaucratic organization of Weber (Rishipal, 2014).

Returning to the main differentiation of tall and flat organizations, a flat organizational structure allows for a more decentralized management approach, crossfunctional career progression, broadly defined jobs, emphasis on teams and a strong customer focus, and less distance (degree of influence) between employee and the ultimate decisionmaking (Barahemah, 2015.; Hammond & Thomas, 1990; Kettley, 1995; Rishipal, 2014; Verma, 2013). Interestingly, employee motivation both benefits and suffers within a flat organization. The employee can feel they have a higher degree of influence on decisionmaking but, in so doing, the very nature of the organization thwarts upward promotional opportunities (Rishipal, 2014). However, an increase in employee satisfaction and motivation correlating to a "smaller" organization is well discussed in the extant literature (Kettley, 1995; Porter & Lawler, 1964) and supports the underlying research conducted by Mayo with the Hawthorne experiments.

This suggests that an equilibrium, based upon the specific needs and nature of the organization, must be weighed and balanced to allow for a sufficient level of employee influence on decisions without pigeonholing them into a dead-end job while concurrently not having a span of control that is too broad for the manager to properly administrate (Anderson & Brown, 2010). However, positively impacting employee motivation must be weighed against decreasing the overall organizational performance (Anderson & Brown, 2010). Five questions that help to answer this are as follows (Anderson & Brown, 2010):

- What kind of tasks is the group working on?
- Have the right individuals been chosen as leaders?

- How does the possession of power modify leaders' psychology?
- Does the hierarchy hinder or facilitate intergroup and intragroup coordination?
- Does the hierarchy affect group members' motivation and, if so, is it affected in a positive or negative direction?

Less centralized (flatter) organizations are correlated to higher employee motivation, but they do not show the same correlation for employee job satisfaction. The size of the organization matters: Taller organizational structures tend to be better for larger (more than 5,000 employees) organizations, whereas smaller organizations (fewer than 5,000 employees) function better with a flatter structure (Anderson & Brown, 2010). Anderson and Brown (2010) cite the 1951 study by Bales, Strodtbeck, Mills, and Roseborough, in which results showed top-level organizational members were up to 15 times more likely to speak up than staff-level employees. This suggests that a flatter organization will allow for a greater likelihood of lower-level staff weighing in on decisions, thus perceiving that their proximity to decisions is closer than that within a taller, more hierarchal organization. The matching of the flatter organization with complementary leadership, such as those with a more democratic approach (less autocratic and authoritarian), causes a higher level of commitment to the group (as opposed to a commitment just to the desired outcome) along with technical competence (Anderson & Brown, 2010).

Employee motivation is highly woven into the fabric of the organizational structure. Lower-level employees (staff) may feel they have less to contribute and tend to form highly positive opinions of their superiors (this does not speak to if a superior is replaced), but they may feel they are ill-treated by the group or in comparison to the others in the group (Equity Theory) as their perception of rewards, based on their perceived efforts come into play even though the effort and positive degree of impact are often conflated by employees (Anderson & Brown, 2010). Finally, making a concerted effort to make employees feel they are part of the decision-making process makes employees feel they are being more justly treated and appreciated, even if they are not any closer to the level of making the decision (Anderson & Brown, 2010; Leavitt, 2005). This supports the theory that perception of proximity to decision-making is strongly correlated to employee job satisfaction and employee engagement and can be moderated by employees with PSM when evaluating a public sector organization.

Span of control is a precursor to discussing organizational fit and culture as the depth, or degree, of the span of control, will, in part, impact the fit and overall culture and related perceived proximity to decision-making. In its most basic form, span of control is simply the number of individuals a person manages (M. Barahemah, personal communication, November 8, 2015; Rishipal, 2014). A broad (or wide) span of control is most often affiliated with a flatter organization, whereas a narrower span of control (fewer direct reports) is associated with a taller organizational (Rishipal, 2014). Besides there being positive financial implications for a flatter organization (less cost going to manage and more going to positions doing the work), it also results in a decentralized management structure, which, in theory, will increase the perceived proximity to decision-making (Rishipal, 2014). However, this is not to suggest that a span of control is boundless. Rather, each manager and organization will reach a point where the efficiency and decentralization of a broad span of control becomes too stretched and results in a decrease in effectiveness and decision-making efficiency (Rishipal, 2014).

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Span of control cannot be simply assigned without regard for the size of the organization and the breadth of what the organization is tasked to do (Shen, Zhong, & Chen, 2016). For example, a small organization tasked with one specific aspect of environmental protection should not necessarily have the same span of control management structure as a far larger organization tasked with many environmental programs to manage. One hurdle to increasing span of control and flattening of the organization is a willingness of senior management to relinquish some of their direct decision-making control and power (Shen et al., 2016). Further, the overall organization should assess the type of functions it is tasked with and set up similar span of control and decision-making structures across program boundaries (Shen et al., 2016), unless, of course, there is a high degree of task uncertainty, which makes this method extremely difficult (Donaldson & Joffe, 2014). As an example, all regulatory programs within a specific system/agency should have a similar span of control structure. This will also serve to address many potential issues within the umbrella of Equity Theory. Employees within like functions should have a similar perception to their proximity to decision-making.

Having the organizational structure and span of control addressed, the overall cultural fit can come into focus. However, this is not a unidirectional approach. The desired fit, or rather the base of the organization's values, should be considered upfront to better design the organizational structure and span of control (Donaldson & Joffe, 2014). As already discussed, fit is, in part, a congruency between the goals, skills, and values of an organization and the employee (Bright, 2007). The ability to positively match fit between the employee and the organization mitigates the relationship between PSM and employee job satisfaction and employee engagement (S. Kim, 2012). Bright (2007) discusses how PSM does not affect

employee performance that is related, to a degree, to employee job satisfaction and employee engagement. However, this is not in direct conflict with the hypothesis of this research. What must be taken into account, both with designing the span of control (and similar flat or tall organizational structures) and the organizational values, is whether the organization will have a singular culture or different cultures for the different levels of the organization (Donaldson & Joffe, 2014). This is an obvious juxtaposition of a single organizational culture; however, this supports the design of sub-organizations based on similarity of functions and goals versus the singularity of a top-down cultural norm. Further, (P-O) fit congruence can be achieved in either a supplementary (similar) or complementary (characteristics from either the employee or the organization fill a gap[s] to make each other complete) manner (Bright, 2007). P-O fit is a positive predictor of job satisfaction as well as turnover intention; further, job satisfaction acts as a mediator between P-O fit and turnover intention (Liu, Liu, & Hu, 2010). This partially supports Moynihan and Pandey (2007), who found that older employees are less likely to leave an organization (Liu et al., 2010).

This is leading up to the overall discussion of organizational culture. While this sounds like a simple concept, it is, in fact, broadly defined and complex. Scandura (2016) cites Schein's (1984) definition of organizational culture as "the pattern of basic assumptions, that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems" (chap. 14). Stated less eloquently, it is the spoken and unspoken narrative, "This is how we do things around here." Seven characteristics of culture are (Scandura, 2016):

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- Innovation and risk-taking
- Attention to detail
- Outcome orientation
- People orientation
- Team orientation
- Aggressiveness (reverse of "easygoingness")
- Stability

These cultural values span across multiple organizational sectors. In addition to these characteristics, The Denison Model of organizational culture emphasizes adaptability, mission, involvement, and consistency (Denison Consulting, 2021; Scandura, 2016). Notice how the sub-parameters of culture involve empowerment, team orientation, and core values.





Culture affects employee behavior and motivation where motivation is a process that stimulates employee's emotions (Li, 2015). An incongruence of cultures, especially between a supervisor and subordinate, can impact that relationship with the "power distance" increasing a subjective feeling of inequality between the two positions (Li, 2015, p. 9). This power distance can also occur between coworkers or can occur differently between the supervisor and employees of the same level. A difference in power distance among employees of the same level, or within the same organizational structure position, can create or exacerbate the impact of Equity Theory and can distort the perception of proximity to decision-making. It is here that the influence of PSM, based, in part, on a sharing of organizational and employee values, can moderate the impacts of this perception.

Organizational culture and value alignment is a multi-dimensional equation. One way to describe the value alignment is through the Person-Organization Fit Theory (Langer & Feeney, 2014). This theory is well-matched with the basic bureaucratic work model, which focuses on rationality, efficiency, and depersonalization as primary drivers as well as authority, hierarchy, division of labor, formalization, and centralization, as described by Langer and Feeney (2014), which is supported by the previous research from Taylor. The person-work theory also looks at risk-taking, innovation, flexibility, and decentralization (Langer & Feeney, 2014). This supports a flat organizational structure with closer proximity to decision-making for the employee. This, in turn, supports the importance of PSM moderating the employee-organization value congruence through the overall work environment and employee job satisfaction (Andrews, 2016; Wright & Pandey, 2008). Andrews (2016) states, "Indeed, PSM levels cannot be fully explained by the satisfaction of basic psychological needs because it reflects an individual's values, internalized through socialization processes that took place earlier in life or in organizational contexts" (p. 246). Finally, moderating and diffusing (or retaining) power within the organization is part of the organizational culture, specifically with how stable the concentration of power is, the accountability associated with having power, and what social values are represented by the cultural norms of the organization (Anderson & Brown, 2010).

The extant literature clearly shows the relationship between organizational structure (hierarchy, span of control, fit, culture, and associated values), employee job satisfaction, and employee engagement. Further, PSM can moderate the impact of the perceived proximity of decisions on employee job satisfaction and employee engagement. PSM is related or, rather, juxtaposed to P-O fit in that it does not mediate but, rather, moderates employee job satisfaction and employee engagement, with respect to the perceived distance (influence) to decision-making, by allowing the employee to better understand the organizational culture. This research suggests that better understanding this relationship, between the moderating effect of PSM to employee job satisfaction and employee engagement, with respect to the perceived distance (influence) to decision-making, can ultimately result in better matching employees with the organization and, in so doing, maximizing the output of motivated employees to better maximize the outcome goals of the public sector organization.

Australia and the United States

The United States and Australia were both colonies of the British Empire although independence for the United States was declared in 1776 and Australia gained its independence in 1901 (Bennett & Webb, 2007). However, Australia, while "independent," is considered a Constitutional Monarchy with the Queen of England as its ultimate head. The common lineage allows for similarities between the two countries to be studied. However, there are certain significant differences between the two countries. The United States emerged as a representative democracy, whereas the Commonwealth of Australia adopted a more Westminster parliamentary system similar to that of the United Kingdom. However, Australia also adopted some aspects of the United States such as constitutionally organized states (Johnston, 2000). Further, this similarity allows for a more parallel dispersion of government services and policy development. The organizational similarity allows for a natural comparison of the national workforce in Australia versus the United States. The fluctuation from conservative to liberal political support also provides another aspect of the

foundation for comparison. However, the differences between the two countries must also be understood to better predict influences on potential employee engagement and employee job satisfaction. The two most striking differences are the head of state and the role of the executive. Again, Australia's Head-of-State is the ruling monarch of England who, through consultation with the Prime Minister, appoints a Governor-General as their representative to Australia. The Head-of-State for the United States is the President, who is elected. The chief executive for Australia is the Prime Minister, whereas for the United States it is, again, the President. The Prime Minister is elected by the ruling party (or, if needed, a coalition of parties if a single party does not hold a majority of parliamentary seats) within Parliament. In turn, the Prime Minister appoints other elected ministers to head the different executive agencies. This means that an agency head is both appointed and elected. In the United States, the President, through consultation and approval of the United States Senate, appoints cabinet-level agency heads that are not elected. This difference can create a more politically charged environment within the agencies because the separation of the political state and the administrative state is blurred.

Taking a step back, the most basic aspect of the United States administrative system is the separation of powers and federalism (Chandler, 2014). The three branches of the U.S. government are the executive, legislative, and judicial, which have equal powers that are separate yet somewhat overlapping (Chandler, 2014). The Tenth Amendment of the U.S. Constitution specifically states, "The powers not delegated to the United States by the constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." This develops a complex and somewhat dynamic limit of federal powers. To amplify this, we will briefly look at environmental protection between the two countries. Environmental protection in the United States follows this basic roadmap where the U.S. Environmental Protection Agency (EPA) is tasked with implementing and enforcing the multitude of environmental protection acts such as the Clean Water Act, the Clean Air Act, the Safe Drinking Water Act, the Resource Conservation and Recovery Act, the Comprehensive Environmental Response Compensation and Liability Act, the Toxic Substance Control Act, and the National Environmental Policy Act, in addition to many other related acts (Rosenbaum, 2014). However, whereas EPA sets the overarching minimum standards for these acts, much, albeit not all, of the implementation and enforcement are authorized down to the state level (Rosenbaum, 2014). Thus, environmental protection at the federal level in the United States follows the basic tenets of federalism and implicitly and explicitly utilizes the separation of powers for overarching policy development and enforcement (Executive), legislative authority (Legislative) and judicial enforcement (Judicial).

The Commonwealth of Australia has similarities to the United States in that it is constitutionally arranged with a separation of powers granted to three equal branches of government: policy and legislative authority (Parliament), development of rules and policies and upholding the law (Executive) and ultimate enforcement of law (Judiciary) (Australian Government, 2019). Also similar to the United States, Australia operates under the basic construct of federalism in which many powers and authority are retained at the state level under Section 51 of the Australian Constitution (Australian Government, 2019). However, the three branches of the federal Australian government are somewhat blurred, such as how the Prime Minister and the ministers are part of both Parliament and Executive levels (Parliamentary Education Office, 2019), which differs from the United States with the exception of the Vice President having duties in both the Executive and Legislative branches.

Environmental protection will continue to be used as a vehicle for the amplification of the similarities and differences between the two countries. At the federal level, the Australian Department of the Environment and Energy is entrusted to "design and implement the Australian Government's policies and programs to protect and conserve the environment, water and heritage and promote climate action" and attempts to accomplish this by dividing up the associated programs under the following divisions: clean air and climate change, clean land, clean water, and national heritage (Department of the Environment and Energy, 2019). The Environment Protection and Biodiversity Conservation Act is the primary piece of legislation that affords the federal government of Australia the power to protect its natural resources (Environment Protection and Biodiversity Conservation Act, 1999). With this being stated, it has been suggested that the Australian federal agency is lacking a cohesive and strategic approach and too much environmental protection is left to the states and territories (Shearman, 2018). This draws a comparison between the United States and Australia where there are differing opinions on the effectiveness of each agency. This is important as it helps to provide another similarity between two agencies (and countries), which makes comparing employee engagement and employee job satisfaction viable. Table 3 shows a per capita comparison between the U.S. Environmental Protection Agency and the Australian Department of Environment and Energy (Department of the Environment and Energy, 2019; U.S. Environmental Protection Agency, 2018; World Population Review, 2020). This is being highlighted to bring light to a potential source of sampling bias.

Tab	le 3	3 : 1	201	9	Per	Capita	Com	parison	
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	Australia Total	Australia Per	United States	United States
		Capita	Total	Per Capita
Population	25,215,000+/-	N/A	329,140,000+/-	N/A
Agency FTE ¹	2007	12,563:1	12,250	26,868:1
Agency Appropriations ²	\$1,443,147,000	\$57	\$6,146,000,000	\$19

¹ Population:FTE

² Dollars:Population

Figure 1 (presented earlier) provides the theoretical model for evaluating the moderating effect of PSM on the perceived influence of decision-making on employee job satisfaction and employee engagement. Comparing Australia to the United States presents some potential challenges because of the differences in the political systems and nonpolitical cultural differences. The most significant influence from the different systems is how the separation of the political state from the administrative state is more blurred (some may claim via an erosion of the overall democratic process) within the parliamentary system because of power being monopolized by a single party or coalition (Gerring, Thacker, & Moreno, 2009; McCoy, Rahman, & Somer, 2018). However, the political-administrative dichotomy is not significantly different in practice because of the rise of the political polarization in both Australia and the United States (McCoy et al., 2018). Interestingly, smaller governments tend to be more polarized (Lindqvist & Ostling, 2010) although, as already suggested, the current political climate is lessening this finding. Of note, the Australian Labor Party (conservative) had a slight Parliament majority in 2017 (Parliament of Australia, 2019). However, the Executive and Legislative branches of the United States (2018) were split with Congress having a democratic (liberal) majority and the Presidency being Republican (conservative). This indicates a potential difference between the political affiliation and focus for the agency

heads. Fit and culture are the two main independent variables that, when accounted for properly within the methodology, will minimize the political system differences between the two countries. While there is a significant difference in the size of the federal governments, the number of employees from both and the response rate (as discussed in the Methodology section) is significant enough to minimize sampling biases.

Chapter III

METHODOLOGY

Overview

Quantitative research allows for a detailed statistical analysis of robust data (Creswell, 2013, 2014; Scandura, 2016; Shafritz et al., 2013). This research is an initial step into evaluating the correlation and interaction between decision-making perceptions, PSM (via HRM antecedents), employee job satisfaction, and employee engagement. Because this research focuses on specific data for both Australia (Westminster system) and the United States, a quantitative approach is a prudent step to develop a strong foundation and model for future research. This research follows a survey-based design with secondary analysis. Because of the source and content of both data sets, it was determined by the Institutional Review Board that the research qualified for a Category 4 exemption (Appendix A).

The two countries used for this research, Australia and the United States, were selected for the following reasons:

- 1. To obtain knowledge and information from a perspective outside of the United States, in the case of Australia, a Westminster-based system.
- The similarity of language, cultures, and survey techniques between the two countries, although culture may play a duplicative role as being similar in some areas, but different in others, enough so to have an effect on the statistical outcomes.
- 3. Availability of existing survey instruments, type of questions in the survey, and type of microdata available.

4. While overall PSM is similar between Australia and the United States, there are differences between the specific measures of PSM: politics and policy, compassion, and self-sacrifice, which show a regional differentiation, globally speaking, on PSM measurement (Vandenabeele & de Walle, 2007).

5. Incorporating the above list in the use of the two similar but not equal data sets will add a degree of validity to the findings of the research. It will help to support or reject the universalness of the findings and while this will not be significantly addressed or researched as part of this study, comparing the outcomes of Australia and the United States may lay some foundational work for the applicability of bringing aspects of diversity into this type of research.

Through detailed research, existing longitudinal studies focusing on employee engagement, employee job satisfaction, and motivation were found for the United States, United Kingdom, Ireland, Canada, Australia, and the New South Wales province in Australia. The studies all look at the applicable level of public sector employees for each jurisdiction. However, a more in-depth analysis of each survey instrument showed significant differences. The data for the United Kingdom, Ireland, and Canada are aggregated in a way that makes a detailed statistical analysis for purposes of this research not viable. The data for New South Wales is more robust but is still incongruent with the data format from Australia and the United States. As such, Australia and the United States are the two data sets that were selected for this research.

While the original decision to utilize the data sets from the APS and FEVS was based on availability and similarity of survey instruments, further research uncovered some interesting similarities and differences as suggested in Chapter 2 of this research. Some similarities are a separation of powers, aspects of federalism, and the Executive branch running the day-to-day operations of the federal government, while two main differences are the heads of states and the more direct, versus indirect, political aspect of agency heads (Parliamentary Education Office, 2019). These differences, coupled with the regional aspect of PSM (Vandenabeele & de Walle, 2007), allow for a more robust assessment of the relationship between employee job satisfaction and employee engagement to the perceived proximity to decision-making where PSM is a moderating variable. It was expected that the two different data sets (APS and FEVS) would result in statistically similar outcomes that, in turn, would provide a stronger suggested relationship for PSM as a moderating variable that extends beyond geopolitical differences, at least with respect to Westminster and American federalist style national governments.

It should be noted that the original concept of the research was to focus on environmental agencies only; however, it proved difficult to find multiple sources of nonaggregated data down to the agency level. The United States has these data, but all of the other data sources have more stringent protections in place to maintain the anonymity of survey respondents. This slight change in research direction will allow for a significant increase in the number of respondents (N), which will allow for a more broad-based and generalizable model. However, to indicate the specific application of this model to environmental agencies, the overall results of the Federal Employee Viewpoint Survey (FEVS) will be statistically compared to the results of the FEVS for just the Environmental Protection Agency. These findings may provide a foundation for future research and model refinement.

The details of the surveys used in this research are as follows:

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United States: The United States conducts an annual FEVS. The data set from the 2018 survey was utilized for this research. The overall survey for 2018 invited participation from 1,473,870 people of which 598,003 participated for a 40.6% response rate (U.S. Office of Personnel Management, 2018). The survey represented 82 different agencies. Further, the survey instrument (Appendix B) has a total of 94 core questions, 78 of which cover eight specific areas of employee perceptions: personal work experiences, work unit, agency, supervisor, leadership, work/life programs, satisfaction, and demographics. There are also 16 specific demographic questions. The 78 main questions are answered on a 5-point Likert system. Specific agency macro response rates are available in Appendix C. There is also a summary of how the survey instruments change over time, the text of which is included in Appendix D.

Australia: Australia conducts an annual survey called the Australian Public Service Employee Census (APS). The data from the 2018 survey were utilized for this research. The overall survey for 2018 invited participation from 150,594 people of which 103,137 participated for a 68.5% response rate (Australian Public Service Commission, 2018). The survey represented 105 different agencies. Further, the survey instrument (Appendix E) has a total of 95 core questions (215 questions when including sub-questions), which are used to cover three specific areas: culture, capability, and leadership (Australian Public Service Commission 2018). Culture includes transparency and integrity, risk and innovation, managing change, and diversity and inclusion. Capability includes organizational performance and efficiency, building capability, and mobilizing capability. Leadership includes leadership and stewardship, developing leadership, and talent. The questions are answered on a 5-point Likert system, true and false, yes and no, or other options. As will be discussed later in this section, the data were normalized for purposes of statistical analysis.

Survey Instruments and Data Preparation

As described above, the 2018 APS and FEVS survey data were used for this research. The decision to utilize a single survey year for the basis of this research is three-fold. First, the survey years for both the APS and FEVS overlap in 2014, 2017, and 2018. Second, the survey questions for the APS vary year to year, making a longitudinal comparison more difficult. Similarly, the survey questions for FEVS are only the same for 2017 and 2018, with 2014 being somewhat different. Third, the 2018 Federal Employee Viewpoint Survey Government Management Report (U.S. Office of Personnel Management, 2018) provides a multi-year running score of the major survey topics. While these referenced scores are not the same across the board, they are often similar, showing a general upward trend. However, since this research is focused more on the correlation of PSM antecedents mitigating the perceived distance/influence on decision-making to employee job satisfaction and employee engagement, the longitudinal changes of a multi-year study are not as important as establishing the initial foundational model by comparing the results of the survey instruments from different countries. As a point of reference and possible future research, Table 4 provides an overview of 2014, 2018, and 2019 FEVS for the major measured themes. Further, Table 4 indicates an overall upward trend (some years are flat), with two exceptions: response rate and if the results of the survey will be used to improve the agency show a decline. One notable outlier for the general increase trend is the job knowledge of a work unit has a significant increase from 2017 to 2018. The reason for this increase is not known. Again, the focus of this research, while based on the longitudinally applied employee surveys (APS and FEVS), is to analyze the single point in time survey for 2018 for Australia and the

United States.

Table 4: 2014, 2017, 2018 Overall Survey Results for the FEVS

Survey Topic	2014 Response	2017 Response	2018 Response
	Rate	Rate	Rate
Overall Response Rate	47	46	41
My work unit has the job-relevant	69	71	80
knowledge and skills necessary to			
accomplish organizational goals.			
Managers communicate the goals of the	58	62	64
organization.			
I believe the results of this survey will be	38	42	41
used to make my agency a better place to			
work.			
How satisfied are you with your	48	53	54
involvement in decisions that affect your			
work?			
How satisfied are you with the information	46	50	51
you receive from management on what is			
going on in your organization?			
Considering everything, how satisfied are	55	60	60
you with your organization?			
The people I work with cooperate to get the	72	75	76
job done.			
My workload is reasonable.	56	59	59
Considering everything, how satisfied are	64	68	68
you with your job?			
I can disclose a suspected violation of any	60	64	66
law, rule or regulation without fear of			
reprisal.			
In my work unit, differences in performance	32	36	38
are recognized in a meaningful way.			
How satisfied are you with the recognition	45	50	52
you receive for doing a good job?			
I am given a real opportunity to improve my	59	64	66
skills in my organization.			
My talents are used well in the workplace.	57	60	60
I know how my work relates to the agency's	82	84	85
goals.			
I recommend my organization as a good	62	66	66
place to work.			
Overall Engagement	63	67	68
Overall Global Satisfaction	59	64	64

The questions for the two survey instruments are thematically coded, first for the

main theme and then for the sub-theme. The themes/variables are as follows:

- Antecedents of PSM: Job enrichment, participation, individual appraisal, professional development, and fairness
- Decision-making proximity/influence
- Job satisfaction
- Employee engagement
- Organizational structure: culture and fit
- Direct PSM
- Demographics: Gender, supervisor, and agency size

There are also some survey responses for the APS that are not coded but will be used within the narrative portion of the research to further the discussion of the results. These include why a respondent wants to leave the APS, staying within the APS if it more aligned with the respondent's values, multiple aspects of innovations, group performance, and agency success.

Once the thematic aspects of the questions are addressed, the measures and normalization of the data are determined. The specific coding is shown in Appendix F. Table 5 indicates which survey questions for the 2018 APS and 2018 FEVS are utilized for each theme/sub-theme.

Theme	Sub-Theme	FEVS Question Number	APS Question Number
Antecedents of	Job Enrichment	43	26j, 63e, 63g, 78
PSM	Participation	3	N/A
	Individual		24c, 38f, 47a, 47b, 47c, 48, 49,
	Appraisal	6, 15, 16, 19, 31, 44, 46	50, 53c, 63a, 74c
	Professional		26e, 29e, 32e, 32f, 43a, 43b, 43c,
	Development	1, 47, 50	63b, 63d, 64a
			26b, 26l, 29l, 32h, 32l, 53a, 61,
	Fairness	17, 22, 23, 24, 25, 33, 37, 38, 55	77e, 93c

Table 5: Survey Instrument Question Cohort Theme

Decision-			
making			
Proximity/			
Influence		30, 63	26d, 32s, 38b, 38g, 79
Theme	Sub-Theme	FEVS Question Number	APS Question Number
Employee			24h, 26k, 32a, 32b, 32n, 32o,
Engagement		7, 8, 13, 49	32r, 41, 64c, 64d, 74d
Organization			25b, 25c, 25d, 25e, 25f, 26f, 29d,
Structure			29i, 31a, 31b, 31c, 31f, 32d, 32k,
			32m, 32p, 39a, 63f, 68a, 68b,
			68c, 68d, 68e, 68g, 68h, 69, 72,
			74b, 74e, 77c, 80, 81a, 81b, 81c,
	Culture	32, 54, 56, 57, 58, 59	89, 93b, 93e
			24g, 24j, 32j, 32q, 38a, 52, 53d,
	Fit	5, 21, 61	74a, 77d, 93f
Direct PSM		N/A	44
Demographics	Gender	Q-Sex	1
	Supervisor	Q-Super	7
	Agency Size	Q-Agency Size	0
Keep as			
narrative only,			
no			
scoring/coding		N/A	42, 46.2, 70, 71, 73, 75, 76

The survey instrument responses for the questions listed in Table 5 had to be normalized to a universally (for this research) applied measure. A 5-point Likert system was selected for this measure. The FEVS is already mostly normalized for this scale. The data are normalized into a numeric measure, with 1 being the most negative and 5 being the most positive. This translation into a numerical standard allowed for detailed statistical analysis. Table 6 presents the FEVS instrument questions along with their original scoring nomenclature. The APS survey instrument required a greater degree of normalization than the FEVS. While the full coding explanation is contained in Appendix F, some of the main issues are that questions were worded in both the negative and in the positive direction, which creates an inverse relationship between the Likert scales utilized. For this research the lower the score is, the more negative it is (#1, strongly disagree), whereas the higher the score is, the more positive it is (#5, strongly agree). Some of the narrative definitions of the questions are different, such as one question may state *Strongly Agree* as the most positive

Question	Original Scoring	Comments
1, 3, 4, 5, 6, 7, 8, 9, 12, 13, 15,	Strongly Disagree=1,	
16, 17, 19, 21, 22, 23, 24, 25, 28,	Disagree=2, Neither	
29, 30, 31, 32, 33, 37, 38, 40, 43,	Agree nor Disagree=3,	
44, 46, 47, 49, 50, 51, 53, 54, 55,	Agree=4, Strongly	
56, 57, 58, 59, and 61	Agree=5	
52 and 60	Very Poor=1, Poor=2,	
	Fair=3, Good=4, Very	
	Good=5	
63, 64, 65, 66, 67, 68, 69, and 71	Very Dissatisfied=1,	
	Dissatisfied=2, Neither	
	Dissatisfied Nor	
	Satisfied=3, Satisfied=4,	
	Very Satisfied=5	
Agency Size	Small=0, Medium=1,	Independent variable, not on a 5-point
	Large=2	Likert-like scale.
Sex of Respondents	No response=0,	Independent variable, not on a 5-point
	A=Male=1, B=Female=2	Likert-like scale.
Supervisor	A=Nonsupervisor=0,	Independent variable, not on a 5-point
	B=Supervisor=1	Likert-like scale.
Leaving	No, Yes (to take another	Question is very strong for job
_	federal job), Yes (to take	satisfaction and, as such, is justified to
	a job outside federal	have absolute responses for purposes of
	government), and Other	fighting a skewed distribution and central
		tendency of the data (Manikandan, 2011).
		As such, this question is normalize as
		A=No=5; B=Yes, to take another Federal
		job=1; C=Yes, to take a job outside
		Federal Government=1; D=Other=3

Table 6: FEVS Question Original Scoring

answer and another question may state *Very Satisfied*. However, it is not expected that this wording will create a substantial difference in statistical analysis. Other questions are Yes/No responses while other responses are simply acknowledged, such as Question 40, "In the last 12 months, have you applied for a job," where the selections were 40.1 Yes, outside the APS; 40.2 Yes, in my agency; 40.3 Yes, in another APS agency; and 40.4, No. For this particular question, based upon the strength of the question and the number of questions used to assess the overall theme and variable, the coded responses that are selected are moderated to where the responses for 40.1, 40.2, and 40.3, are all scored as a 2 on a 5-point Likert scale, which equates a slightly negative response, and the response for 40.4 is scored as a 4 on a 5-point Likert scale, which is a slightly positive response. Overall, the coding of the question

is similar to that of the FEVS data: All answers are made to correlate to a 5-point Likert scale, the overall strength of the question is taken into consideration, and the overall number of questions for the given theme/variable is considered when applying codes.

The algorithm, for the FEVS survey instrument responses, to develop a single number for the variable is as follows; note that the numbers correspond to the question numbers on the survey instrument:

• Antecedents of PSM =

((43)+(3)+((6+15+16+19+31+44+46)/7)+((1+47+50)/3)+((17+22+23+24+25+33+3 7+38+55)/9))/5

- Decision-making Proximity/Influence = (30+63)/2
- Job Satisfaction =

(4+9+12+28+29+40+51+52+53+60+64+65+66+67+68+69+71+Q-Leaving)/18

- Employee Engagement = (7+8+13+49)/4
- Organizational Structure = (((32+54+56+57+58+59)/6)+((5+21+61)/3))/2
- Direct PSM = N/A
- Gender = Q-Sex
- Supervisor = Q-Super
- Agency Size = Q-Agency Size

Similarly, the algorithm for the APS survey instrument responses are as follows:

• Antecedents of PSM =

(((26j+63e+63g+78)/4)+((24c+38f+47a+47b+47c+48+49+50+53c+63a+74c)/11)+

((26e+29e+32e+32f+43a+43b+43c+63b+63d+64a)/10)+((26b+26l+29l+32h+32l+53 a+61+77e+93c)/9))/4

- Decision-making Proximity/Influence = (26d+32+38b+38g+79)/5
- Job Satisfaction = (24+

24b+24i+25a+26i+29a+29g+31e+32g+33+38e+40+45+51)/14

- Employee Engagement = (24h+26k+32a+32b+32n+32o+32r+41+64c+64d+74d)/11
- Organizational Structure =

((25b+25c+25d+25e+25f+26f+29d+29i+31a+31b+31c+31f+32d+32k+32m+32p+39 a+63f+68a+68b +68c+68d+68e+68g+68h+69+72+74b+74e+77c+80+81a+81b+81c+89+93b+93e)/37)+((24g+24j+32j

+32q+38a+52+53d+74a+77d+93f)/10)/2

- Direct PSM = 44
- Gender = 7d
- Supervisor = 7e
- Agency Size = 7i

The algorithms, as described above, will allow for the statistical analysis of the dependent and independent variables. The process of taking the mean of multiple questions to develop a score for the variable will help to address the different number of questions and the wording of the question between the two survey instruments. To reiterate, the demographic independent variables are supervisor and agency size while the organizational structure is an independent variable that is utilized to address the political/cultural differences between the two countries. The dependent variables are employee job satisfaction and

employee engagement. The independent variables are antecedents of PSM, direct PSM, and decision-making proximity/influence. The statistical analysis will include the calculation of central tendency along with the Standard Deviation for each of the dependent and independent variables. This analysis will allow for multiple T-tests to compare the specific outcomes for FEVS to APS. The correlation via Pearson R shall be measured to assess the decision-making proximity/influence to both job satisfaction and separately employee engagement. An Exploratory Factor Analysis will be utilized to test for the relationships between the independent and outcome (dependent) variables to provide an overall basis to accept or reject the hypothesis of this research (Creswell, 2014). Specifically, the Exploratory Factor Analysis will be conducted at the sub-theme level (as shown in Table 5), which will allow a broader analysis of the variables than those in the theoretical model. The above-described statistical analysis will be conducted separately for the APS and FEVS data, thus allowing for probable development of a unified model yet also acknowledging the differences between the two. Further, the FEVS data will then be compared to the data just for the FEVS U.S. Environmental Protection Agency to discuss the increase or decrease in the response from an environmental agency. Finally, the APS analysis will be conducted comparing the results for direct PSM to PSM antecedents to determine the applicability of utilizing PSM antecedents for the overall analysis. Simple path analyses are conducted to indicate the overall applicability or rather goodness of fit for the model, which again is the antecedents of PSM act as a moderating variable on the perceived proximity to decisionmaking on employee job satisfaction and employee engagement.

Hypotheses and Analytical Approach

Table 7 provides an overall quantitative analysis approach. The specific hypotheses

are:

HO1: The perceived proximity to decision-making does not affect employee engagement.

HO2: The perceived proximity to decision-making does not affect employee job

satisfaction.

Ha1: PSM moderates the effect of perceived proximity to the decision-making on employee

engagement.

Ha2: PSM moderates the effect of perceived proximity to the decision-making on employee

job satisfaction.

Table 7: Quantitative Analysis Approach

Statistical Test	Specific Analysis/Variables		Data Set
Central Tendency	Each dependent variable (2) and independent va	ariable (6)	APS, FEVS,
and Standard			FEVS-EPA
Deviation			
T-Test	Employee engagement: antecedents of PSM con	mpared to direct PSM	APS, FEVS,
	(APS only)		FEVS-EPA
	Employee engagement: PSM Environmental co	mpared to all	
	agencies (FEVS only)		
	Employee job satisfaction: antecedents of PSM	compared to direct	
	PSM (APS only)	1	
	Employee Job Satisfaction: PSM environmenta	l compared to all	
	agencies (FEVS only)	1	
Pearson R	Employee engagement: Decision-making	Each test will also	APS, FEVS,
	Employee job satisfaction: Decision-making	be run for agency	FEVS-EPA
	Employee engagement: APSM	size, supervisor,	
	Employee job satisfaction: APSM	and organizational	
	Employee engagement: PSM (only APS)	culture	
	Employee job satisfaction: PSM (only APS)		
Exploratory Factor	All data for APS		APS, FEVS,
Analysis			FEVS-EPA
	All data for FEVS		
Simple Path	Decision-making, antecedents of PSM, employed	ee job satisfaction	APS and
Analysis	and employee engagement		FEVS

Finally, both APS and FEVS responses are assessed for partial or item nonresponse (Haziza, 2008). Because of the increased potential for a partially completed survey to adversely impact the statistical analysis, and because of the overall large sample size of both the APS and FEVS, it was decided to increase the validity of the statistical analysis to omit any survey respondents that did not completely answer all of the sample questions that are being utilized for this research (Haziza, 2008). Both survey instrument responses that are used meet a statistically appropriate confidence level of 99% or greater with a margin of error of $\pm 10\%$.

Chapter IV

RESULTS

This chapter discusses the statistical analyses used, the results of these analyses, and the nonquantitative results. To reiterate, this research utilized existing data sets from both the 2018 Australian Public Service Employee Census (APS) and the U.S. Federal Employee Viewpoint Survey (FEVS). Both of these data sets provided a large sample size (n), which afforded the viability of statistical analyses even when the data were scrutinized, normalized, and refined. The data were analyzed to assess correlations and statistical comparisons of means and determine linear relationships and underlying relationships of the large data sets. Stata 16.1 was utilized for these analyses.

Summary Statistics

Variable	Obs	Mean	Std. Dev.
Agency Size	50,351	1.8252	0.4709
Sex	50,351	1.5363	0.5502
Supervisor	50,351	0.3847	0.4865
Job Enrich	50,351	3.7421	0.6113
Ind App	50,351	3.9432	0.7493
Prof Dev	50,351	3.5583	0.7001
Fairness	50,351	3.8071	0.5875
DM	50,351	3.5848	0.6104
Job Sat	50,351	3.6901	0.5972
Empl Engage	50,351	3.8043	0.6030
Culture	50,294	3.6916	0.5628
Fit	50,263	3.9134	0.4731
PSM	32,294	4.6920	0.4617
APSM	50,351	3.7627	0.5905

Table 8: APS Summary Statistics

Variable	Obs	Mean	Std. Dev.
Agency Size	311,684	1.9966	0.0582
Sex	311,684	1.3838	0.5282
Supervisor	311,684	0.2363	0.4248
Leaving	311,684	3.9805	1.6208
Participation	311,684	3.7166	1.1655
Job Enrich	311,684	3.9787	1.1099
Ind App	311,684	3.9017	0.8315
Prof Dev	311,684	3.9840	0.8877
Fairness	311,684	3.3963	0.9250
DM	311,684	3.4647	1.0278
Job Sat	311,684	3.7438	0.8092
Empl Engage	311,684	4.4326	0.5551
Culture	311,684	3.5696	0.9826
Fit	311,684	3.6698	0.8318
APSM	311,684	3.7955	0.8670

Table 9: FEVS Summary Statistics

Table 10: FEVS EPA Only Summary Statistics

Variable	Obs	Mean	Std. Dev.
Participation	3,117	3.7697	1.1226
Ind App	3,117	3.9041	0.7859
Prof Dev	3,117	4.0849	0.7965
Fairness	3,117	3.3184	0.8776
DM	3,117	3.3134	1.0141
Job Sat	3,117	3.6464	0.7601
Employ Engage	3,117	4.4287	0.5363
Culture	3,117	3.4429	0.9407
Fit	3,117	3.3526	0.8524
APSM	3,117	3.8342	0.8034

All variables, with the exception of agency size, sex, and supervisor, for all three data sets have a minimum score of 1 and a maximum score of 5, which is all based on the 5-point whole number Likert-like scale utilized throughout this research. The significance of some of the summary statistics will be described later in the T-test section. One overall observation of interest is the difference in sample size: APS is 50,351, FEVS is 311,684,

and FEVS-EPA is 3,117. All sample sizes, when compared to the applicable population, at a minimum are statistically viable to the 95% confidence level and confidence interval of 2+/-%. APS has a larger Standard Deviation than FEVS across all variables. FEVS-EPA Only has a slightly lower Standard Deviation than FEVS across all measured variables except for fit where it is slightly higher than FEVS.

Correlation

Next, the data were evaluated using Pearson R to show the correlation between variables. Tables 11 through 13 show this information. Overall, there was a strong degree of correlation between the variables from each data set, which of course do not tell the entire story but provide insight into the connectedness of the variables.

	Agency						
	Size	Sex	Supervisor	Job Enrich	Ind App	Prof Dev	Fairness
Agency							
Size	1						
Sex	0.013	1					
Supervisor	-0.0822	-0.1055	1				
Job Enrich	-0.0063	0.0386	0.0086	1			
Ind App	-0.0072	0.061	0.0031	0.7298	1		
Prof Dev	0.0086	0.0642	0.0569	0.7412	0.7205	1	
Fairness	-0.0195	0.043	0.0122	0.6894	0.7014	0.7838	1
DM	-0.0455	0.0548	0.0606	0.6757	0.6385	0.704	0.7185
Job Sat	-0.0234	0.091	0.0474	0.6611	0.6994	0.7852	0.8134
Employ							
Engage	-0.0319	0.0541	0.0596	0.5995	0.5729	0.6842	0.7197
Culture	-0.0354	0.0674	0.0195	0.6362	0.6805	0.7939	0.8702
Fit	-0.0463	0.0179	0.0901	0.6127	0.5979	0.6758	0.7523
PSM	0.0352	-0.0148	-0.0238	0.0146	0.0175	0.0126	0.0282
APSM	-0.0062	0.059	0.0232	0.8807	0.8928	0.9117	0.8818

Table 11: APS Correlation

			Employ				
	DM	Job Sat	Engage	Culture	Fit	PSM	APSM
DM	1						
Job Sat	0.7357	1					
Employ							
Engage	0.6629	0.7593	1				
Culture	0.7592	0.8419	0.7593	1			
Fit	0.6622	0.7414	0.7969	0.7622	1		
PSM	-0.013	0.0094	0.0758	0.0225	0.0937	1	
APSM	0.7644	0.8277	0.7185	0.8321	0.7354	0.0201	1

Table 12: FEVS Correlation

	Agency	Sev	Supervisor	Leaving	Darticin	Job Enrich	Ind Ann
Agency Size	1	SUX	Supervisor	Leaving			
Sex	-0.0015	1					
Supervisor	0.013	-0.0859	1				
Leaving	0.0032	0.0227	0.0439	1			
Particip	-0.0017	0.0058	0.1186	0.2978	1		
Job Enrich	-0.002	-0.0163	0.1374	0.2864	0.6132	1	
Ind App	-0.001	0.0041	0.091	0.3254	0.6961	0.774	1
Prof Dev	-0.0032	-0.0107	0.1072	0.3255	0.7059	0.7898	0.8386
Fairness	-0.0047	-0.0387	0.1811	0.3415	0.6744	0.6497	0.7952
DM	-0.0014	-0.0279	0.1145	0.3404	0.7166	0.6266	0.7462
Job Sat	-0.0032	0.003	0.0986	0.4992	0.7424	0.7007	0.8365
Employ Engage	-0.0008	0.0098	0.1159	0.2356	0.5634	0.6002	0.68
Culture	0	-0.0004	0.1274	0.3231	0.6764	0.5965	0.7363
Fit	-0.0056	0.0155	0.0595	0.3401	0.6314	0.5236	0.6751
APSM	-0.0028	-0.0123	0.1451	0.3553	0.8478	0.8697	0.9185

	Prof Dev	Fairness	DM	Job Sat	Employ Engage	Culture	Fit	APSM
Prof Dev	1							
Fairness	0.7528	1						
DM	0.7118	0.7745	1					
Job Sat	0.8166	0.8492	0.8504	1				
Employ Engage	0.6485	0.5634	0.5573	0.6556	1			
Culture	0.7136	0.8191	0.7791	0.8584	0.5499	1		
Fit	0.644	0.7399	0.7323	0.8375	0.5976	0.7613	1	
APSM	0.9183	0.8677	0.8073	0.8879	0.6886	0.7967	0.7231	1

Correlation						
	Sex	Supervisor	Particip	Job Enrich	Ind App	Prof Dev
Sex	1					
Supervisor	-0.0646	1				
Particip	0.0308	0.1338	1			
Job Enrich	0.0228	0.1357	0.5866	1		
Ind App	0.0269	0.1502	0.6672	0.7721	1	
Prof Dev	0.0229	0.1547	0.6831	0.778	0.8095	1
Fairness	-0.0373	0.2738	0.6243	0.6148	0.7687	0.7101
DM	-0.0143	0.1567	0.665	0.5554	0.6836	0.6429
Job Sat	0.0239	0.1572	0.7135	0.6514	0.7931	0.7677
Employ						
Engage	0.0285	0.1196	0.5705	0.599	0.6698	0.6439
Culture	0.0018	0.188	0.6342	0.5439	0.6916	0.6477
Fit	0.0274	0.0905	0.5324	0.408	0.5522	0.513

Table 13: FEVS EPA ONLY Correlation

	Fairness	DM	Job Sat	Employ Engage	Culture	Fit
Fairness	1					
DM	0.7084	1				
Job Sat	0.8095	0.8223	1			
Employ Engage	0.5249	0.5235	0.6352	1		
Culture	0.7802	0.7431	0.837	0.5102	1	
Fit	0.6163	0.6577	0.7809	0.5098	0.6858	1

One constant is a lack of correlation of gender, supervisory, and agency size to the rest of the variables. However, there is a moderate degree of correlation between an employee who is planning to leave their job to the rest of the key variables. The Kaiser-Meyer-Olkin Measure of Sampling for APS is 0.704, while for FEVS and EPA Only FEVS is 0.664, which, for purposes of the Exploratory Factor Analysis discussed later, indicates that there is not too much shared variance between the variables. The P-values for all three data set outcomes are also significant.

Regression Analysis

After quantifying the summary statistics and correlations, linear regressions analyses were conducted. Specifically, linear analyses were determined for job satisfaction compared to decision-making, culture, fit, and APSM; along with a comparison of employee engagement to decision-making, culture, fit, and APSM for both FEVS and EPA Only FEVS data. Similarly, linear regressions were conducted for APS data except that direct PSM was added to the independent variable list. To further analyze the linear regression, the Beta Coefficients were determined to show which variables have the greater influence on the dependent variable (Bangert, 2018). Tables 14 and 15 show the summary information for linear regressions for APS and FEVS. Complete tables for the linear regression are contained in Appendix G (Tables 22-24)

	R-squared	P > t -	P > t - PSM	Beta Coeff -	Beta Coeff -
	-	APSM		APSM	PSM
		Employ	Engage		
DM	0.6972	0	0	0.0838	
Culture		0	0	0.2572	
Fit		0	0	0.4781	
APSM/PSM		0	0	0.0883	0.0245
		Job	Sat		
DM	0.7738	0	0	0.0965	
Culture		0	0	0.3896	
Fit		0	0	0.1439	
APSM/PSM		0	0	0.3245	0.0180

Table 14: Linear Regression A	PS
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Table 15: Linear Regression FEVS

	R-squared -	P > t -	Beta Coeff –
	APSM	APSM	APSM
	Employ	Engage	
DM	0.5011	0	0.0697
Culture		0	0.1086
Fit		0	0.2728
APSM		0	0.6341

	R-squared -	P > t -	Beta Coeff –
	APSM	APSM	APSM
	Job	Sat	
Employ		0	0.2061
Engage			
Fit		0	0.2712
APSM		0	0.3761

T-tests

To test the means of both the dependent and independent variables of the APS, FEVS, and FEVS-EPA Only data sets, a T-test was utilized to compare the means of each variable (decision-making, job satisfaction, employee engagement, culture, fit, and antecedents of public service motivation [APSM]) (UCLA Institute for Digital Research and Education, Statistical Consulting Group, 2021). The full T-test data are contained in Appendix G (Table 28 and 29); however, Table 16 shows the P-values for each test. All T-tests except for employee engagement FEVS-FEVS-EPA Only has a result of 0.0000; the employee engagement FEVS-FEVS EPA Only has a result of 0.6996, indicating that the mean of the two groups can be due to chance.

Variable	APS-FEVS	FEVS-FEVS EPA Only
	P-Value: $Pr(T > t)$	P-Value: $Pr(T > t)$
Decision-Making	0.0000	0.0000
Job Sat	0.0000	0.0000
Employ Engage	0.6996	0.0000
Culture	0.0000	0.0000
Fit	0.0000	0.0000
APSM	0.0000	0.0000

Table	16:	T-test	P-V	alues
I uore	10.	1 1001	T 1	urueb

Exploratory Factor Analysis

The next statistical analysis that was conducted is an Exploratory Factor Analysis (EFA) for the main variables. It needs to be noted that an exploratory analysis was not conducted for all of the survey questions in each instrument to determine common factors as the decision of what variables each question should be attributed to was directly

accomplished by assessing the questions. The EFA was utilized, in part, as a verification process for the final variables, which did indicate a strong correlation and Cronbach's Alpha with a few exceptions, such as agency size, sex, supervisor (APS and FEVS), and overall weakness of agency size for FEVS. Note that while sex was not expected to have a significant effect on the overall model, it was initially thought the position (supervisor) and agency size would play a more significant role. Tables 25a through 25i (Appendix G) are the sorted full EFA results along with their Cronbach's Alpha scale reliability. In actuality, the factor analysis was conducted from two different approaches to assess the relationships of the variables. As such, both a Principal Component Analysis (PCA) and a Principal Factor Analysis (PFA) were completed for all the variables (not including the variable ASPM as the individual variables that comprise ASPM are included in the analysis) and analyses of only the variables that comprise ASPM. To better interpret the data, postestimation rotation was utilized via Stata, specifically an orthogonal rotation via Varimax (Bangert, 2017). The factor loadings were then sorted. Each factor loading (>0.400) was evaluated (Pituch & Stevens, 2016). Tables 25c, 25e, and 25g (Appendix G) all support the variables Job Enrich, Ind App, Prof Dev, Fairness, and Particip (FEVS only) being combined and utilized to represent APSM. Tables 17 and 18 provide a summary of the factors for PCA for both APS and FEVS.

Table 17: Exp	oloratory Fact	or Analysis:	APS-PCA
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APS-PCA					
	Factor 1 Variables	Factor 2 Variables	Factor 3 Variables		
Cronbach's Alpha	0.9547	0.1802	N/A		
	Culture	Supervisor	PSM		
	Job Sat	Sex	Agency Size		
	Fairness	Agency Size			
	Prof Dev				
	Fit				

Factor 1 Variables	Factor 2 Variables	Factor 3 Variables
Employ Engage		
DM		
Job Enrich		
Ind Appr		

Table 18: Exploratory Factor Analysis: FEVS-PCA

FEVS - PCA				
	Factor 1 Variables	Factor 2 Variables		
Cronbach's Alpha	0.9559	0.1174		
	Job Sat	Sex		
	Ind App	Super		
	Fairness	Agency Size		
	Prof Dev			
	Culture			
	DM			
	Fit			
	Particip			
	Job Enrich			
	Employ Engage			

Simple Path Analysis

Finally, a Simple Path Analysis has been conducted for both APS and FEVS data sets to present the moderating effect of APSM on proximity to decision-making on both job satisfaction and employee engagement. These results help to shape both the similarities and differences of the APS and FEVS survey data. All of these results present the strengths and weaknesses of the proposed model, which will be expanded upon in the next chapter.



Figure 8: APS Simple Path Analysis



Figure 9: FEVS Simple Path Analysis

The overall goodness of fit was analyzed separately for APS and FEVS data. As Table 19 indicates, the results are mixed, but they do show support that the data fit the model for both APS and FEVS, although the FEVS appears to be a stronger fit.

Table 19: Goodness of Fit

Test	APS	FEVS
Chi-squared/p >	8708.974/0	7128.631/0
RMSEA	0.416	0.151
CFI	0.943	0.994
TLI	0.66	0.961
SRMR	0.046	0.014

As will be expanded upon in the next chapter, the overall results show some strong correlations between decision-making and both employee job satisfaction and employee engagement with APSM acting as a moderating variable, for both APS and FEVS data sets. The factors utilized for the analyses also show a strong relationship with one another. Finally, via the Simple Path Analysis, the results, while not conclusive, do indicate a somewhat strong to strong mitigating effect of APSM characteristics on the relationship between decision-making and employee engagement and employee job satisfaction.

Hypotheses Results

HO1: Based upon the statistical analyses shown above, the perceived proximity to the decision-making does affect employee engagement; as such, HO1 is rejected.
HO2: Based upon the statistical analyses shown above, the perceived proximity to the decision-making does affect employee job satisfaction; as such, HO2 is rejected.
Ha1: Based upon the statistical analyses shown above, PSM moderates the effect of perceived proximity to the decision-making on employee engagement; as such, Ha1 is accepted.

Ha2: Based upon the statistical analyses shown above, PSM moderates the effect of perceived proximity to the decision-making on employee job satisfaction; as such, Ha1 is accepted.

Chapter V

DISCUSSION

Statistical Insights

Important initial observations are immediately observed in the summary statistics from the APS, FEVS, and FEVS-EPA Only data. The most interesting observation is that although the data set for FEVS has approximately six times the number of observations, the Standard Deviation for most of the measured variables is broader, often significantly so, over that of the APS data. Further, when comparing the data sets of FEVS to FEVS-EPA Only, the significantly smaller (approximately 1% of the total FEVS observation) FEVS-EPA Only data set has a slightly smaller Standard Deviation for all of the measured variables. This observation is the opposite of what is expected from a larger data set (Wilson Van Voorhis & Morgan, 2007). Anecdotally, this suggests that the different agencies measured for the FEVS are not homogeneous with respect to the respondents that took the survey, and the significant differences, such as for job enrichment, are an underlying factor influencing motivation. The research did not investigate this aspect of the data however. Future studies may want to further dissect the agency responses to uncover some correlations or causality of the Standard Deviation of the responses to the survey instrument questions. Focusing on this research, the summary statistics allow for two initial thoughts on the differences of the Standard Deviations.

Comparing the FEVS to FEVS-EPA Only, it is possible and probable that the respondents of the survey are more homogeneous for EPA as compared to the overall FEVS. This, while not clearly supported by the statistical analysis of this research, suggests that

employees of EPA (perhaps environmental agencies in general) have a similar motivation behind conducting the work they do, which influences a slightly more narrow survey response when compared to the general population of the overall level of government sampled (see Tables 8, 9, and 10).

When comparing the APS to FEVS data sets, the differences are both positive and negative depending upon the variable. This suggests the relationship between the two is not as linear as it appears between FEVS and FEVS-EPA Only. Specifically, FEVS has a higher mean for job enrichment, professional development, employee job satisfaction, and employee engagement, but a lower mean for fairness and fit, while APSM is almost equal with a mean difference of only 0.03. However, nearly all of the Standard Deviations are greater for FEVS than APS, which again is somewhat unexpected. This is possibly explained by the differences in government (Westminster parliamentary compared to representative democracy) and cultural differences between Australia and the United States. As will be discussed later, when the two different data sets for the overall hypotheses of this research are evaluated, they are mostly similar with only a few differences. Finally, the language of the APS survey itself, which changes somewhat, can cause a change or differentiation in the respondent's selections.

The T-tests, as described previously, all resulted in a Pr([T] > [t]) = 0.0000, indicating the results of the test were not due to chance, with the one exception being employee engagement when comparing FEVS to FEVS EPA Only data. For all of the other T-tests, the results indicated that the data used for the correlations are viable and when combined with the other statistical analyses, allow for HO1 and HO2 to be rejected and for Ha1 and Ha2 to be accepted. In analyzing the T-test for employee engagement of FEVS to FEVS EPA Only, the root cause of the higher P-value appears to be that the variable for both data sets has a very similar Standard Deviation, but given the large difference in sample size, this is causing a much greater Standard Error. This result, within itself, is not enough to cause the rejecting or acceptance of the hypotheses to change. When focusing the analysis on just the variables employee engagement and decision-making for FEVS EPA Only data, it becomes quickly evident that the employee engagement data, when graphically evaluated, is skewed to be above 3 on the 5-point Likert-like scale, meaning it ranges from neutral to highly positive, thus a right or positive tail skew. However, decision-making is graphically represented as a more normal distribution, with a slight right or positive tail skew. The general distribution also holds true for the FEVS data set. This again brings the T-test results back to the significant difference in sample size as indicated by the skewed distribution.

Pearson R is utilized to assess the overall correlation of the data. The APS, FEVS, and FEVS EPA Only data all show generally strong correlation. While this within itself is not enough to either accept or reject the hypotheses or make definitive claims of causality, it certainly provides a strong foundation to move in these directions. In discussing the APS correlations (see Table 11), it is clear that agency size, sex, and supervisor variables all have a Pearson value of less than 0.1 or -0.1, which is indicating an extremely low degree of correlation. Direct PSM also has an extremely low degree of correlation. However, for this research, only one question of the APS survey instrument is utilized for the direct PSM variable, as opposed to the far more robust PSM survey instrument developed by Perry and Wise (Perry, 1996). While direct PSM will be discussed later, it is apparent that the sampling of PSM simply is not contemplated by the APS survey and is thus not a valid indication of the sample population. As such, the antecedents of PSM (APSM) are a more

validating variable utilized for this research. To this point, APSM shows a high to very high correlation with the other variables—job enrichment, individual appraisal, and professional development, which are all considered antecedents of PSM (Giauque et al., 2013; Perry, 1997) and are thus expected to have a very high correlation to the APSM. Additionally, fairness, proximity to decision-making, employee job satisfaction, employee engagement, culture, and fit are not specific components of APSM but also have a very high correlation to APSM (above 0.71). While not causality, this provides strong support to the components of APSM (job enrichment, individual appraisal, professional development, and participation) and can be utilized in assessing employee engagement, employee job satisfaction, and proximity to decision-making. All other analyses of the APS correlation data show a Pearson R-value of greater than 0.5. This indicates at least a moderate to moderately strong correlation, but when converting the Pearson R-value to R-SQUARED it indicates that as little as 25% of the scores can be directly explained by the given variable (Pyrczak, 2014). Case in point, the correlation between employee engagement and individual appraisal is 0.5729, which equates to an R-SQUARED of 0.328. In this case, while the Pearson R is not as high as might be expected, when combined with the other aspects of APSM, it provides a Pearson R of 0.7185 or an R-SQUARED 0.516, meaning that over half of the survey result observations can be explained by this correlation. Most importantly for this research, the Pearson Rs for decision-making to job satisfaction, employee engagement, and APSM, are 0.7357, 0.6629, and 0.7644, respectively, which all indicate a moderately strong to strong correlation.

FEVS analysis did not include any aspect of direct PSM because none of the survey instrument questions were worded in a manner that they could be used for this purpose. As such, there is not a direct PSM correlation for either FEVS or FEVS EPA Only data. Similar to APS, FEVS and FEVS EPA Only have an extremely low correlation for agency size (FEVS EPA Only did not include this variable), sex, and supervisor in comparison to the other variables. Intent to leave the job was included for FEVS only and is found to only have a moderate, at highest, correlation to the other variables, which is somewhat unexpected. The Pearson R for intent to leave the job compared to job satisfaction is 0.4992, which although can be called a moderate correlation, anecdotally appears low because of the expectation that how satisfied in a job someone is, is tied to their desire, or lack thereof, to leave. Other factors such as retirement may play a more influential role. The Pearson R for employee engagement to intent to leave the job is low, which again is somewhat unexpected. However, given that this relationship is not paramount for our main hypotheses, additional time to assess the reasoning behind these relations will not be taken. The remaining correlations for FEVS and FEVS EPA Only are generally similar to those for APS, with the main exception being FEVS EPA Only having a Pearson R of 0.408 for fit compared to job enrichment, which is ~0.12 lower than FEVS as a whole. FEVS Pearson R for decisionmaking to job satisfaction, employee engagement, and APSM are 0.8504, 0.5573, and 0.8073, respectively. The most interesting observation in this comparison is how job satisfaction and APSM are stronger, yet employee engagement is lower. One possible explanation for this is that the FEVS have significantly larger Standard Deviation for proximity to decision-making (1.02 compared to 0.61 for APS) and a significantly higher mean score for employee engagement (4.43 compared to 3.80 for APS), which highlights the greater variability.

The multiple regression analysis is quite informative. The APS results indicate a Pvalue that is less than 0.05 for all variables for both employee engagement and job satisfaction. The Beta Coefficient was strongest for fit for the employee engagement regression and only showed a small degree of influence for APSM (0.06). However, while not strong, this still supports the hypothesis that APSM does affect the variability of employee engagement. The Beta Coefficient was strongest for culture for the job satisfaction regression, with APSM being just slightly weaker. These more strongly support the hypothesis for ASPM moderating the influence on Job Satisfaction as it is fairly influential on affecting this variable. The R-squared for employee engagement is 0.70 and for job satisfaction is 0.77, indicating that the four variables used for the regression analysis, decision-making proximity, culture, fit, and APSM, explain most of the variability with dependent variables. It is interesting how fit is more influential for employee engagement and culture is more influential for job satisfaction. This will be discussed later in this research. Because of the reasons already discussed, direct PSM, while it was assessed, will not be discussed due to the inadequacy of the survey instrument questions.

The FEVS results differed in many ways from the APS results. However, the results for the P-value were the same. The Beta Coefficient for employee engagement is strongest for APSM at 0.63, while decision-making proximity and culture both showed a small and negative influence. Fit was the second most influential but was less than half as much as fit for APS employee engagement. These results are beginning to suggest that although there are similarities between APS and FEVS, there are some strong differences between the two. Returning to the regression analysis, the Beta Coefficient for job satisfaction indicates that APSM is still the most influential variable, with all four variables being more clustered with the degree of influence. In comparing FEVS to APS, APSM only has a difference of 0.07, thus indicating similar influences for job satisfaction. R-Squared for employee engagement is only 0.50, indicating that other factors are influencing the dependent variable. This may help explain the disproportionality between APS and FEVS. R-squared for job satisfaction is quite high at 0.89, strongly indicating that these four variables are the main influences on the dependent variable.

The FEVS-EPA Only regression analysis was extremely similar to the FEVS regression analysis for job satisfaction. However, things become a bit more interesting when looking at the FEVS-EPA Only regression analysis for employee engagement. R-squared and the Beta Coefficients were all very similar; however, the P-value for decision-making proximity is 0.219. The exact cause of this is not clear but statistically suggests that proximity to decision-making is not as influential on employee engagement for FEVS-EPA Only respondents. With a Beta Coefficient of -0.026, this supports the assertion to the degree of influence. While this is quite interesting, it is not clear if this result has a significant impact on the outcome of this research, but it does suggest that more thorough research evaluating the influences of employee engagement of EPA employees (or environmental agency employees in general) compared to non-environmental agency employees should be conducted. These results should not impact the outcome of the overall research because the sample size of FEVS-EPA Only is approximately 1% of the total sample size of the FEVS data set. However, from a point of discussion perspective, this does suggest, as does the differences between APS and FEVS, that universal application of the moderating influence of PSM on employee engagement and job satisfaction is complicated.

Exploratory factor analyses were performed for the APS and FEVS data; more specifically, both a Principal Component Factor Analysis (PCA) and a Principal Factor Analysis (PFA) were conducted. The difference between the two types of analyses is the PFA analyzes only the reliable common variance of data, whereas PCA analyzes all the variance of data (H.-J. Kim, 2008).

The APS PCA (Table 17), as indicated by the Eigenvalues above 1 (Bangert, 2017), indicates two components for the APSM analysis and adds the direct PSM as a third component for the PCA with direct PSM; the number of factors was also automatically identified by StataIC 16.1. This, again, indicates that direct PSM is not well suited to be included in the overall research because of a week correlation to the rest of the variables. One variable to point out is culture, which (as will be discussed later in this chapter) has the highest degree of communality at ~0.84, compared to 0.77 for the FEVS analysis. After rotating the loadings (orthogonally) and sorting the loadings, all of the variables have a value above 0.400 (Bangert, 2017; Pituch & Stevens, 2016) except supervisor, sex, and agency size. Supervisor, sex, and agency size are combined into Factor 2. As discussed previously, statistically, supervisor, sex, and agency size do not appear to have a significant role in this research. This is supported by Cronbach's Alpha scores, which for Factor 1 is 0.9547 indicating strong internal consistency (Bangert, 2017), whereas Factor 2 has a Cronbach's Alpha score of 0.1803, which is quite low.

The APS PCA including direct PSM (Table 17) is similar to the analysis not including direct PSM, with a few main differences. Factor 1 and Factor 2 Eigenvalues are nearly identical; however, this analysis includes a third factor with an Eigenvalue of 1.04. Post rotational loading and sorting, Factor 1 contains the same variables (culture, fairness, job satisfaction, employee engagement, professional development, fit, decision-making proximity, individual appraisal, and job enrichment) at nearly the same values. Similarly, Factor 2 contains the same variables (supervisor, sex, and agency size) with similar values. The difference, however, is with the third factor that only contains direct PSM. Again, this all supports that both the variables within Factor 2 and certainly Factor 3 are not significantly influential on the overall research.

The APS PCA (Table 25c) is for evaluating or rather a verification of the four variables that are utilized for the antecedents of PSM (APSM) (Giauque et al., 2013). The Eigenvalue only indicated one factor for the four APSM variables (job enrichment, individual appraisal, professional development, and fairness). All values were 0.88 or greater. Cronbach's Alpha equaled 0.9102. All of these results strongly support that the four variables utilized in combination to described APSM are statistically valid and functionally appropriate for this research.

To further analyze the appropriateness of the variables utilized in this research, two PFAs were conducted. The first evaluated all of the variables as described for the PCA except for direct PSM (Table 25d.). The result for this analysis indicated that the following variables are all part of Factor 1: culture, fairness, job satisfaction, employee engagement, professional development, fit, decision-making proximity, individual appraisal, and job enrichment. It should be noted that job enrichment also had a value above 0.400 for Factor 2 but because the value is so much higher for Factor 1 (0.7094), it is being incorporated into Factor 1 only. No other variable obtains a value of 0.400 for any other factor. Again, this supports excluding supervisor, sex, and agency size from the overall analysis. Cronbach's Alpha stayed consistent. The final analysis for PFA is to directly analyze the appropriateness of utilizing job enrichment, individual appraisal, professional development, and fairness for APSM (Table 25e). Again, all four of these variables fell into one factor and all values were above 0.800, with a Cronbach's Alpha of 0.9102. This again supports the appropriateness of using these four variables together for APSM.

Similar analyses were conducted for FEVS except for one including direct PSM as this was not attempted to be measured with the FEVS data set. The FEVS PCA (Table 18), as indicated by the Eigenvalues above 1 (Bangert, 2017), indicates two components for the APSM analysis; the number of factors was also automatically identified by StataIC 16.1. After rotating the loadings (orthogonally) and sorting the loadings, all of the variables have a value above 0.400 (Bangert, 2017; Pituch & Stevens, 2016) for Factor 1, again except for supervisor, sex, and agency size; supervisor, sex and agency size are combined into Factor 2. The values for these are above 0.70 for supervisor and sex but only 0.121 for agency size. As discussed previously, statistically, supervisor, sex, and agency size do not appear to have a significant role in this research. This is supported by Cronbach's Alpha scores, which for Factor 1 is 0.9559 indicating strong internal consistency (Bangert, 2017), whereas Factor 2 has a Cronbach's Alpha score of 0.1174, which is quite low.

The FEVS PCA (Table 25g) is for evaluating or rather a verification of the four variables that are utilized for the antecedents of PSM (APSM) (Giauque et al., 2013). The Eigenvalue only indicated one factor for the four APSM variables (job enrichment, individual appraisal, professional development, and fairness). All values were 0.82 or greater. Cronbach's Alpha equaled 0.9224. All of these results strongly support that the four variables utilized in combination to described APSM are statistically valid and functionally appropriate for this research.

Again, to further analyze the appropriateness of the variables utilized in this research, two PFAs were conducted. The first evaluated all of the variables as described for the PCA (Table 25h). The result for this analysis indicated that the following variables are all part of Factor 1: participation, culture, fairness, job satisfaction, employee engagement, professional development, fit, decision-making proximity, individual appraisal, and job enrichment. It should be noted that job enrichment, individual appraisal, and professional development also had a value above 0.400 for Factor 2 but because the value is higher for Factor 1 for all three variables, they are being incorporated into Factor 1 only. Given that job enrichment has this indication for both APS and FEVS, it does suggest that it influences other things beyond the scope of this research. No other variable obtains a value of 0.400 for any other factor. Again, this supports excluding supervisor, sex, and agency size from the overall analysis. Cronbach's Alpha stayed consistent. The final analysis for PFA is to directly analyze the appropriateness of utilizing job enrichment, individual appraisal, professional development, and fairness for APSM (Table 25i). Again, all four of these variables fell into one factor; however, the values were lower than for PCA, with participation and fairness being 0.55 and 0.58, respectively. What is also of interest is that participation, individual appraisal, professional development, and fairness could be included in Factor 2, with fairness having a higher value than it does for Factor 1. However, since the overall value of Factor 2 is 0.047, the single factor approach supports the appropriateness of using the four variables together for APSM. Cronbach's Alpha is similar at 0.9224.

A Simple Path Analysis was developed as a model to show the effect of APSM on decision-making proximity as related to both job satisfaction and employee engagement; for both APS and FEVS data sets. The APS models that all variables are significant. R-squared indicates that approximately 64% of the variability of this model is explained by these variables and more specifically, approximately 58% of the variability from proximity to decision-making involves APSM. This is supporting the theory that APSM does moderate the proximity to decision-making variable as it applies to both job satisfaction and employee engagement, although not equally so. Further, while it is a moderating variable, there are other influencing variables that we have not included in this research. The Goodness of fit for the overall model varies. Chi-Squared, RMSEA, and TLI do not indicate a good fit, although this is not unexpected for Chi-Squared because of the large sample size (Crowson, 2020). However, CFI and SRMR both indicate that the model is a good fit. With this in mind, the model appears to be a good fit, albeit incomplete to describe the full relationship between proximity to decision-making and both job satisfaction and employee engagement. Again, though, the main focus of this research is evaluating APSM as the moderating variable in this model.

The FEVS Simple Path Analysis model has both similarities and some differences from the APS model. The most striking difference is the coefficient between proximity to decision-making and employee engagement, which equals 0.0023 and is not significant as its P-value is 0.054; although this is close to being significant. However, this does not seem to dissuade from the moderating effect of APSM. All other aspects of the model are significant. The overall R-square for the model is 73% and R-square for APSM itself is 65%. Again, this indicates a similar conclusion as to the APSM findings. Overall Goodness of fit is also similar to APS although a bit stronger. Like APS, Chi-Squared and RMSEA do not indicate a good model fit; however, CFI, TLI, and SRMR all do. As such, like the APS model, the FEVS model for this specific research is a good fit. What is more interesting to this research is not the model fit itself, but that the analysis of the model supports the theory that APSM is a moderating variable between decision-making proximity and job satisfaction as well as employee engagement, for both APS and FEVS.

Significant Findings

As will be mentioned in the Recommendation for Further Research section, comparing Australia to the United States, specifically for public administration and its effects on employee engagement and employee job satisfaction among other variables discussed during this research did not prove to be as insightful and predictive as anticipated. While this research does not descend into deeply researching the *why* of the similarities and differences, there are some higher-level concepts that do become more evident. Perceived proximity to decision-making and job satisfaction are similar between APS and FEVS. As an example, these variables suggest a possible commonality in motivation, be it as straightforward as Theory Y (Denhart & Catlaw, 2015) or PSM and the concepts of self-sacrifice and a preference to policy development along with the inherent implicit and explicit processes that go along with that (Perry, 1996).

However, there are some very obvious differences between APS and FEVS such as employee engagement, culture, and fit. Again, these can, at least in part, be correlated to some foundational employee motivation theories. Theory Y (Denhart & Catlaw, 2015) discusses how employees seek additional responsibilities, which correlates to both employee engagement and fit. Expectancy Theory expounds on how the organization's mission can satisfy (or not satisfy) the employee's values and goals (Vroom, 1964), which is to say that culture and fit can be affected by the explicit or even perceived organizational mission and values. Similarly, Self-Determination Theory discusses the need for relatedness (Ryan &
Deci, 2000) which is part of fit and even culture. Finally, characteristics of PSM, such as rational motives, samaritan motivations, and humanitarian motivation (Brewer, 2002; Vaisvalaviciute, 2009; Vandenabeele, 2008) all support the differences in employee engagement, culture, and fit. The variation is well stated by Vandenabeele and de Walle (2007, p. 224):

There are a number of issues that are important when comparing public service motivation internationally. First, there are different perspectives on public service motivation. Second, international comparison of a value-laden concept such as public service motivation requires an understanding of the international variability of values, especially public administration values, upon which public service motivation is based. Finally, the relationship between public service motivation and public service is considered in a global context.

This is all to say that different theories and aspects of employee motivation, beyond that of PSM, play integral and complex roles in addressing how employees from different countries, regions, or even the particular focus of a given agency compared to a different agency, have significant influence over employee engagement, culture and fit. Therefore, it can also be hypothesized that the moderating effect of PSM is also affected.

While not an initial question of this research, it became an imperative component to show that APSM is in correlation to PSM, thus being a good measure. The main components of APSM are job enrichment, participation, individual appraisal, professional development, and fairness (Giauque et al., 2013), which are generally thought of as HRM practices, not including fairness, which is of course an extrinsic component. This research, specifically that of the Exploratory Factor Analysis, indicated that these are appropriate measures. This means that measuring how employees view these variables for their given organization/situation correlates to the degree of PSM characteristics they may have, which in turn suggests organizations can utilize a less intrusive type of survey to assess the levels of PSM within the organization or with potential recruits for positions to be filled.

As has already been discussed, fit and culture are two very influential variables in this research, especially with APSM. This suggests that fit and culture, which in part can be influenced by organizational design, can be further moderated (positively or negatively) by APSM on employee engagement and employee job satisfaction on the impact of perceived proximity to decision-making. First, this provides support for the idea that aspects of employee motivation cannot be applied within a vacuum, at least for purposes of this research and second, that many of the measured variables, such as culture and fit, have multiple points of influence with employee motivation that goes beyond the focus of this research. This also means that organizations have multiple variables and multiple opportunities with a single variable, to "fine-tune" the intrinsic behaviors and structures of the organization; which obviously can affect an employee's extrinsic opinions of the organization. One example of modifying the organizational structure is through HRM practices, which as outlined above, can influence APSM and therefore influence PSM or at least how it affects employees that exhibit PSM characteristics. This also speaks to the potential of unintended consequences where changing one variable in one part of the equation can have implications elsewhere. Again, based upon the overall results of this research, changing the same variable in the federal governments of Australia and the United States is not guaranteed to have an equal effect vector in both organizations.

Bringing these findings together, there is compelling evidence that the organizational structure (perceived proximity to decision-making) affects employee engagement and job satisfaction, which are both moderated by APSM and subsequently PSM. What this also

suggests is that to achieve organizational goals, an organization can choose to address the structure, the type of people it employs (employee characteristics), or a nearly endless combination between the two, which will help goal obtainment in dynamic and complex constructs.

Consideration of Findings in Light of Current Research

As discussed earlier, there is not an extensive body of research on the specific focus of this dissertation; however, looking tangentially, there is a more expansive amount of research. In a study conducted by Metheny, West, Winston, and Wood (2015) that focuses on faith-based institutions, it was concluded that additional involvement in decision-making and job satisfaction did not show a statistically significant measure of correlation or causality. This is different from the findings of this research yet significant, as Metheny et al. (2015) were not focused on the public sector or on the corresponding use of PSM. What this does indicate is that there is not a universal application for perceived proximity to decision-making and job satisfaction. However, there are some direct similarities and overlap with the for-profit environment and further evaluation of some current research shows the positive influence of decision-making (participatory) on job satisfaction (Van Der Westhuizen, Pacheco, & Webber, 2012).

Employee engagement is shown, extensively, to be correlated (in part) to increased productivity (and profits) (Greenfield, 2004). While the public sector does not measure productivity in profits, they are similar in the type of outcome measures that show a relationship to employee engagement and productivity and, in the opinion of this researcher, are encapsulated within the fiduciary responsibility of the public sector. Greenfield (2004, p. 16) discusses the outcome of research by Jay Forrester, which indicates 24% of employees are engaged, 55% of employees are disengaged, and 19% are actively disengaged. This is a significant downward force on productivity and outcome-oriented goals. While not the focus of this research, increasing employee engagement increases the ability to produce the desired outputs and outcomes.

One way to address increasing employee engagement is to leverage decision-making as a way to support the employee. Extant literature covers a multitude of approaches to doing this, which greatly depend on the organizational structure, desired outcome, and enhancing a congruence with the values of the organization (Arney, 2007; Greenfield, 2004; Langer & Feeney, 2014; Westwood & Posner, 1997). This research shows that aligning both the decision-making process and the values of the employee can more times than not, increase the engagement of that employee. Related, there is strong evidence that PSM shows a correlation of encouraging ethical behaviors among public sector employees (Meyer-Sahling et al., 2019; Shim & Park, 2019), which lends further support for values and the organizational cultures as exemplified through P-O fit (Bright, 2007). For this particular research, the incorporation of PSM, as measured through a set of particular human resource PSM antecedents (APSM), can moderate the adverse effect of having a less than optimal decision-making structure and culture (from the employee's perspective).

Culture is a variable that was not originally given any special emphasis within this research. However, some of the results from the statistical analysis, as previously discussed, support a theoretical concept that the measured differences between the results from Australia compared to the United States are, at least in part, influenced by the different cultures. Some of the most recent research concerning culture and PSM focuses on South Korea and China, in part because of the resurgence of NPM (Lee, Kim, et al., 2020; Lee, Oh, et al., 2020). Trust in top management (which has implications with the construct of perceived proximity of decision-making) through a lens of desired behaviors, in the case of Korean ethical values are a paramount behavior, is strongly correlated to PSM, which in turn positively and significantly supports the performance-based culture (Lee, Oh, et al., 2020; Shim & Park, 2019). More to the point, Lee, Oh, et al. (2020) found that "the moderating effects of organizational culture differ by PSM dimension" (p. 290), which lends support to the model for this research. National culture is associated with PSM, with masculinity and indulgence being positively related to an individual's PSM, while individualism is negatively associated with PSM (S. Kim, 2017). The idea of national cultural differences and the associated impact on the organization is supported by Denison's model of organizational culture (Scandura, 2016). This affords possible support to explain the differentiation between Australia and the United States concerning some of the variation in the statistical analysis, such as the Simple Path Analysis for employee engagement and proximity to decision-making was not significant. However, it should be noted that Lee, Oh et al. (2020) suggest that power distance and uncertainty avoidance are not significantly related to PSM.

Implications of This Study

The stated purpose of this research is to better understand how an agency's organizational structure, specifically the perceived distance to a decision-making, affects employee job satisfaction and employee engagement for employees that demonstrate PSM characteristics. Further, the use of HRM actions as PSM antecedents will allow for a more insightful design of the organizational structure, better hiring protocols with a focus on organizationally specific inclusion of employees with PSM, and employee retention.

Having a more engaged and satisfied workforce will allow for a more congruent outcome of the agency's goals.

This research indicates a positive moderating effect of PSM (via APSM) on employee engagement and employee job satisfaction concerning the perception of proximity to decision-making. This suggests that both hiring practices and reorganizations can be done with a level of specificity. However, before jumping into changing hiring practices and reorganizational plans, an organization should first evaluate what the desired outcome(s) are and simultaneously decide what is the true culture. A less than congruent culture from an employee perspective, as described previously, can be offset or moderated for employees displaying PSM characteristics, or as measured from HRM PSM antecedents. This is an extremely important finding of this research when focusing on organizational outcomes and employee engagement or employee job satisfaction.

Once an organization understands and articulates its goals, which is predicated on the organization functioning at a high enough level to do so, it can design and implement its culture through multiple avenues. As culture correlates to values (both organizational values and employee fit to those values) it can be framed, in part, by the formalized organizational mission, vision, and values. However, the specifics of the mission, vision, and values must be achievable, measurable, embraced by the organization, and must be clearly articulated via leadership messaging (Rabinowitz, 2016b). The established culture (including the mission, vision, and values) should be utilized to design both the organizational structure and the supporting HRM practices. Based upon this research, the less congruent the culture and the greater the perceived proximity to decision-making, the greater the need for employees with stronger PSM characteristics. This can of course be

directly measured through one of the PSM survey instruments designed by Perry and Wise or, like the data sets utilized for this research, measured via HRM PSM antecedents. Regardless of how it is measured, the theoretical framework is clear that through the employment of staff that display PSM characteristics, employee engagement and employee job satisfaction will moderate the impact by less than optimally structured organizations; thus providing a greater opportunity for the organization to achieve its desired outcomes.

Additionally, through an expanding focus on Diversity, Equity, and Inclusion (DEI), the perceived proximity to decision-making can be further assessed to expand the finding through more than just a homogenous lens. More direct surveying of staff or potential staff can take place whether through the hiring practices or post-hiring follow-up. This can allow for the targeted measuring of employee engagement, employee job satisfaction, and the moderating effects of PSM on them from perceived proximity to decision-making perspective. This will obviously not address all organization structural and cultural issues, nor will it directly address increasing employee engagement and employee job satisfaction; but it can certainly be used to moderate adverse effects of organizational behaviors and potentially maximize the outcome with a stagnant organizational structure and culture by better focusing on given characteristics of employees.

Finally, an implication of this study is to simply reinforce the interconnectedness of all the variables used for this research and that to make organizational changes to improve employee engagement and employee job satisfaction, great care and precision must be utilized when addressing any single variable, as that variable will undoubtedly have a positive and negative influence on the other variables.

Limitations of This Study

The limitations of this study are fairly evident. The most significant limitation is the use of existing data sets from two survey instruments (APS and FEVS), which are not specifically congruent with one another. This was partially addressed by close examination of the individual questions and combining questions into generally the same research variables (except for direct PSM for APS). Utilizing EFA provides a level of validity to using the two different data sets. Additionally, many of the responses of each data set were incomplete, which was addressed by not including those particular responses, which is viable due to the size of each sample set.

Because of the specific questions utilized in both survey instruments, there was not a clearly viable way to directly measure PSM. The APS instrument included one question that specifically correlated to the PSM instrument designed by Perry and Wise, but upon analysis, the singular question was inadequate in which to make any theoretical assertions. Additionally, all responses for the one PSM question were either a 4 or a 5 on a 5-point Likert-like scale, with 5 being the most positive. This lack of variability further complicated any statistical correlation to this question. Because of this, it was decided that the antecedents of PSM would be used to support this research. Based on the analytical analysis, the use of these antecedents is statistically appropriate and significant.

Other limitations of this research centered on the evaluation of the FEVS data in totality as compared to the data for only the EPA and also in the general comparison of Australia to the United States. The comparison of the overall FEVS data to the EPA Only data was undertaken because the researcher has a specific interest in the application of this research to environmental agencies. The statistical analysis did show some slight variation, but the root cause of the variation was not clearly evident (Is PSM greater in environmental

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agencies? Does it act as a greater moderating variable? Is the difference because of management, agency size, or culture?) and no further analysis was completed on EPA Only data. The comparison between Australia and the United States is justified so that the strength of the overall model can be assessed. However, as was discovered, differences in national cultures and national work cultures may play a part in the differences between the two countries. Also, language differences between the two survey instruments may cause a slight skewing of respondents' perceptions and may cause a slight moderating (i.e., increasing) of their responses. This is not expected to cause a reversal of a negative response to become a positive response, but rather a possible change within the Likert-like answer selected, and overall, this could cause a slight change in the response distribution. Further, additional data sets down to the agency level or a respondent level were not readily available from other countries; this additional data could support or not support the validity of the findings of this research.

Finally, what sex (gender) a respondent identified as, whether a respondent was a supervisor, the size of the agency, and whether the respondent planned to leave the agency (FEVS only) was part of the initial study, it was found to not correlate within the main focus of this research. This study did not take into account any aspect of DEI. While this was done intentionally because of the specific research, DEI could provide further insight into the outcome, especially given the many variables assessed for this research.

Recommendations for Further Research

As is clear from the previous statement, including aspects of DEI or focusing on DEI is something that can further refine the results for future studies; this especially holds true

because of the potential overlap of the antecedents of PSM to DEI-related HR practices. Beyond DEI, the research could evaluate Australia and/or the United States from a longitudinal perspective, presuming that the survey instrument questions remain consistent enough for this type of study. As an example, evaluating the FEVS for the United States from 2015 through 2022 may provide some interesting results. Optimally, this type of longitudinal study will be able to better highlight the moderating effect of PMS.

Beyond a single country longitudinal study, research that directly measures PSM, along with the rest of the variables from this research (job enrichment, individual appraisal, professional development, fairness, perceived proximity to decision-making, job satisfaction, employee engagement, culture, and fit) will allow for a comparison between direct PSM and antecedents of PSM. Further, the moderating effects of PSM will be more precise and may advance the model. Additionally, the individual characteristics of PSM can be dissected to assess their potential correlation with the characteristics of culture, as described previously.

Another area of future research that should be conducted is to focus on the agencylevel responses using either a single year of the FEVS or multiple years for a longitudinal study. This may reveal if and why agencies are not homogenous and how the affected variables correlate to the moderating effect of PSM for perceived proximity of decisionmaking on employee engagement and employee job satisfaction. A future aspect of continuing research on this topic is in evaluating the type of decision-making process (within the organization) compared to the perceived proximity to the final decision and if that variable impacts an employee's job satisfaction and engagement. Finally, while not at all part of this research, assessing an entrepreneurial approach to decision-making with an organization and how that is supported may result in some very specific and telling findings.

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Some public sector organizations state they desire to have an entrepreneurial spirit and while this can result in creative and unique ideas, it requires a bias towards risk-taking (Shafritz et al., 2013). How this type of thinking is incorporated (or tolerated) within the management construct (Scandura, 2016) may affect many aspects of this research model.

Finally, as has been discussed previously in this research, the two data sets, APS and FEVS, were originally selected because of their similarities, completeness of available data, and to help broaden the findings of this research. What was not part of this research is a deeper analysis into comparative public administration between Australia and the United States. While overall PSM scores are similar for the United States and Australia (Vandenabeele & de Walle, 2007), the sub-aspects of PSM (such as compassion) are somewhat more divergent, at least regionally speaking. Self-sacrifice is another component of PSM and as a cultural example that extends beyond the borders of the administrative state, Australians view their tax burden far more favorable (by approximately 12%) for an overall similar tax burden (Blumberg, 2017) than the United States. This research is mostly a quantitative analysis of the existing data sets; by expanding this research to qualitatively comparing the public administration of both countries-including but not limited to the political culture, constitutional framework including civil service, central government agencies, federal and local governments, finance systems, coordination, management, accountability and openness, and the administrative system (Chandler, 2014), a more robust picture should emerge, especially surrounding the variables of culture and fit.

Conclusion

Similar to other studies that involve a large number of respondents, many statistical inferences and conclusions can be made, as this research certainly has done. However,

while this study will provide another "tool in the toolbox" for managing employee engagement and employee job satisfaction from a macro-perspective, it does not provide a magic elixir to address any single individual employee. Tables 7 and 8 show the mean and standard deviation for the dependent and independent variables. Beyond this is the overall range of respondent scores with all of the variables covering the entire range of the 5-point Likert-like scores. As an example, while the "average" employee for the FEVS data set scored a 3.46 for perceived proximity to decision-making, a 3.74 for employee job satisfaction, and a 4.43 for employee engagement, this does not indicate that a specific respondent will have scored this way. This means that policies and culture will not address the entire workforce and that employees still need the complexities and paradoxes of engagement to be addressed by leaders, often in a specific and at times individual manner (Farrell, 2018).

This study focused not on the individual but rather on an entire sector (federal government) of Australia and the United States and how PSM, as expressed through the antecedents of PSM (APSM), moderates the effect of the perceived proximity to decision-making on both employee job satisfaction and employee engagement. To this overarching focus, it was determined that APSM does moderate the effects of the perceived proximity to decision-making on both employee job satisfaction and employee engagement. The degree of magnitude to how much so does fluctuate between Australia and the United States, which indicates that the magnitude of relationships between the variables is not completely congruent between the two countries, thus suggesting that this research is not a unified methodology for all countries and cultures.

The variable of culture is singled out as the results suggest it can be a cause of both the differences between the APS and FEVS and also on the micro-scale acting as a more influential variable than was considered for this research. This being stated, it does not detract from the overall hypotheses of the research but rather supports the concept that the organizational structure of agencies may conflict with PSM employees thus impacting employee job satisfaction, employee engagement, and successful program goal obtainment (Campbell et al., 2014). Something not investigated within this research is the sub-culture of the federal agencies. As an example, the Environmental Protection Agency (EPA) is headquartered in Washington, D.C., and has 10 regional offices located around the country; however, the FEVS does not differentiate the results based upon the regions or headquarters but rather as an overall agency. This was done to help keep the respondents from being able to be identified, but in so doing, ignores potential cultural and fit issues that are unique within a given region. Interestingly, the U.S. federal government does not ignore the concept of culture and identifies employee engagement as an issue to be addressed (U.S. Office of Personnel Management, 2016). However, their approach appears to be more focused on identifying drivers as opposed to the focus of this research in identifying the concept of a moderating variable, specifically PSM. Australia, within the APS, does ask where a respondent's workplace is located, which can certainly allow for a deeper dive into regional cultural differences. However, Australia does not make that level of the APS survey instrument public, so the regionalized results cannot be evaluated for this research.

The outcome of this research is important as it provides public sector organizations with further insight into how their organizational structure (perceived distance to decisionmaking) may affect employee job satisfaction and employee engagement and how employees that demonstrate PSM characteristics differ from those who don't. In turn, this allows for a more insightful design of the organizational structure and better hiring protocols with a focus on organizationally specific inclusion of employees with PSM, at least as measured through APSM.

The findings for the research questions are:

- Does the organizational structure (perceived proximity to decision-making) affect employee engagement? Yes.
- Does the organizational structure (perceived proximity to decision-making) affect employee job satisfaction? Yes.
- Does PSM moderate the effects of organizational structure (perceived proximity to decision-making) on employee job satisfaction and employee engagement? Yes

This research uncovered more questions than it has answered, which is not unexpected. However, it is clear that employees that exhibit characteristics of PSM have the implicit ability to moderate the adverse effects of the decision-making organizational structure within a federal agency of Australia and the United States, which may be able to be extrapolated and extended to sub-federal level state, territorial, provincial, municipal, and local agencies. This also provides another option in how organizational leadership can address the cultural complexity of the organization: Is the focus on a homogenous workforce for a predetermined outcome and allowing PSM to moderate the effect on employee job satisfaction and employee engagement, or is the focus on a more heterogeneous workforce that allows for more outcome variability but an intrinsically more satisfied and engaged employee? Whatever is selected by an agency, understanding the different motivational factors and the effects of those factors will be crucial to addressing decision-making,

employee job satisfaction, and employee engagement.

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APPENDIX A:

Institutional Review Board Exemption



Institutional Review Board (IRB) For the Protection of Human Research Participants

PROTOCOL EXEMPTION REPORT

Protocol Number: 04008-2020

Responsible Researcher: Mr. Geoffrey Rabinowitz

Supervising Faculty: Dr. Luke Fowler

Project Title: Perceived Proximity to Decision-Making within Organizational Hierarchy: How Public Service Motivation Moderates its Effect on Employee Job Satisfaction and Engagement of Federal Agencies in Australia and the United States.

INSTITUTIONAL REVIEW BOARD DETERMINATION:

This research protocol is **Exempt** from Institutional Review Board (IRB) oversight under Exemption **Category 4**. Your research study may begin immediately. If the nature of the research project changes such that exemption criteria may no longer apply, please consult with the IRB Administrator (<u>irb@valdosta.edu</u>) before continuing your research.

ADDITIONAL COMMENTS:

- Upon completion of this research study all data (email correspondence, survey data, participant lists, etc.) must be securely maintained (locked file cabinet, password protected computer, etc.) and accessible only by the researcher for a minimum of 3 years.
- ☐ If this box is checked, please submit any documents you revise to the IRB Administrator at <u>irb@valdosta.edu</u> to ensure an updated record of your exemption.

Elizabeth Ann Olphie

05.02.2020

Thank you for

submitting an IRB application. Elizabeth Ann Olphie, IRB Administrator

Please direct questions to *irb@valdosta.edu* or 229-253-2947.

Revised: 06.02.16
APPENDIX B:

FEVS Survey Instrument



Appendix B: 2018 FEVS Instrument

Appendix B: 2018 Federal Employee Viewpoint Survey Instrument

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	
My Work Experience						
 I am given a real opportunity to improve my skills in my organization. 						
2. I have enough information to do my job well.						
 I feel encouraged to come up with new and better ways of doing things. 						
 My work gives me a feeling of personal accomplishment. 						
5. I like the kind of work I do.						
6. I know what is expected of me on the job.						
 When needed I am willing to put in the extra effort to get a job done. 						
8. I am constantly looking for ways to do my job better.						

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
 I have sufficient resources (for example, people, materials, budget) to get my job done. 						
10. My workload is reasonable.						
11. My talents are used well in the workplace.						
12. I know how my work relates to the agency's goals.						
13. The work I do is important.						
 Physical conditions (for example, noise level, temperature, lighting, cleanliness in the workplace) allow employees to perform their jobs well. 						
15. My performance appraisal is a fair reflection of my performance.						
16. I am held accountable for achieving results.						

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Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
17. I can disclose a suspected violation of any law, rule or regulation without fear of reprisal.						
18. My training needs are assessed.						
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Basis to Judge
19. In my most recent performance appraisal, I understood what I had to do to be rated at different performance levels (for example, Fully Successful, Outstanding).						
My Work Unit						
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	
20. The people I work with cooperate to get the job done.						
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
 My work unit is able to recruit people with the right skills. 						
22. Promotions in my work unit are based on merit.						
23. In my work unit, steps are taken to deal with a poor performer who cannot or will not improve.						
24. In my work unit, differences in performance are recognized in a meaningful way.						
25. Awards in my work unit depend on how well employees perform their jobs.						
26. Employees in my work unit share job knowledge with each other.						
27. The skill level in my work unit has improved in the past year.						

Appendix B

Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

	Very Good	Good	Fair	Poor	Very Poor	
28. How would you rate the overall quality of work done by your work unit?						
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
29. My work unit has the job-relevant knowledge and skills necessary to accomplish organizational goals.						
My Agency						
30. Employees have a feeling of personal empowerment with respect to work processes.						
 Employees are recognized for providing high quality products and services. 						
32. Creativity and innovation are rewarded.						
33. Pay raises depend on how well employees perform their jobs.						
 Policies and programs promote diversity in the workplace (for example, recruiting minorities and women, training in awareness of diversity issues, mentoring). 						
35. Employees are protected from health and safety hazards on the job.						
 My organization has prepared employees for potential security threats. 						
 Arbitrary action, personal favoritism and coercion for partisan political purposes are not tolerated. 						
38. Prohibited Personnel Practices (for example, illegally discriminating for or against any employee/ applicant, obstructing a person's right to compete for employment, knowingly violating veterans' preference requirements) are not tolerated.						
39. My agency is successful at accomplishing its mission.						

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	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	
 I recommend my organization as a good place to work. 						
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do I Kno
 I believe the results of this survey will be used to make my agency a better place to work. 						
My Supervisor						
 My supervisor supports my need to balance work and other life issues. 						
 My supervisor provides me with opportunities to demonstrate my leadership skills. 						
 Discussions with my supervisor about my performance are worthwhile. 						Ľ
45. My supervisor is committed to a workforce representative of all segments of society.						
 My supervisor provides me with constructive suggestions to improve my job performance. 						Ľ
 Supervisors in my work unit support employee development. 						
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	
48. My supervisor listens to what I have to say.						
49. My supervisor treats me with respect.						
50. In the last six months, my supervisor has talked with me about my performance.						
51. I have trust and confidence in my supervisor.						

Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

Appendix B

Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

	Very Good	Good	Fair	Poor	Very Poor	
52. Overall, how good a job do you feel is being o by your immediate supervisor?	done 🗌					
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	[
Leadership						
 In my organization, senior leaders generate hi levels of motivation and commitment in the workforce. 	gh					
 My organization's senior leaders maintain hig standards of honesty and integrity. 	h 🗌					
 Supervisors work well with employees of difference backgrounds. 	rent					
 Managers communicate the goals of the organization. 						
 Managers review and evaluate the organization progress toward meeting its goals and objection 	on's 🗌					
 Managers promote communication among dif work units (for example, about projects, goals, needed resources). 	ferent					
 Managers support collaboration across work to accomplish work objectives. 	units					
	Very Good	Good	Fair	Poor	Very Poor	[
60. Overall, how good a job do you feel is being by the manager directly above your immediat supervisor?	done					
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	C
 I have a high level of respect for my organizat senior leaders. 	ion's					
62. Senior leaders demonstrate support for Work/	Life					

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Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied		
My Satisfaction							
63. How satisfied are you with your involvement in decisions that affect your work?							
64. How satisfied are you with the information you receive from management on what's going on in your organization?							
65. How satisfied are you with the recognition you receive for doing a good job?							
66. How satisfied are you with the policies and practices of your senior leaders?							
67. How satisfied are you with your opportunity to get a better job in your organization?							
68. How satisfied are you with the training you receive for your present job?							
69. Considering everything, how satisfied are you with your job?							
70. Considering everything, how satisfied are you with your pay?							
71. Considering everything, how satisfied are you with your organization?							
Work/Life							
72. Please select the response below that BEST describe	s your curren	t teleworking	g situation.				
I telework very infrequently, on an unscheduled	or short-term	ı basis.					
I telework, but only about 1 or 2 days per month	1.						
I telework 1 or 2 days per week.							
I telework 3 or 4 days per week.							
I telework every work day.							
I do not telework because I have to be physically Security Personnel).	y present on t	the job (e.g. l	.aw Enforceme	nt Officers, Pa	ark Rangers,		
I do not telework because of technical issues (e.g. connectivity, inadequate equipment) that prevent me from teleworking.							
I do not telework because I did not receive appr	oval to do so	, even thoug	n I have the kir	id of job whei	re I can telework.		
I do not telework because I choose not to telew	ork.						

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Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	I choose not to participate in these programs	These programs are not available to me	l am unaware of these programs
73-78. How satisfied are you with	the followin	g Work/Life	programs in y	our agency?				
73. Telework								
74. Alternative Work Schedules (AWS) (AWS, for example, compressed work schedule or flexible work schedule)								
75. Health and Wellness Programs (for example, onsite exercise, flu vaccination, medical screening, CPR training, health and wellness fair)			, 🗆 ,					
76. Employee Assistance Program (EAP, for example, short- term counseling, referral services, legal services, information services)								
 Child Care Programs (for example, child care center, parenting classes and support groups, back-up care, flexible spending account) 								
78. Elder Care Programs (for example, elder/adult care, support groups, speakers)								
Demographics								
79. Where do you work?								
Headquarters								
Field								
80. What is your supervisory statu	;?							
Non-Supervisor: You do not	supervise c	ther employ	yees.					
Team Leader: You are not a have supervisory responsib	n official su ilities or cor	pervisor; you duct perfor	u provide emp mance apprais	loyees with c als.	lay-to-day gu	idance in wo	ork projects, bu	it do not
Supervisor: You are a first-I	ine supervis	or who is re	sponsible for e	employees' p	erformance a	ppraisals and	d leave approv	ral.
🗌 Manager: You are in a man	agement po	sition and s	upervise one o	or more supe	rvisors.			
Senior Leader: You are the head of a department/agency or a member of the immediate leadership team responsible for directing the policies and priorities of the department/agency. May hold either a political or career appointment, and typically is a member of the Senior Executive Service or equivalent.								

Appendix B



Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

81. Are you:	
🗌 Male	
E Female	
82. Are you Hispanic or Latino?	
Yes	
No No	
83. Please select the racial category or categories with which you most closely identify (mark as many as apply).
American Indian or Alaska Native	
Asian	
Black or African American	
Native Hawaiian or Other Pacific Islander	
White	
84. What is the highest degree or level of education you have completed?	
Less than High School	
High School Diploma/GED or equivalent	
Trade or Technical Certificate	
Some College (no degree)	
Associate's Degree (e.g., AA, AS)	
Bachelor's Degree (e.g., BA, BS)	
Master's Degree (e.g., MA, MS, MBA)	
Doctoral/Professional Degree (e.g., Ph.D., MD, JD)	
85. What is your pay category/grade?	
Federal Wage System (for example, WB, WD, WG, WL, WM, WS, WY)	
GS 1-6	
GS 7-12	
GS 13-15	
Senior Executive Service	
Senior Level (SL) or Scientific or Professional (ST)	
Other	

Appendix B



Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

86. How long have you been with the Federal Government (excluding military service)?
Less than 1 year
1 to 3 years
4 to 5 years
6 to 10 years
11 to 14 years
15 to 20 years
More than 20 years
87. How long have you been with your current agency (for example, Department of Justice, Environmental Protection Agency)?
Less than 1 year
1 to 3 years
4 to 5 years
G to 10 years
11 to 20 years
More than 20 years
88. Are you considering leaving your organization within the next year, and if so, why?
No No
Yes, to retire
Yes, to take another job within the Federal Government
Yes, to take another job outside the Federal Government
Yes, other
89. I am planning to retire:
☐ Within one year
Between one and three years
Between three and five years
Five or more years
90. Are you transgender?
Yes
□ No

Appendix B

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Appendix B: 2018 Federal Employee Viewpoint Survey Instrument (continued)

91. Wh	ich one of the following do you consider yourself to be?
	Straight, that is not gay or lesbian
	Gay or Lesbian
	Bisexual
	Something else
92. Wh	at is your US military service status?
	No Prior Military Service
	Currently in National Guard or Reserves
	Retired
	Separated or Discharged
93. Are	you an individual with a disability?
	Yes
	No
94. Wh	at is your age group?
	25 and under
	26–29 years old
	30–39 years old
	40–49 years old
	50–59 years old
	60 years or older

Appendix B

Appendix C:

FEVS Agency Response Rates



Appendix A: Participating Agency Response Rates by Employee Population Size Categories

	Number Surveyed	Number Responded	Response Rate
Governmentwide	1,473,870	598,003	40.6%
Very Large Agencies (>75,000 employees)			
Department of Agriculture	78,659	43,352	55.1%
Department of Defense Overall	607,027	182,115	30.0%
Department of the Air Force	138,234	33,351	24.1%
Department of the Army	201,841	70,005	34.7%
Department of the Navy	176,552	47,882	27.1%
OSD, Joint Staff, Defense Agencies, and Field Activities (DOD 4th Estate)	90,400	30,877	34.2%
Department of Health and Human Services	75,275	43,029	57.2%
Department of Homeland Security	178,801	73,899	41.3%
Department of Justice	110,050	30,978	28.1%
Department of the Treasury	78,195	42,027	53.7%
Large Agencies (10,000-74,999 employees)			
Department of Commerce	37,432	20,725	55.4%
Department of Energy	12,499	8,624	69.0%
Department of Labor	14,339	8,075	56.3%
Department of State	23,110	7,228	31.3%
Department of the Interior	49,006	28,290	57.7%
Department of Transportation	52,532	21,552	41.0%
Environmental Protection Agency	13,969	7,972	57.1%
General Services Administration	10,841	7,157	66.0%
National Aeronautics and Space Administration	16,974	11,568	68.2%
Social Security Administration	61,170	26,318	43.0%

For an Excel version of Appendix A: Participating Agency Response Rates by Employee Population Size Categories click this link



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Appendix A: Participating Agency Response Rates by Employee Population Size Categories



Appendix A: Participating Agency Response Rates by Employee Population Size Categories (continued)

	Number Surveyed	Number Responded	Response Rate
Governmentwide	1,473,870	598,003	40.6%
Medium Agencies (1,000-9,999 employees)			
Broadcasting Board of Governors	1,418	829	58.5%
Court Services and Offender Supervision Agency	1,134	470	41.4%
Department of Education	3,710	2,592	69.9%
Department of Housing and Urban Development	7,450	4,628	62.1%
Equal Employment Opportunity Commission	1,935	1,379	71.3%
Federal Communications Commission	1,406	594	42.2%
Federal Energy Regulatory Commission	1,381	1,115	80.7%
Federal Trade Commission	1,055	638	60.5%
National Archives and Records Administration	2,738	1,743	63.7%
National Credit Union Administration	1,084	633	58.4%
National Labor Relations Board	1,376	859	62.4%
National Science Foundation	1,240	940	75.8%
Nuclear Regulatory Commission	3,072	2,308	75.1%
Office of Personnel Management	5,229	3,069	58.7%
Securities and Exchange Commission	4,442	3,394	76.4%
Small Business Administration	2,082	1,543	74.1%
U.S. Agency for International Development	3,482	1,837	52.8%

Appendix A: Participating Agency Response Rates by Employee Population Size Categories



Appendix A: Participating Agency Response Rates by Employee Population Size Categories (continued)

	Number Surveyed	Number Responded	Response Rate
Governmentwide	1,473,870	598,003	40.6%
Small Agencies (100–999 employees)			
Commodity Futures Trading Commission	667	476	71.4%
Consumer Product Safety Commission	490	355	72.4%
Corporation for National and Community Service	458	326	71.2%
Defense Nuclear Facilities Safety Board	94	77	81.9%
Export-Import Bank of the United States	407	229	56.3%
Farm Credit Administration	282	237	84.0%
Federal Election Commission	300	182	60.7%
Federal Housing Finance Agency	572	412	72.0%
Federal Labor Relations Authority	109	82	75.2%
Federal Maritime Commission	107	75	70.1%
Federal Mediation and Conciliation Service	206	142	68.9%
Federal Retirement Thrift Investment Board	261	215	82.4%
International Boundary and Water Commission: United States and Mexico	243	89	36.6%
Merit Systems Protection Board	197	135	68.5%
National Endowment for the Arts	110	68	61.8%
National Endowment for the Humanities	113	50	44.2%
National Gallery of Art	744	520	69.9%
National Indian Gaming Commission	109	63	57.8%
National Transportation Safety Board	382	282	73.8%
Office of Management and Budget	423	338	79.9%
Office of the U.S. Trade Representative	186	111	59.7%
Overseas Private Investment Corporation	224	163	72.8%
Pension Benefit Guaranty Corporation	882	526	59.6%
Railroad Retirement Board	861	413	48.0%
Selective Service System	98	51	52.0%
Surface Transportation Board	110	82	74.5%
U.S. International Trade Commission	318	290	91.2%
U.S. Office of Special Counsel	123	90	73.2%

Appendix A: Participating Agency Response Rates by Employee Population Size Categories



Appendix A: Participating Agency Response Rates by Employee Population Size Categories (continued)

	Number Surveyed	Number Responded	Response Rate	
Governmentwide	1,473,870	598,003	40.6%	
Very Small Agencies (<100 employees)				
AbilityOne Commission	28	10	35.7%	
African Development Foundation	34	30	88.2%	
American Battle Monuments Commission	73	33	45.2%	
Chemical Safety and Hazard Investigation Board	35	28	80.0%	
Commission on Civil Rights	27	16	59.3%	
Farm Credit System Insurance Corporation	11	<10	_	
Federal Mine Safety and Health Review Commission	43	13	30.2%	
Institute Of Museum and Library Services	61	47	77.0%	
Inter-American Foundation	33	29	87.9%	
Marine Mammal Commission	10	<10	—	
National Capital Planning Commission	33	24	72.7%	
National Mediation Board	30	21	70.0%	
Occupational Safety and Health Review Commission	46	20	43.5%	
Office of Navajo and Hopi Indian Relocation	29	16	55.2%	
Postal Regulatory Commission	62	54	87.1%	
U.S. Access Board	26	15	57.7%	
U.S. Office of Government Ethics	62	48	77.4%	
U.S. Trade and Development Agency	38	24	63.2%	

Note: Agencies with fewer than 10 responses are indicated with "---".

Appendix A: Participating Agency Response Rates by Employee Population Size Categories

APPENDIX D:

FEVS Survey Change



Appendix C: Item Change Summary

Some FEVS items were modified slightly in 2018 to improve the interpretation or understanding of the items. These changes are outlined in this section.

New Item Text (2018)	Change	Old Item Text (2017)			
12. I know how my work relates to the agency's goals.	Text change.	12. I know how my work relates to the agency's goals and priorities.			
29. My work unit has the job-relevant knowledge and skills necessary to accomplish organizational goals.	Text change.	. 29. The workforce has the job-relevant knowledge and s necessary to accomplish organizational goals.			
56. Managers communicate the goals of the organization.	Text change.	56. Managers communicate th organization.	e goals and priorities of the		
Item removed from 2018 FEVS	ltem removed.	 rd. 72. Have you been notified whether or not you are eligible to telework? Yes, I was notified that I was eligible to telework Yes, I was notified that I was not eligible to telework No, I was not notified of my telework eligibility Not sure if I was notified of my telework eligibilitian 			
 72. Please select the response below that BEST describes your current teleworking schedule. I telework very infrequently, on an unscheduled or short-term basis I telework, but only about 1 or 2 days per month I telework 1 or 2 days per week I telework 2 or 4 days per week I telework every work day I do not telework because I have to be physically present on the job (e.g. Law Enforcement Officers, Park Rangers, Security Personnel) I do not telework because I dechnical issues (e.g. connectivity, inadequate equipment) that prevent me from teleworking I do not telework because I did not receive approval to do so, even though I have the kind of job where I can telework I do not telework because I choose not to telework 	Response options modified.	 73. Please select the response below that BEST describe your current teleworking situation. I telework 3 or more days per week I telework 1 or 2 days per week I telework very infrequently, on an unscheduled or short-term basis I do not telework because I have to be physically present on the job (e.g., Law Enforcement Officers Park Rangers, Security Personnel) I do not telework because I have technical issues (e.g., connectivity, inadequate equipment) that prime from telework because I did not receive approvide to so, even though I have the kind of job when can telework I do not telework because I did not receive approvide so so, even though I have the kind of job when can telework 			
73-78. How satisfied are you with the following Work/Life programs in your agency? Note: 2017 FEVS items 74-84 were combined (participation - satisfaction); new response scale for these items is displayed below item 78.	Questions combined.	74-78. Do you participate in the following Work/Life programs? Note: Response scale for these items is displayed below item 78.	79-84. How satisfied are you with the following Work/Life programs in your agency? Note: Response scale for these items is displayed below item 84.		
73. Telework	Questions combined.	N/A	79. Telework		
74. Alternative Work Schedules (AWS, for example, compressed work schedule or flexible work schedule)	Questions combined. Text change.	74. Alternative Work Schedules (AWS)	80. Alternative Work Schedules (AWS)		

Appendix C: Item Change Summary



Appendix C: Item Change Summary (continued)

New Item Text (2018)	Change	Old Item 1	Text (2017)
75. Health and Wellness Programs (for example, onsite exercise, flu vaccination, medical screening, CPR Training, health and wellness fair)	Questions combined. Text change.	75. Health and Wellness Programs (for example, exercise, medical screening, quit smoking programs)	81. Health and Wellness Programs (for example, exercise, medical screening, quit smoking programs)
 Employee Assistance Program (EAP, for example, short-term counseling, referral services, legal services, information services) 	Questions combined.	76. Employee Assistance Program (EAP)	76. Employee Assistance Program (EAP)
77. Child Care Programs (for example, child care center, parenting classes and support groups, back-up care, flexible spending account)	Questions combined. Text change.	77. Child Care Programs (for example, daycare, parenting classes, par- enting support groups)	77. Child Care Programs (for example, daycare, parenting classes, par- enting support groups)
 78. Elder Care Programs (for example, elder/adult care, support groups, speakers) Very satisfied Satisfied Neither Satisfied nor Dissatisfied Dissatisfied Very Dissatisfied I choose not to participate in these programs These programs are not available to me I am unaware of these programs 	Questions combined. Text change.	 78. Elder Care Programs (for example, elder/adult care, support groups, speakers) Yes No Not available to me 	 84. Elder Care Programs (for example, elder/adult care, support groups, speakers) Very satisfied Satisfied Neither Satisfied nor Dissatisfied Dissatisfied Very Dissatisfied No Basis to Judge
90. Are you transgender? • Yes • No	New item.	Not a separate item in 2017 F	EVS
91.Which one of the following do you consider yourself to be? • Straight, that is not gay or lesbian • Gay or Lesbian • Bisexual • Something else	Response options modified.	 96. Do you consider yourself t following? (Mark all that a Heterosexual or Straight Gay or Lesbian Bisexual Transgender I prefer not to say 	o be one or more of the apply) :

Appendix C: Item Change Summary

APPENDIX E:

APS Survey Instrument



2018 APS employee census

7 May to 8 June 2018

INTRODUCTION

The 2018 APS employee census is your opportunity to provide your views on your experience of working in your agency and the broader APS.

Full information describing what you need to do to participate, the benefits of participating, and how your responses are stored, disclosed and used can be found in the <u>Participant Information Sheet</u>. A formal <u>Australian Privacy Principle 5 collection notice</u> is also available.

Before commencing the APS employee census, you might like to note the key points below.

- Participation in this survey is entirely voluntary. In order to submit your survey you will need to complete the first 5 questions. You are then free to skip and not answer any other questions that you may not want to answer.
- The results of this survey will be used by the Australian Public Service Commission and agencies to inform planning and initiatives. The data enables evaluation and improvements to working conditions for you and your colleagues.
- Your responses will remain confidential. However, your de-identified responses to the free-text questions throughout the census may be provided to your agency.

If you have any further questions, please contact the Commission's Workforce Performance team on 1800 464 926 or at stateoftheservice@apsc.gov.au.

Instructions on how to complete this census

- 1. Please read each question carefully.
- A number of different scales have been used throughout the employee census. Where there is a scale in response to the question, please select the option that represents the answer you want to give. For example, if you think that the weather outside today has been good, you would select the circle 'good' as below.

	Very Good	Good	Average	Poor	Very Poor
How would you rate the weather outside today?	01	O 2	O 3	O 4	O 5

- 3. Unless stipulated, please answer in relation to your current agency even if you have worked in more than one agency during the last 12 months.
- 4. If you cannot answer a question, please feel free to leave it blank.
- 5. There are free-text questions throughout the employee census where you can comment on specific issues. In answering these questions, please do not provide personal information about any other person, for example by including their name in your response.

When is this census due?

The census should be completed and submitted by 5:00 pm AEST Friday 8 June 2018.

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A. ABOUT YOU

Please note that your survey responses are confidential. All data and information collected from the survey will be stored in accordance with the Australian Privacy Principles and the *Privacy Act 1988*.

- 1. What is your gender?¹
 - O 1 Male
 - O 2 Female
 - O 3 X (Indeterminate/Intersex/Unspecified)
 - O 4 Prefer not to say
- 2. How old were you at your last birthday?
 - O 1 Under 20 years
 - O 2 20 to 24 years
 - O 3 25 to 29 years
 - O 4 30 to 34 years
 - O 5 35 to 39 years
 - O 6 40 to 44 years
 - O 7 45 to 49 years
 - O 8 50 to 54 years
 - O 9 55 to 59 years
 - O 10 60 to 64 years
 - O 11 65 years or older

3. Where is your workplace?

- O 1 Australian Capital Territory
- O 2 New South Wales
- O 3 Victoria
- O 4 Queensland
- O 5 South Australia
- O 6 Western Australia
- O 7 Tasmania
- O 8 Northern Territory
- O 9 Outside Australia [Please go to question 5]
- 4. Is your workplace in:
 - O 1 A capital city
 - O 2 Another location

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¹ Please note, the Australian Government Guidelines on the Recognition of Sex and Gender provides further detail on the definition of gender, including the option of 'X'

⁽http://www.ag.gov.au/Publications/Documents/AustralianGovernmentGuidelinesontheRecognitionofSexandGender/AustralianGovernmentGuidelinesontheRecognitionofSexandGender.PDF)

5. What is your substantive classification level? [This is the classification level at which you were engaged or to which you were last promoted. It does not mean the level you may be acting in, or temporarily performing]

If you are unsure of how your classification translates to the APS standard classifications and you are unable to ask someone in your agency, please call the Australian Public Service Commission between 8:30 am and 5:00 pm Eastern Standard Time on 1800 464 926 <u>before completing the survey</u>.

- O 1 Trainee/Apprentice
- O 2 Graduate APS (including Cadets)
- O 3 APS 1-2 (or equivalent)
- O 4 APS 3-4 (or equivalent)
- O 5 APS 5-6 (or equivalent)
- O 6 Executive Level 1 (or equivalent)
- O 7 Executive Level 2 (or equivalent)
- O 8 Senior Executive Service Band 1 (or equivalent)
- O 9 Senior Executive Service Band 2 or 3 (or equivalent)
- O 10 Outside Australia—non-APS²
- O 11 Non-APS—within Australia³
- 6. How long have you been at your substantive classification?
 - O 1 Less than 1 year
 - O 2 1 to less than 5 years
 - O 3 5 to less than 10 years
 - O 4 10 to less than 15 years
 - O 5 15 to less than 20 years
 - O 6 20 years or more
- 7. What is your current, actual classification level? [This is the classification level you are currently assigned, including temporary assignment and/or acting or higher duties]
 - O 1 Trainee/Apprentice
 - O 2 Graduate APS (including cadets)
 - O 3 APS 1-2 (or equivalent)
 - O 4 APS 3-4 (or equivalent)
 - O 5 APS 5-6 (or equivalent)
 - O 6 Executive Level 1 (or equivalent)
 - O 7 Executive Level 2 (or equivalent)
 - O 8 Senior Executive Service Band 1 (or equivalent)
 - O 9 Senior Executive Service Band 2 or 3 (or equivalent)
 - O 10 Outside Australia—non-APS⁴ [Please go to question 10]
 - O 11 Non-APS—within Australia⁵ [Please go to question 10]

⁵ For the purpose of the survey, Non-APS – Within Australia includes contractors, non-APS secondees and other similar terms.

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² For the purpose of the survey, Outside Australia—non-APS includes locally-engaged staff, overseas engaged employees, O-based staff and other similar terms.

³ For the purpose of the survey, Non-APS – Within Australia includes contractors, non-APS secondees and other similar terms.

⁴ For the purpose of the survey, Outside Australia—non-APS includes locally-engaged staff, overseas engaged employees, O-based staff and other similar terms.

- 8. What is your total length of service in the APS? [Please include all periods of service in the APS]
 - O 1 Less than 1 year
 - O 2 1 to less than 5 years
 - O 3 5 to less than 10 years
 - O 4 10 to less than 15 years
 - O 5 15 to less than 20 years
 - O 6 20 years or more
- 9. What is your total length of service in your current agency as an APS employee?
 - O 1 Less than 1 year
 - O 2 1 to less than 5 years
 - O 3 5 to less than 10 years
 - O 4 10 to less than 15 years
 - O 5 15 to less than 20 years
 - O 6 20 years or more
- 10. What is your highest completed qualification?
 - O 1 Less than Year 12 or equivalent
 - O 2 Year 12 or equivalent (HSC/Leaving certificate)
 - O 3 Vocational qualification
 - O 4 Associate diploma
 - O 5 Undergraduate diploma
 - O 6 Bachelor degree (including with Honours)
 - O 7 Postgraduate diploma (includes graduate certificate)
 - O 8 Master's degree
 - O 9 Doctorate
- 11. What was the main focus of your tertiary qualification? (Select one only) [only applicable if response to Q10 is 5 or higher]
 - O 1 Agriculture, Environmental and related studies
 - O 2 Architecture and Building
 - O 3 Arts and Social Sciences, including psychology and social work
 - O 4 Business and Management
 - O 5 Creative Arts
 - O 6 Economics, Commerce and Accounting
 - O 7 Education
 - O 8 Engineering and related technologies
 - O 9 Food, hospitality and personal services
 - O 10 Human Resources
 - O 11 Information technology
 - O 12 Law
 - O 13 Mathematics and Statistics
 - O 14 Medicine and Health Sciences
 - O 15 Natural and physical sciences
 - O 16 Public Administration and Political Science
 - O 17 Other

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- 12. What is your employment category?
 - O 1 Ongoing
 - O 2 Non-ongoing
 - O 3 Casual, intermittent or irregular
 - O 4 Contractor
- 13. Are you employed on a full-time basis?
 - O 1 Yes
 - O 2 No
- 14. a. Do you identify as Aboriginal and/or Torres Strait Islander?
 - O1 Yes

O 2 No [Please go to question 15]

- b. Are you recorded as Aboriginal and/or Torres Strait Islander in your agency's human resource information system (i.e. have you informed your agency)?
 - O 1 Yes
 - O 2 No-I chose not to inform
 - O 3 No—I have never been asked for this information
 - O 4 No—For another reason
 - O 5 Not sure
- 15. In which country were you born?
 - O 1 Australia
 - O 2 Other country
- 16. Do you speak a language other than English at home?
 - O 1 No, English only [Please go to question 18]
 - O 2 Yes, other
- 17. How well do you speak English?
 - O 1 Very well
 - O 2 Well
 - O 3 Not well
 - O 4 Not at all

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- 18. a. Do you have an ongoing disability?⁶
 - O 1 Yes
 - O 2 No [Please go to question 19]
 - b. Is the information that you have an ongoing disability recorded in your agency's human resource information system (i.e. have you informed your agency that you have a disability)?
 - O 1 Yes
 - O 2 No-I chose not to inform
 - O 3 No-I have never been asked for this information
 - O 4 No-For another reason
 - O 5 Not sure
- 19. Do you identify as Lesbian, Gay, Bisexual, Trans, and/or Intersex (LGBTI+)?
 - O1 Yes
 - O2 No
 - O 3 Prefer not to say
- 20. a. Do you have carer responsibilities? [For the purpose of this question carer responsibilities are not limited to those in receipt of carer payment, and <u>does</u> include parental responsibilities]
 - O1 Yes
 - O 2 No [Please go to question 21]
 - b. For whom do you have carer responsibilities? [Please select all that apply]
 - O 1 Child(ren)-under 5 years
 - O 2 Child(ren)-5 to 16 years
 - O 3 Child(ren)—over 16 years
 - O 4 Parent(s)
 - O 5 Other relative(s) (not including parents or children)
 - O 6 Partner
 - O 7 Other
- 21. Did you come through an APS graduate programme?
 - O 1 Yes, in my current agency
 - O 2 Yes, in another APS agency
 - O3 No
- 22. Have you ever served in the Australian Defence Force?
 - O1 Yes
 - O2 No

- loss of sight (not corrected by glasses or contact lenses)
- loss of hearing where communication is restricted, or an aid to assist with, or substitute for, hearing is used
- speech difficulties
- shortness of breath or breathing difficulties causing restriction
- chronic or recurrent pain or discomfort causing restriction
- blackouts, fits, or loss of consciousness
 difficulty learning or understanding
- incomplete use of arms or fingers
- difficulty gripping or holding things

- incomplete use of feet or legs
- nervous or emotional condition causing restriction
- restriction in physical activities or in doing physical work
 disfigurement or deformity
- mental illness or condition requiring help or supervision
- Iong-term effects of head injury, stroke or other brain
- damage causing restriction
 receiving treatment or medication for any other long-
- term conditions or ailments and still restricted
- any other long-term conditions resulting in a restriction.

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⁶ For the purpose of this survey, a person has a disability if they report that they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least 6 months and restricts everyday activities. This includes:

- 23. Which one of the following best describes the type of work you do?
 - O 1 Accounting and finance (e.g. accounting, accounts receivable/payable, budgets, travel, procurement and contracting, grants management)
 - O 2 Administration (e.g. administrative support, secretariat, facilities and property)
 - O 3 Communications and marketing (e.g. campaign and marketing, graphic design, change management, event organisation, public relations, stakeholder management, editing, writing, speech writing)
 - O 4 Compliance and regulation (e.g. enforcement, quarantine, inspection, investigation, regulation and compliance, detention assessment)
 - O 5 Engineering and technical (e.g. engineering, education, training and assessment, draftsperson/technical, patents examiner, land and asset management)
 - O 6 Human resources (e.g. industrial relations, learning and development, recruitment, payroll, workforce planning and reporting, occupational health and safety, organisational design)
 - O 7 Information and communications technology (e.g. networks and telecommunications, testing, helpdesk/support, databases, development and programming, systems analysis and design, systems administration, systems integration and deployment, web and multimedia content development)
 - O 8 Digital (e.g. service manager, product manager, delivery manager, technical architect, service designer, interaction designer, content designer, user researcher, developer, web operations engineer, performance analyst)
 - O 9 Information and knowledge management (e.g. archivist, curator, librarian, records management)
 - O 10 Intelligence (e.g. collection and analysis, production and dissemination, national security advice, personnel security)
 - O 11 Legal and parliamentary (e.g. lawyer, legal adviser, court officer, freedom of information, ministerial and parliamentary liaison, legislation drafting and advice)
 - O 12 Monitoring and audit (e.g. internal/external auditor, risk management, fraud control)
 - O 13 Organisation leadership (e.g. board member, chief executive or managing director, statutory office holder, corporate and business planning, generalist management)
 - O 14 Project and programme (e.g. evaluation, programme management, project management)
 - O 15 Research (e.g. numerical analysis, economist, actuary, data analysis, statistician)
 - O 16 Science (e.g. agriculture/forestry science, chemist, environmental science, life sciences, ranger)
 - O 17 Health (e.g. health and allied health professionals, health and welfare support)
 - O 18 Service delivery (e.g. customer advice and support, gallery, museum and tour guides, hospitality, program delivery, visa processing)
 - O 19 Strategic policy (e.g. strategic policy, policy development, policy advice)
 - O 20 Trades and labour (e.g. vehicles and equipment maintenance/operation, transport and logistics, horticulture, gardening, labourer, trades)

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B. GENERAL IMPRESSIONS: CURRENT JOB

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a. My job gives me opportunities to utilise my skills	01	02	O 3	O 4	O 5
 My job gives me a feeling of personal accomplishment 	O 1	O 2	O 3	O 4	O 5
c. I am satisfied with the recognition I receive for doing a good job	O 1	O 2	O 3	O 4	O 5
 I am fairly remunerated (e.g. salary, superannuation) for the work that I do 	O 1	02	O 3	O 4	O 5
e. I am satisfied with my non- monetary employment conditions (e.g. leave, flexible work arrangements, other benefits)	01	02	03	O 4	O 5
f. I am satisfied with the stability and security of my current job	O 1	O 2	O 3	O 4	O 5
 g. I suggest ideas to improve our way of doing things 	O 1	O 2	O 3	O 4	O 5
 h. I am happy to go the 'extra mile' at work when required 	O 1	O 2	O 3	O 4	O 5
i. Considering everything, I am satisfied with my job	O 1	02	O 3	O 4	O 5
j. I believe strongly in the purpose and objectives of the APS	O 1	O 2	O 3	O 4	O 5

24. Please rate your level of agreement with the following statements regarding **your current job**:

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C. GENERAL IMPRESSIONS: IMMEDIATE WORKGROUP

25. Please rate your level of agreement with the following statements regarding *your immediate workgroup*: [This survey uses immediate workgroup, workgroup and team interchangeably. Your immediate workgroup, and/or team are the people you currently work with on a daily basis]

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a.	I have a clear understanding of how my workgroup's role contributes to my agency's strategic direction	O 1	O 2	O 3	O 4	O 5
b.	The people in my workgroup are honest, open and transparent in their dealings	O 1	O 2	O 3	O 4	O 5
C.	The people in my workgroup cooperate to get the job done	O 1	O 2	O 3	O 4	O 5
d.	The people in my workgroup are committed to workplace safety	O 1	O 2	O 3	O 4	O 5
e.	The people in my workgroup behave in an accepting manner towards people from diverse backgrounds	O 1	02	O 3	O 4	O 5
f.	The people in my workgroup treat each other with respect	O 1	02	O 3	O 4	O 5

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D. GENERAL IMPRESSIONS: IMMEDIATE SUPERVISOR

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a.	My supervisor actively supports people from diverse backgrounds	O 1	02	O 3	O 4	O 5
b.	My supervisor treats people with respect	01	O 2	O 3	O 4	O 5
C.	My supervisor communicates effectively	01	02	O 3	O 4	O 5
d.	My supervisor encourages me to contribute ideas	0 1	0 2	O 3	O 4	O 5
e.	My supervisor helps to develop my capability	01	02	O 3	O 4	O 5
f.	My supervisor invites a range of views, including those different to their own	O 1	02	O 3	O 4	O 5
g.	My supervisor displays resilience when faced with difficulties or failures	O 1	02	O 3	O 4	O 5
h.	My supervisor maintains composure under pressure	01	02	O 3	O 4	O 5
i.	l have a good immediate supervisor	01	02	O 3	O 4	O 5
j.	My supervisor gives me responsibility and holds me to account for what I deliver	01	02	O 3	O 4	O 5
k.	My supervisor challenges me to consider new ways of doing things	01	02	O 3	O 4	O 5
I.	My supervisor actively supports the use of flexible work arrangements by all staff, regardless of gender	O 1	02	O 3	O 4	O 5

26. Please rate your level of agreement with the following statements regarding *your immediate supervisor*.

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- 27. What is your immediate supervisor's current classification level? [If they are acting or temporarily performing at that level, please record their acting level]
 - O 1 Trainee/Apprentice
 - O 2 Graduate APS (including Cadets)
 - O 3 APS 1–2 (or equivalent)
 - O 4 APS 3-4 (or equivalent)
 - O 5 APS 5-6 (or equivalent)
 - O 6 Executive Level 1 (or equivalent)
 - O 7 Executive Level 2 (or equivalent)
 - O 8 Senior Executive Service Band 1 (or equivalent)
 - O 9 Senior Executive Service Band 2 or 3 (or equivalent)
 - O 10 Agency head
- 28. Where is your immediate supervisor's normal work location?
 - O 1 In the same office as me
 - O 2 In the same office as me but on a different floor
 - O 3 In a different office, but in the same town/city
 - O 4 In a different town/city or state
 - O 5 In a different country

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E. GENERAL IMPRESSIONS: SENIOR EXECUTIVE SERVICE

29.	The following questions only relate to the leadership practices of your immediate Senior Executive
	Service (SES) Line/Branch/Group manager or equivalent. Please rate your level of agreement with the
	following statements regarding your SES manager :

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a.	My SES manager is of a high quality	01	02	O 3	O 4	O 5
b.	My SES manager is sufficiently visible (e.g. can be seen in action)	O 1	02	O 3	O 4	O 5
c.	My SES manager communicates effectively	O 1	O 2	O 3	O 4	O 5
d.	My SES manager engages with staff on how to respond to future challenges	O 1	02	O 3	O 4	O 5
e.	My SES manager gives their time to identify and develop talented people	O 1	02	O 3	O 4	O 5
f.	My SES manager ensures that work effort contributes to the strategic direction of the agency and the APS	O 1	O 2	O 3	O 4	O 5
g.	My SES manager effectively leads and manages change	O 1	O 2	O 3	O 4	O 5
h.	My SES manager actively contributes to the work of our area	O 1	02	O 3	O 4	O 5
i.	My SES manager encourages innovation and creativity	O 1	O 2	O 3	O 4	O 5
j.	My SES manager actively supports people of diverse backgrounds	O 1	02	O 3	O 4	O 5
k.	My SES manager actively supports opportunities for women to access leadership roles	O 1	02	O 3	O 4	O 5
I.	My SES manager actively supports the use of flexible work arrangements by all staff, regardless of gender	O 1	02	O 3	O 4	O 5
m.	My SES manager leads regular staff meetings (e.g. in person, via video conference)	01	02	O 3	O 4	O 5
n.	My SES manager clearly articulates the direction and priorities for our area	01	02	O 3	O 4	O 5

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- 30. Where is your SES manager's normal work location?
 - O 1 In the same office as me
 - O 2 In the same office as me but on a different floor
 - O 3 In a different office, but in the same town/city
 - O 4 In a different town/city or state
 - O 5 In a different country
- 31. Considering all the Senior Executive Service (SES) officers in your agency, please rate your level of agreement with the following statements:

agreement with the following statements.										
		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Do not know			
a.	In my agency, the SES are sufficiently visible (e.g. can be seen in action)	O 1	O 2	O 3	O 4	O 5	O 6			
b.	In my agency, communication between the SES and other employees is effective	O 1	02	O 3	O 4	O 5	O 6			
C.	In my agency, the SES set a clear strategic direction for the agency	O 1	O 2	O 3	O 4	O 5	O 6			
d.	In my agency, the SES actively contribute to the work of our agency	O 1	02	O 3	O 4	O 5	O 6			
e.	In my agency, the SES are of a high quality	O 1	O 2	O 3	O 4	O 5	O 6			
f.	In my agency, the SES supports and provides opportunities for new ways of working in a digital environment	01	02	O 3	O 4	O 5	O 6			
g.	In my agency, the SES work as a team	O 1	O 2	O 3	O 4	O 5	O 6			
h.	In my agency, the SES clearly articulate the direction and priorities for our agency	01	02	O 3	O 4	O 5	O 6			

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F. GENERAL IMPRESSIONS: AGENCY

32. Please rate your level of agreement with the following statements regarding aspects of **your agency's** working environment:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a. I feel a strong personal attachment to my agency	01	02	O 3	O 4	O 5
b. I am proud to work in my agency	O 1	02	O 3	O 4	O 5
c. Change is managed well in my agency	O 1	O 2	O 3	O 4	O 5
d. Internal communication within my agency is effective	O 1	O 2	O 3	O 4	O 5
e. My workplace provides access to effective learning and development (e.g. formal training, learning on the job, e-learning, secondments)	O 1	O 2	O 3	O 4	O 5
 I am satisfied with the opportunities for career progression in my agency 	01	02	O 3	O 4	O 5
g. I would recommend my agency as a good place to work	O 1	O 2	O 3	O 4	O 5
 My agency actively encourages ethical behaviour by all of its employees 	O 1	02	O 3	O 4	O 5
 My agency is committed to creating a diverse workforce (e.g. gender, age, cultural and linguistic background, disability, Indigenous, LGBTI+) 	01	02	O 3	O 4	O 5
j. I believe strongly in the purpose and objectives of my agency	01	02	O 3	O 4	O 5
k. Internal communication within my agency is regular	01	O 2	O 3	O 4	O 5
 My agency supports and actively promotes an inclusive workplace culture 	01	02	O 3	O 4	O 5
m. In general, the workforce in my agency is managed well (e.g. filling vacancies, finding the right person for the right job)	01	02	O 3	O 4	O 5
 I work beyond what is required in my job to help my agency achieve its objectives 	01	02	O 3	O 4	O 5
 When someone praises the accomplishments of my agency, it feels like a personal compliment 	01	02	O 3	O 4	O 5

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	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
to me					
 p. In general, employees in my agency feel they are valued for their contribution 	O 1	02	O 3	O 4	O 5
 I feel committed to my agency's goals 	01	02	O 3	O 4	O 5
 My agency really inspires me to do my best work every day 	01	O 2	O 3	O 4	O 5
 In general, employees in my agency are encouraged to make suggestions 	01	02	O 3	O 4	O 5

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G. WELLBEING

- 33. Considering your work and life priorities, how satisfied are you with the work-life balance in your current job?
 - O 1 Very satisfied
 - O 2 Satisfied
 - O 3 Neither satisfied nor dissatisfied
 - O 4 Dissatisfied
 - O 5 Very dissatisfied
- 34. Are you currently using flexible working arrangements, such as changes to your work location, work hours or pattern of work?
 - O 1 Yes [Please go to question 36]
 - O 2 No

35. Why are you not using flexible working arrangements? [Please select all that apply]

- O 1 My agency does not have a flexible working arrangement policy
- O 2 My agency's culture is not conducive to flexible working arrangements
- O 3 Lack of technical support (e.g. remote access)
- O 4 Absence of necessary hardware (e.g. phone, computer, internet)
- O 5 The operational requirements of my role (e.g. rostered or otherwise scheduled work environment such as shift work)
- O 6 Management discretion
- O 7 Resources and staffing limits
- O 8 Potential impact on my career
- O 9 Personal/financial reasons
- O 10 I would be letting my workgroup down
- O 11 I do not need to

36. Do you currently access any of the following arrangements? [Please select all that apply]

- O 1 Part time
- O 2 Flexible hours of work
- O 3 Compressed work week
- O 4 Job sharing
- O 5 Working remotely/virtual team
- O 6 Working away from the office / working from home
- O 7 Purchasing additional leave
- O 8 Breastfeeding facilities and/or paid lactation breaks
- O 9 Return to work arrangements
- O 10 None of the above
- 37. Approximately how many working days of personal (sick or carer's) leave did you take in the last 12 months? Enter a numeric value between 0 and 250 days _____

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	Always	Often	Sometimes	Rarely	Never
a. I have unrealistic time pressures	01	O 2	O 3	O 4	O 5
 b. I have a choice in deciding how I do my work 	01	0 2	O 3	O 4	O 5
 My immediate supervisor encourages me 	01	O 2	O 3	O 4	O 5
 I receive the respect I deserve from my colleagues at work 	01	0 2	O 3	O 4	O 5
e. Relationships at work are strained	01	0 2	O 3	O 4	O 5
f. I am clear what my duties and responsibilities are	01	O 2	O 3	O 4	O 5
g. Staff are consulted about change at work	01	0 2	O 3	04	O 5

38. Based on your experience in your current job, please respond to the following statements:

39. Based on your experience in **your current job**, please respond to the following statements:

based on your experience in your current job, please respond to the following statements.							
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree		
 a. I am satisfied with the policies/practices in place to help me manage my health and wellbeing 	O 1	02	O 3	O 4	O 5		
 b. My agency does a good job of communicating what it can offer me in terms of health and wellbeing 	01	02	O 3	O 4	O 5		
 My agency does a good job of promoting health and wellbeing 	01	O 2	O 3	O 4	O 5		
d. I think my agency cares about my health and wellbeing	01	O 2	O 3	O 4	O 5		
e. I believe my immediate supervisor cares about my health and wellbeing	01	02	O 3	O 4	O 5		
f. I am supported with resources to be able to manage health and wellbeing in the workplace	01	02	O 3	O 4	O 5		
g. I am comfortable approaching my immediate supervisor about personal circumstances that may impact on work	O 1	02	O 3	O 4	O 5		
 I am comfortable approaching my immediate supervisor about working-relationship issues 	01	02	O 3	O 4	O 5		

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H. RECRUITMENT AND RETENTION

- 40. In the last 12 months, have you applied for a job? [Please select all that apply]
 - O 1 Yes, outside the APS
 - O 2 Yes, in my agency
 - O 3 Yes, in another APS agency
 - O4 No
- 41. Which of the following statements best reflects your current thoughts about working for your agency? [Please select <u>one</u> category only]
 - O 1 I want to leave my agency as soon as possible
 - O 2 I want to leave my agency within the next 12 months
 - O 3 I want to leave my agency within the next 12 months but feel it will be unlikely in the current environment
 - O 4 I want to stay working for my agency for the next one to two years [Please go to question 43]
 - O 5 I want to stay working for my agency for at least the next three years [Please go to question 43]
- 42. What is the primary reason behind your desire to leave your agency? [Please select <u>one</u> category only]
 - O 1 There is a lack of future career opportunities in my agency
 - O 2 I want to try a different type of work or I'm seeking a career change
 - O 3 I am not satisfied with the work
 - O 4 My expectations for work in my agency have not been met
 - O 5 I have achieved all I can in my agency
 - O 6 I am intending to retire
 - O 7 Senior leadership is of a poor quality
 - O 8 I can receive a higher salary elsewhere
 - O 9 My agency lacks respect for employees
 - O 10 I want to live elsewhere within Australia or overseas
 - O 11 I am in an unpleasant working environment
 - O 12 Other⁷ (please specify).....

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⁷ Please note: de-identified, verbatim comments to question 42 may be provided to your agency. In answering this question, please do not provide personal information about any other person, for example by including their name in your response. Australian Privacy Principle 5 requires that, where personal information has been collected about an individual (including from sources other than the individual concerned), they must be notified of certain matters, such as the purposes for which this information has been collected.

, 0					
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
 My agency provides opportunities for mobility within my agency (e.g. temporary transfers) 	O 1	O 2	O 3	O 4	O 5
 b. My agency provides opportunities for mobility outside my agency (e.g. secondments and temporary transfers) 	O 1	02	O 3	O 4	O 5
c. My immediate supervisor actively supports opportunities for mobility	01	O 2	O 3	O 4	O 5

43. Please rate your level of agreement with the following statements:

44. What attracted you to work in the APS? [Please select all that apply]

- O 1 Long term career progression
- O 2 Type of work offered
- O 3 Employment conditions
- O 4 Security and stability
- O 5 Service to the general public
- O 6 The work aligned with my job skills/experience
- O 7 Geographical location
- O 8 Remuneration
- O 9 Other. Please specify_____
- 45. Would you consider leaving the APS for other job opportunities?
 - O 1 Yes
 - O 2 No
 - O 3 Unsure
- 46. What would prevent you from seeking job opportunities outside the APS? [Please select <u>all</u> that apply]
 - O 1 I would not enjoy the work
 - O 2 My values are more aligned with the work of the APS
 - O 3 My current pay and conditions would not be met
 - O 4 Impact on superannuation
 - O 5 Would require relocating
 - O 6 I don't know how to find out about specific opportunities
 - O 7 I am nearing retirement
 - O 8 Nothing would prevent me
 - O 9 Other. Please specify_____

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I. PERFORMANCE MANAGEMENT

47. Please indicate whether you have experienced each of the following in the past 12 months:

	Yes	No
a. Received regular and timely feedback from your supervisor	01	O 2
 Received constructive feedback from your supervisor 	01	O 2
c. Your supervisor has checked in regularly with you to see how you are progressing	01	O 2

- 48. In the past 12 months, have you discussed with your supervisor your overall performance over the previous year and the performance expectations for the future year?
 - O 1 Yes
 - 02 No
 - O 3 Not applicable (e.g. have not worked with my current supervisor long enough for this conversation to occur)
- 49. In the past 12 months, did your supervisor recognise when your job performance changed for any reason?
 - O 1 Yes
 - O2 No
 - O 3 Not applicable (e.g. my performance has not changed)
- 50. To what extent do you agree that in the past 12 months, the **performance expectations** of your job were clear and unambiguous?
 - O 1 Strongly agree
 - O 2 Agree
 - O 3 Neither agree nor disagree
 - O 4 Disagree
 - O 5 Strongly disagree
- 51. How satisfied are you with your supervisor in managing your performance?
 - O 1 Very satisfied
 - O 2 Satisfied
 - O 3 Neither satisfied nor dissatisfied
 - O 4 Dissatisfied
 - O 5 Very dissatisfied
- 52. To what extent do you agree that the support by your supervisor has helped to improve your performance?
 - O 1 Strongly agree
 - O 2 Agree
 - O 3 Neither agree nor disagree
 - O 4 Disagree
 - O 5 Strongly disagree

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53. Please rate your level of agreement with the following statements:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
 My overall experience of performance management in my agency has been useful for my development 	01	02	O 3	O 4	O 5
 My supervisor openly demonstrates commitment to performance management 	01	02	O 3	O 4	O 5
c. I received recognition when I last accomplished something significant at work	01	02	O 3	O 4	O 5
 I can identify a clear connection between my job and my agency's purpose 	01	02	O 3	O 4	O 5

- 54. Do you know where to locate your agency's guidance on managing underperformance?
 - O1 Yes
 - O 2 No
 - O 3 Not sure
- 55. Are you familiar with your agency's guidance on managing underperformance?
 - O1 Yes
 - O 2 No
 - O 3 Not sure
- 56. In the past 12 months, what exposure to underperformance have you had in your agency? [Please select <u>all</u> that apply]
 - O 1 I managed someone for underperformance
 - O 2 I was being managed for underperformance [Please go to question 61]
 - O 3 I was a person who supported someone being managed for underperformance [Please go to question 61]
 - O 4 I worked in a HR area providing formal guidance on underperformance [Please go to question 61]
 - O 5 I supervised someone who was managing an employee for underperformance [Please go to question 61]
 - O 6 Someone in my team was having their performance managed [Please go to question 61]
 - O 7 None [Please go to question 61]
- 57. Did you experience any challenges or difficulties in managing this underperformance?
 - O 1 Yes
 - O 2 No [Please go to question 59]

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- 58. What were the challenges or difficulties you experienced while managing this underperformance? [Please select <u>all</u> that apply]
 - O 1 Lack of support from my immediate supervisor
 - O 2 Lack of support from my agency's HR area
 - O 3 Managing the impact of the underperformer on team members and/or colleagues
 - O 4 Dealing with confidentiality issues
 - O 5 The complexity of processes required to manage the underperformance
 - O 6 Unwillingness on the part of the underperformer to try and improve
 - O 7 Other. Please specify_____
- 59. Did you find anything particularly beneficial or helpful while managing this underperformance?
 - O 1 Yes
 - O 2 No [Please go to question 61]
- 60. What did you find particularly beneficial or helpful while managing this underperformance? [Please select <u>all</u> that apply]
 - O 1 Support from my immediate supervisor
 - O 2 Support from my agency's HR area
 - O 3 Support from a mentor or coach
 - O 4 Access to resources to support the process
 - O 5 Access to external assistance/advice
 - O 6 Other. Please specify
- 61. To what extent do you agree that your agency deals with underperformance effectively?
 - O 1 Strongly agree [Please go to question 63]
 - O 2 Agree [Please go to question 63]
 - O 3 Neither agree nor disagree [Please go to question 63]
 - O 4 Disagree
 - O 5 Strongly disagree
- 62. Why does your agency not deal with underperformance effectively? [Please select all that apply]
 - O 1 I don't see change in the performance of the employee/s
 - O 2 I don't see or hear any action being taken to address underperformance
 - O 3 Managers are not confident in addressing underperformance
 - O 4 Managers are reluctant to have difficult conversations
 - O 5 Managers don't have time and resources to address underperformance
 - O 6 Managers are not supported to address underperformance
 - O 7 Managers are concerned about the repercussions (e.g. unfair dismissal claims and bullying complaints) of managing underperformance
 - O 8 My agency simply moves underperforming employees to other workgroups
 - O 9 My agency has a culture of accepting poor performance
 - O 10 My agency does not have appropriate procedures and guidance for managing underperformance
 - O 11 Other. Please specify_____

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J. DEVELOPING CAPABILITY

63.	Please rate your level of agreement with the following statements regarding your	
	immediate supervisor.	

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a. My immediate supervisor coaches me as part of my development	O 1	02	O 3	O 4	O 5
 My immediate supervisor provides time for me to attend learning programs 	01	02	O 3	O 4	O 5
c. My immediate supervisor shares links, readings and information	O 1	02	O 3	O 4	O 5
d. My immediate supervisor discusses my career plans	O 1	02	O 3	O 4	O 5
e. My immediate supervisor provides me with opportunities to develop relevant capabilities for my career	O 1	02	O 3	O 4	O 5
f. My immediate supervisor encourages me to try new things even if they don't always work out	O 1	02	O 3	O 4	O 5
g. My immediate supervisor gives me the opportunity to apply what I learn in my day-to-day work	01	02	O 3	O 4	O 5

64. Please rate your level of agreement with the following statements.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a. I am able to access learning and development solutions to meet my needs	O 1	O 2	O 3	O 4	O 5
 b. I have a clear understanding of my development needs 	O 1	O 2	O 3	O 4	O 5
c. I spend time out of working hours building my capability	O 1	O 2	O 3	O 4	O 5
 I seek out opportunities to apply what I learn in my day-to-day work 	O 1	02	O 3	O 4	O 5

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APS agencies collect and generate large volumes of data. The following questions ask about working with data in your current role.

- 65. How frequently do you work with data in your current role?
 - O 1 Never [Please go to question 68]
 - O 2 Rarely
 - O 3 Sometimes
 - O 4 Often
 - O 5 Very Often

66. What types of data do you work with in your current role? [Please select all that apply]

- O 1 Business and finance metrics (e.g. budgeting, key performance indicators, remuneration)
- O 2 Workforce metrics (e.g. engagement and separation data, FTE/ASL figures, absence rates)
- O 3 Attitude and opinion data (e.g. employee surveys)
- O 4 Client data (e.g. Medicare, tax records)
- O 5 Personal and health data (e.g. eHealth records)
- O 6 Scientific data (e.g. geological, meteorological, ecological data)
- O 7 Economic data (e.g. economic indicators, labour force statistics)
- O 8 Geographic or geospatial data
- O 9 Statistics (e.g. average, percentage)
- O 10 Other. Please specify_____
- 67. What specialised training have you received to work with this data? [Please select all that apply]
 - O 1 Vocational qualification
 - O 2 University degree
 - O 3 Short course (online or in person)
 - O 4 On-the-job training
 - O 5 No formal training
 - O 6 Other. Please specify_____

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K. RISK CULTURE

The following questions ask about behaviours and attitudes towards risk in your agency.

68. Please rate your level of agreement with the following statements:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
 My agency supports employees to escalate risk-related issues with managers 	O 1	02	O 3	O 4	O 5
 Risk management concerns are discussed openly and honestly in my agency 	O 1	02	O 3	O 4	O 5
 Employees in my agency have the right skills to manage risk effectively 	O 1	02	O 3	O 4	O 5
 Employees in my agency are encouraged to consider opportunities when managing risk 	O 1	O 2	O 3	O 4	O 5
e. Appropriate risk taking is rewarded in my agency	O 1	02	O 3	O 4	O 5
f. In my agency, the benefits of risk management match the time required to complete risk management activities	O 1	02	O 3	O 4	O 5
 g. Senior leaders in my agency demonstrate and discuss the importance of managing risk appropriately 	O 1	02	O 3	O 4	O 5
 When things go wrong, my agency uses this as an opportunity to review, learn, and improve the management of similar risks 	01	02	O 3	O 4	O 5

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L. INNOVATION

For the purposes of the following questions, an innovation can be a better way of working or a new idea that makes either incremental changes or transformative change.

- 69. In the last 12 months, has your workgroup implemented any innovations?
 - O1 Yes
 - O 2 No [Please go to question 72]
 - O 3 Not sure [Please go to question 72]
- 70. Thinking of the most significant innovation that was implemented by your workgroup in the last 12 months, which parts of your work did it primarily affect? [Select only one]
 - O 1 Process
 - O 2 Products
 - O 3 Communications
 - O 4 Policy
- 71. What was the main impact of this most significant innovation? [Select only one]
 - O 1 Money was saved
 - O 2 Workplace culture was improved
 - O 3 Policy design was enhanced
 - O 4 Service delivery was enhanced
 - O 5 Efficiencies were created
 - O 6 Employee skills were improved
 - O 7 Client experience was improved
 - O 8 There was no impact
 - O 9 I don't know what the impact was
 - O 10 Other⁸ (please specify).....
- 72. Are there barriers to implementing innovations in your agency?
 - O1 Yes
 - O 2 No [Please go to question 74]
 - O 3 Not sure [Please go to question 74]

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⁸ Please note: de-identified, verbatim comments to question 71 may be provided to your agency. In answering this question, please do not provide personal information about any other person, for example by including their name in your response. Australian Privacy Principle 5 requires that, where personal information has been collected about an individual (including from sources other than the individual concerned), they must be notified of certain matters, such as the purposes for which this information has been collected.

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73. What are the barriers to innovating in your agency? [Please select all that apply]

- O 1 I have insufficient time to develop and implement innovations
- O 2 My workplace culture does not support innovation
- O 3 Leaders within my agency don't support or value innovation
- O 4 I don't have the skills required to develop and implement innovations
- O 5 My agency's strategy for innovation is unclear
- O 6 I don't have the resources needed to develop and implement innovations
- O 7 My workgroup does not have the money needed to develop and implement innovations
- O 8 My workgroup does not have the right employees needed to develop and implement innovations
- O 9 Other⁹ (please specify).....

74. Please rate your level of agreement with the following statements:

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a.	I believe that one of my responsibilities is to continually look for new ways to improve the way we work	O 1	02	O 3	O 4	O 5
b.	My immediate supervisor encourages me to come up with new or better ways of doing things	O 1	O 2	O 3	O 4	O 5
C.	People are recognised for coming up with new and innovative ways of working	01	O 2	O 3	O 4	O 5
d.	My agency inspires me to come up with new or better ways of doing things	01	02	O 3	O 4	O 5
e.	My agency recognises and supports the notion that failure is a part of innovation	01	02	O 3	O 4	O 5

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⁹ Please note: de-identified, verbatim comments to question 73 may be provided to your agency. In answering this question, please do not provide personal information about any other person, for example by including their name in your response. Australian Privacy Principle 5 requires that, where personal information has been collected about an individual (including from sources other than the individual concerned), they must be notified of certain matters, such as the purposes for which this information has been collected.

M. PERFORMANCE

75. <u>In the last month</u>, please rate your **workgroup's** overall performance on a scale of **1 to 10**, where **1** means your workgroup's worst performance, **5 means an average workgroup performance** and **10 means the best your workgroup has ever worked**:

0 1 0 2 0 3 0 4 0 5 0 6 0 7 0 8 0 9 0 1 0 0 Don't know

76. <u>In the last month</u>, please rate your **agency's** success in meeting its goals and objective on a scale of 1 to 10, where 1 means no success, 5 means usual levels of success and 10 means the best your agency has performed:

1

O 1 O 2 O 3 O 4 O 5 O 6 O 7 O 8 O 9 O 10 O Don't know

77. Please rate your level of agreement with the following statements:

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a.	I have the appropriate skills, capabilities, and knowledge to do my job	O 1	O 2	O 3	O 4	O 5
b.	My workgroup has the tools and resources we need to perform well	01	O 2	O 3	O 4	O 5
C.	The work processes we have in place allow me to be as productive as possible	01	02	03	O 4	O 5
d.	The people in my workgroup complete work to a high standard	01	O 2	03	O 4	O 5
e.	My supervisor ensures that my workgroup delivers on what we are responsible for	01	02	03	04	O 5

1

1

78. In my opinion, the work I am given is:

- O 1 Above my classification level
- O 2 Appropriate for my classification level
- O 3 Below my classification level
- 79. In my opinion, the decision-making authority I have is:
 - O 1 Above my classification level
 - O 2 Appropriate for my classification level
 - O 3 Below my classification level
- 80. Please assess the level of action being taken by your agency to reduce red tape (red tape is defined as unnecessary, burdensome administrative rules and procedures that have negative effects on the agency's performance). [Please assess the level of action being taken by your agency to reduce red tape by entering a number between 1 and 10, with 1 signifying no action and 10 signifying the highest level of action]

O1 O2 O3 O4 O5 O6 O7 O8 O9 O10 ODon't know

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N. APS VALUES AND THE CODE OF CONDUCT

81.	Based on	your experie	ence in t	he workpl	ace, how fre	equently:
			1	1		

based on your experience in the workplace, now nequently.						
	Always	Often	Sometimes	Rarely	Never	Not sure
a. Do colleagues in your immediate workgroup act in accordance with the APS Values in their everyday work?	01	02	O 3	O 4	O 5	O 6
b. Does your supervisor act in accordance with the APS Values in his or her everyday work?	O 1	02	O 3	O 4	O 5	O 6
c. Do senior leaders (i.e. the SES) in your agency act in accordance with the APS Values?	01	02	03	O 4	O 5	O 6

For the purposes of this survey the following definition has been used:

Discrimination happens when a person, or a group of people, is treated less favourably than another person or group because of their background or certain personal characteristics. It is also discrimination when an unreasonable rule or policy applies to everyone but has the effect of disadvantaging some people because of a personal characteristic they share.

- 82. During the last 12 months and in the course of your employment, have you experienced discrimination on the basis of your background or a personal characteristic (e.g. gender, race, disability, caring responsibilities, age, sexual orientation or identification as an Aboriginal and/or Torres Strait Islander person)?
 - 01 Yes
 - O 2 No [Please go to question 85]
- 83. Did this discrimination occur in your current agency?
 - O1 Yes
 - O2 No
- 84. What was the basis of the discrimination that you experienced? [Please select all that apply]
 - O 1 Gender
 - O 2 Race
 - O 3 Disability
 - O 4 Caring responsibilities
 - O 5 Age
 - O 6 Sexual orientation
 - O 7 Identification as an Aboriginal and/or Torres Strait Islander person
 - O 8 Other¹⁰ (please specify).....

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¹⁰ Please note: de-identified, verbatim comments to question 84 may be provided to your agency. In answering this question, please do not provide personal information about any other person, for example by including their name in your response. Australian Privacy Principle 5 requires that, where personal information has been collected about an individual (including from sources other than the individual concerned), they must be notified of certain matters, such as the purposes for which this information has been collected.

For the purposes of this survey, the following definitions have been used:

Harassment: Workplace harassment entails offensive, belittling or threatening behaviour directed at an individual or group of APS employees. The behaviour is unwelcome, unsolicited, usually unreciprocated and usually, but not always, repeated. Reasonable management action carried out in a reasonable way is not workplace harassment.

Bullying: A worker is bullied at work if, while at work, an individual or group of individuals repeatedly behaves unreasonably towards the worker, or group of workers of which the worker is a member, and that behaviour creates a risk to health and safety. To avoid doubt, this does not apply to reasonable management action carried out in a reasonable way.

Please note this survey is voluntary and you may skip any question you do not wish to answer. Your responses will remain confidential unless disclosure of the information is required or authorised by or under Australian law or a court/tribunal order.

- 85. During the last 12 months, have you been subjected to harassment or bullying in your current workplace?
 - O1 Yes
 - O 2 No [Please go to question 89]
 - O 3 Not sure [Please go to question 89]
- 86. What type of harassment or bullying did you experience? [Please select all that apply]
 - O 1 Physical behaviour
 - O 2 Sexual harassment
 - O 3 Cyberbullying (e.g. harassment via IT, or the spreading of gossip/materials intended to defame or humiliate)
 - O 4 Verbal abuse (e.g. offensive language, derogatory remarks, shouting or screaming) (please provide non-identifying details)
 - O 5 'Initiations' or pranks
 - O 6 Interference with your personal property or work equipment
 - O 7 Interference with work tasks (i.e. withholding needed information, undermining or sabotage (please provide non-identifying details)
 - O 8 Inappropriate and unfair application of work policies or rules (e.g. performance management, access to leave, access to learning and development)
 - O 9 Other¹¹ (please specify).....

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¹¹ Please note: de-identified, verbatim comments to question 76 may be provided to your agency. In answering this question, please do not provide personal information about any other person, for example by including their name in your response. Australian Privacy Principle 5 requires that, where personal information has been collected about an individual (including from sources other than the individual concerned), they must be notified of certain matters, such as the purposes for which this information has been collected.

- 87. Who was responsible for the harassment or bullying? [Please select all that apply]
 - O 1 Your current supervisor
 - O 2 A previous supervisor
 - O 3 Someone more senior (other than your supervisor)
 - O 4 Co-worker
 - O 5 Contractor
 - O 6 Someone more junior than you
 - O 7 Client, customer or stakeholder
 - O 8 Consultant/service provider
 - O 9 Representative of another APS agency
 - O 10 Minister or ministerial adviser
 - O 11 Unknown
- 88. Did you report the harassment or bullying?
 - O 1 I reported the behaviour in accordance with my agency's policies and procedures
 - O 2 It was reported by someone else
 - O 3 I did not report the behaviour

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For the purposes of this survey, the following definition has been used:

Corruption: The dishonest or biased exercise of a Commonwealth public official's functions. A distinguishing characteristic of corrupt behaviour is that it involves conduct that would usually justify serious penalties, such as termination of employment or criminal prosecution.

The following list provides examples of types of behaviour that, if serious enough, may amount to corruption:

- Bribery, domestic and foreign—obtaining, offering or soliciting secret commissions, kickbacks or gratuities
- Fraud, forgery, embezzlement
- Theft or misappropriation of official assets
- Nepotism-preferential treatment of family members
- Cronyism—preferential treatment of friends
- · Acting (or failing to act) in the presence of a conflict of interest
- Unlawful disclosure of government information
- Blackmail
- · Perverting the course of justice
- Colluding, conspiring with, or harbouring criminals
- Insider trading—misusing official information to gain an unfair private, commercial or market advantage for self or others
- Green-lighting-making official decisions that improperly favour a person or company, or disadvantage another

Please note this survey is voluntary and you may skip any question you do not wish to answer. Your responses will remain confidential unless disclosure of the information is required or authorised by or under Australian law or a court/tribunal order.

- 89. Excluding behaviour reported to you as part of your duties, in the last 12 months have you witnessed another APS employee in your agency engaging in behaviour that you consider may be serious enough to be viewed as corruption?
 - O 1 Yes
 - O 2 No [Please go to question 93]
 - O 3 Not sure [Please go to question 93]
 - O 4 Would prefer not to answer [Please go to question 93]

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- 90. Which of the following best describes the corrupt behaviours you witnessed? [Please select all that apply]
 - O 1 Bribery, domestic and foreign—obtaining, offering or soliciting secret commissions, kickbacks or gratuities
 - O 2 Fraud, forgery or embezzlement
 - O 3 Theft or misappropriation of official assets
 - O 4 Nepotism—preferential treatment of family members
 - O 5 Cronyism—preferential treatment of friends
 - O 6 Acting (or failing to act) in the presence of an undisclosed conflict of interest
 - O 7 Unlawful disclosure of government information
 - O 8 Blackmail
 - O 9 Perverting the course of justice
 - O 10 Colluding, conspiring with or harbouring, criminals
 - O 11 Insider trading
 - O 12 Green-lighting
 - O 13 Other

91. Did you report the potentially corrupt behaviour?

- O 1 I reported the behaviour in accordance with my agency's policies and procedures
- O 2 It was reported by someone else
- O 3 I did not report the behaviour

92. Please explain why you chose not to report the behaviour? [Please select all that apply]

- O 1 I did not want to upset relationships in the workplace
- O 2 I did not have enough evidence
- O 3 It could affect my career
- O 4 I did not think action would be taken
- O 5 The matter was resolved informally
- O 6 I did not think the corruption was serious enough
- O 7 Managers accepted the behaviour
- O 8 I did not think it was worth the hassle of going through the report process
- O 9 I did not know how to report it
- O 10 Other (please specify)

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93.	Please rate v	your level of	agreement with	the following	statements:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Do not know
a. My workplace operates in a high corruption-risk environment (e.g. it holds information, assets or decision making powers of value to others)	01	02	03	04	O 5	O 6
 b. My agency has procedures in place to manage corruption 	O 1	O 2	O 3	O 4	O 5	O 6
 c. It would be hard to get away with corruption in my workplace 	01	O 2	O 3	O 4	O 5	O 6
 I have a good understanding of the policies and procedures my agency has in place to deal with corruption 	01	02	O 3	O 4	O 5	O 6
e. I am confident that colleagues in my workplace would report corruption	01	02	O 3	O 4	O 5	O 6
f. I feel confident that I would know what to do if I identified corruption in my workplace	01	02	O 3	O 4	O 5	O 6

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O. CONCLUDING QUESTIONS

Please note: de-identified, verbatim comments to questions 94 and 95 <u>will be</u> provided to your agency.

In answering these questions, please do not provide personal information about any other person, for example by including their name in your response. Australian Privacy Principle 5 requires that, where personal information has been collected about an individual (including from sources other than the individual concerned), they must be notified of certain matters, such as the purposes for which this information has been collected.

94. What is one thing your agency is doing really well?

95. What is the most important issue that needs to be addressed in your agency?

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APPENDIX F:

FEVS and APS Coding

FEVS Coding

Question Number	Scale	Justification
Q-Agency Size	Small=0, Medium=1,	Independent variable, scale is
	Large=2	arbitrary
Q-Sex	No response=0,	Independent variable, scale is
	A=Male=1, B=Female=2	arbitrary
Q-Super	A=Nonsupervisor=0,	Independent variable, scale is
	B=Supervisor=1	arbitrary
Q-Leaving	A=No=5, B=Yes, to take	Question is strong for theme of job
	another Federal job=1,	satisfaction and justified to have
	C=Yes, to take a job	absolute responses for purpose of
	outside Federal Gov=1,	fighting a central tendency.
	D=Other=3	
1, 3, 4, 5, 6, 7, 8, 9,	Strongly Disagree=1,	All questions are positive and are kept
12, 13, 15, 16, 17,	Disagree=2, Neither	to the 5-point Likert scale
19, 21, 22, 23, 24,	Agree nor Disagree=3,	
25, 28, 29, 30, 31,	Agree=4. Strongly	
32, 33, 37, 38, 40,	Agree=5	
43, 44, 46, 47, 49,		
50, 51, 53, 54, 55,		
56, 57, 58, 59, 61		
52, 60	Very Poor=1, Poor=2,	All questions are positive and are kept
	Fair=3, Good=4, Very	to the 5-point Likert scale
	Good=5	
63, 64, 65, 66, 67,	Very Dissatisfied=1,	All questions are positive and are kept
68, 69, 71	Dissatisfied=2, Neither	to the 5-point Likert scale
	Dissatisfied Nor	
	Satisfied=3, Satisfied=4,	
	Very Satisfied=5	

APS Coding

Question Number	Scale	Justification
0	Small=0, Medium=1, Large=2	Independent variable, scale is arbitrary
1	Prefer not to say=0, Male=1, Female=2, X=(Indeterminate/Inters ex/Unspecified)	Independent variable, scale is arbitrary
7	Trainee/Graduate/APS=0 , EL=1, SES=1	Independent variable, scale is arbitrary, both EL and SES are supervisory
24, 25, 26, 29, 31, 32, 39, 43, 50, 52, 53, 61, 63, 64, 68, 74, 77, 93	Strongly disagree=1, Disagree=2, Neither agree nor disagree=3, Agree=4. Strongly agree=5	All questions are positive and are kept to the 5-point Likert scale
33	Very dissatisfied=1, Dissatisfied=2, Neither satisfied or dissatisfied=3, Satisfied=4, Very satisfied=5	Question is positive and is kept to the 5-point Likert scale
38A, 38E	Always=5, Often=4, Sometimes=3, Rarely=2, Never=1	Questions are negative and are kept to the 5-point Likert score
38B, 38F, 38G	Never=1, Rarely=2, Sometimes=3, Often=4, Always=5	Questions are positive and are kept to the 5-point Likert score
40.1, 40.2, 40.3	Tick=2	Question is not strong enough to justify absolute rating of 1; there are enough questions for this theme to keep this from causing an artificial central tendency.
40.4	Tick=4	Question is not strong enough to justify absolute rating of 5; there are enough questions for this theme to keep this from causing an artificial central tendency.

Question Number	Scale	Justification
41	I want to leave my agency as soon as possible=1, I want to leave my agency within the next 12 months=2, I want to leave my agency within the next 12 months but feel it will be unlikely in the current environment=2, I want to stay working for my agency for the next one to two years=4, I want to stay working for my agency for at least the next three years=5	I want to leave my agency within the next 12 months and I want to leave my agency within the next 12 months but feel it will be unlikely in the current environment are essentially saying the same thing and as such, are scored the same. None of the possible responses are neutral, which is why a 3 is not possible; otherwise the 5-point Likert scale is kept to for avoidance of a central tendency.
44.2	Tick=4	"Type of Work Offered" can be a positive indicator of PSM, but is not absolute.
44.5	Tick=5	"Service to the general public" is a strong PSM indicator
45	Yes=1, Unsure=3, No=5	This is an absolute question with respect to job satisfaction
47	No=1, Yes=5	This is a positive question. Absolute ratings of 1 and 5 will help fight central tendency for a theme with fewer questions and to not minimize the importance of this action.
48	No=1, Not applicable=3, Yes=5	This is a positive question. Absolute ratings of 1 and 5 will help fight central tendency for a theme with fewer questions and to not minimize the importance of this action.
49	No=1, Not applicable=3, Yes=6	This is a positive question. Absolute ratings of 1 and 5 will help fight central tendency for a theme with fewer questions and to not minimize the importance of this action.

Question Number	Scale	Justification
51	Very dissatisfied=1, Dissatisfied=2, Neither satisfied or dissatisfied=3, Satisfied=4, Very satisfied=5	Question is positive and is kept to the 5-point Likert scale
69	No=1, Not Sure=3, Yes=5	Direct question for culture theme.
72	Yes=2, Not Sure=3, No=4	Negative question, strength of question is not strong enough to be a theme absolute
78	Below my classification level=2, Appropriate for my classification level=3, Above my classification level=4	Question is somewhat extrapolative in nature for the theme.
79	Below my classification level=1, Appropriate for my classification level=3, Above my classification level=5	This is a very important and central question for decision-making and justifies the absolute 1-5 ratings
80	1=1, 2=1, 3=2, 4=2, 5=3, 6=3, 7=4, 8=4, 9=5, 10=5	Question is rated on a 10-point scale, converting the responses to a 5-point- Likert scale for consistency is justified.
81	Never=1, Rarely=2, Sometimes=3, Often=4, Always=5	Question is positive and is kept to the 5-point Likert scale
89	Yes=2, Not sure/Would prefer not to answer=3, No=4	Question is not overly strong, as such response are more centralized. Little chance of this causing a centralized tendency because of the number of questions that are used for this theme.

APPENDIX G:

Tables

Table 20: Supporting Information for APS Correlation

Determinant of Correlation Matrix
Bartlett test of sphericity
Chi-square = $1.29e + 06$
Degrees of freedom = 91
P-value = 0.000
H0: variables are not intercorrelated
Kaiser-Meyer-Olkin Measure of Sampling
KMO = 0.704

Table 21: Supporting information for FEVS and FEVS-EPA Only Correlation

Determinant of Correlation Matrix				
Bartlett test of sphericity				
Chi-square = $1.23e + 07$				
Degrees of freedom = 105				
P-value = 0.000				
H0: variables are not intercorrelated				
Kaiser-Meyer-Olkin Measure of Sampling				
KMO = 0.664				

Table 22a: APS Linear Regression Job Satisfaction

Regress: JobSat DM Culture Fit APSM PSM						
Source SS	df	MS Number of $obs = 32,209$				
		F(5, 32203) = 22038.34				
Model 8704.3255	5	1740.8651 $Prob > F = 0$				
Residual 2543.79792	32,203	.078992576 R-squared = 0.7738				
		Adj R-squared = 0.7738				
Total 11248.1234	32,208	.349233837 Root MSE = 0.28106				

Job Sat	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	Beta Coeff
					.085972	
DM	.0944338	.0043171	21.87	0	.1028955	0.0965147
					.3995217	
Culture	.410753	.0057302	71.68	0	.4219844	0.3896791
					.1762855	
Fit	.1873598	.0056501	33.16	0	.1984341	0.1434861
					.3167332	
APSM	.3271644	.0053219	61.47	0	.3375956	0.3244877
	-				-0.0298016	-
PSM	.0230873	.0034256	-6.74	0	-0.016373	0.0180382
	-				0566387	
_cons	.0168553	.0202973	-0.83	0.406	.0229282	

Table 22b: APS Linear Regression Employee Engagement

Regress: Emp				
Source	SS	df	MS	Number of $obs = 32,209$
				F(5, 32203) = 14830.16
Model	7524.34227	5	1504.86845	Prob > F = 0
Residual	3267.75055	32,203	.101473482	R-squared = 0.6972
				Adj R-squared = 0.6972
Total	10792.0928	32,208	.335074914	Root MSE = 0.31855

Employ						Beta
Engage	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	Coeff
					0.0707032	
DM	0.0802938	0.004893	16.41	0	0.0898843	0.083779
					0.2528528	
Culture	0.2655824	0.0064946	40.89	0	0.278312	0.2572248
					0.5990094	
Fit	0.611561	0.0064038	95.5	0	0.6241126	0.4781457
					0.0753957	
APSM	0.0872184	0.0060319	14.46	0	0.0990412	0.0883136
					0.0231448	
PSM	0.0307548	0.0038826	7.92	0	0.0383648	0.0245314
					-0.347676	
_cons	-0.3025855	0.0230049	-13.15	0	-0.2574949	

Source	SS	Df	MS	Number of $obs = 311,684$
				F(4, 311679) > 999999
Model	183174.503	4	45793.6256	Prob > F = 0
Residual	20901.4492	311,679	0.06706082	R-squared = 0.8976
				Adj R-squared = 0.8976
Total	204075.952	311,683	0.654754837	Root MSE = 0.25896

Table 23a: FEVS Linear Regression Job Satisfaction

						Beta
Job Sat	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	Coefficient
					0.1460432	
DM	0.1477113	0.0008511	173.55	0	0.1493795	0.1876271
					0.1679924	
Culture	0.169763	0.0009034	187.92	0	0.1715335	0.2061494
					0.2619945	
Fit	0.2638112	0.0009269	284.62	0	0.2656278	0.2711885
					0.3490077	
APSM	0.3510264	0.00103	340.82	0	0.3530451	0.3761004
					0.3210846	
_cons	0.3255908	0.0022991	141.62	0	0.330097	

Table 23b: FEVS Linear Regression Employee Engagement

Source	SS	Df	MS	Number of $obs = 311,684$
				F(4, 311679) = 78255.53
Model	48128.7929	4	12032.1982	Prob > F = 0
Residual	47922.279	311,679	0.153755239	R-squared = 0.5011
				Adj R-squared = 0.5011
Total	96051.0719	311,683	0.308169107	Root MSE = 0.39212

						Beta
Employ Engage	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	Coefficient
	-				-0.0401691	-
DM	0.0376432	0.0012887	-29.21	0	-0.0351173	0.0696968
	-				-0.0640702	-
Culture	0.0613892	0.0013679	-44.88	0	-0.0587082	0.1086616
					0.1793264	
Fit	0.1820772	0.0014035	129.73	0	0.1848279	0.2728214
					0.4029856	
APSM	0.4060422	0.0015595	260.36	0	0.4090989	0.6341326
					2.565978	
_cons	2.572801	0.0034813	739.03	0	2.579624	

Source	SS	Df	MS Number of obs =	3,117
			F(4, 3112)	5778.27
Model	1586.77348	4	396.693371 Prob > F	0
Residual	213.647048	3,112	.06865265 R-squared	0.8813
			Adj R-squared	0.8812
Total	1800.42053	3,116	.57779863 Root MSE	0.26202

Table 24a: FEVS EPA Only Linear Regression Job Satisfaction	Table 24a:	FEVS	EPA	Only	Linear	Regre	ssion	Job	Satisf	faction
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						Beta
Job Sat	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	Analysis
					0.1339487	
DM	0.1494509	0.0079064	18.9	0	0.1649532	0.199393
					0.1577495	
Culture	0.1750915	0.0088447	19.8	0	0.1924334	0.2166882
					0.2305156	
Fit	0.2461084	0.0079526	30.95	0	0.2617013	0.2759909
					0.3362033	
APSM	0.3554494	0.0098158	36.21	0	0.3746955	0.3756921
					0.3128003	
_cons	0.3604059	0.0242796	14.84	0	0.4080115	

Table 24b: FEVS EPA Only Linear Regression Employee Engagement

Source	SS	Df	MS	Number of $obs = 3,117$
				F(4, 3112) = 761.63
Model	443.282385	4	110.820596	Prob > F = 0
Residual	452.808127	3,112	0.145503897	R-squared = 0.4947
				Adj R-squared = 0.494
Total	896.090512	3,116	0.287577186	Root MSE = 0.38145

						Beta
Employ Engage	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	Coefficient
	-				-0.0367089	-
DM	0.0141403	0.0115103	-1.23	0.219	0.0084282	0.0267413
	-				-0.0925244	-
Culture	0.0672776	0.0128763	-5.22	0	-0.0420308	0.1180189
					0.1053394	
Fit	0.1280398	0.0115775	11.06	0	0.1507402	0.2035281
					0.4228331	
APSM	0.450852	0.0142901	31.55	0	0.4788709	0.6754595
					2.479951	
_cons	2.549257	0.0353468	72.12	0	2.618562	

Variable	Factor1	Factor2	Uniqueness
Culture	0.918	0.0024	0.1573
Job Sat	0.9075	-0.0015	0.1765
Fairness	0.907	0.0112	0.1773
Prof Dev	0.8889	0.0158	0.2096
Fit	0.8533	-0.1125	0.2592
Employ Engage	0.8427	-0.0749	0.2842
DM	0.8415	-0.0354	0.2906
Job Enrich	0.81	0.0431	0.3421
Ind Appr	0.8059	0.0746	0.345
Supervisor	0.069	-0.7448	0.4405
Sex	0.0876	0.5952	0.6381
Agency Size	-0.0324	0.4732	0.775
Cronbach's Alpha (All Variables = 0.9018)	0.9547	0.1802	

Table 25a: APS PCA All Variables

Table 25b: APS PCA All Variables with Direct PSM

0.1601 0.1748 0.1756
).1748).1756).2138
).1756) 2138
) 2138
J.2150
0.2608
0.2823
0.2857
0.3363
0.3403
).4483
).4845
0.3061
).5956

Table 25c: APS PCA Only APSM Variables

Variable	Factor1	Uniqueness
Prof Dev	0.9115	0.1691
Fairness	0.8883	0.211
Job Enrich	0.8859	0.2152
Ind App	0.88	0.2256
Cronbach's Alpha	0.9102	

							Uniquenes
Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	S
Culture	0.9355	-0.0026	-0.0353	-0.0806	0.0159	-0.0174	0.1165
Fairness	0.8993	0.1044	-0.0253	-0.0791	-0.0356	-0.087	0.1645
Job Sat	0.8974	0.0784	-0.025	0.0095	0.026	0.0806	0.1806
Fit	0.845	0	0.1069	0.2222	-0.0022	-0.0344	0.2239
Employ							
Engage	0.8369	-0.0258	0.0494	0.2435	0.0077	0.0303	0.2362
Prof Dev	0.8366	0.2861	0.0099	-0.0491	-0.0406	0.0591	0.2106
DM	0.7919	0.1878	0.0531	0.0016	0.095	0.0399	0.3241
Ind App	0.7163	0.3995	-0.0486	-0.0447	0.0017	-0.0092	0.3228
Job Enrich	0.7094	0.4666	0.0061	0.0234	0.0028	-0.0039	0.2784
Supervisor	0.0723	-0.0377	0.3104	0.0647	0.0242	0.0282	0.8914
Sex	0.0738	-0.0061	-0.2471	-0.0057	0.0398	0.0619	0.928
Agency Size	-0.042	0.0561	-0.1488	-0.0188	-0.1092	-0.0043	0.9607
Cronbach's							
Alpha							
All variables							
= 0.9018	0.9547						

Table 25d: APS PFA All Variables

Table 25e: APS PFA Only APSM Variables

Variable	Factor1	Uniqueness
Prof Dev	0.876	0.2326
Fairness	0.8394	0.2954
Job Enrich	0.8315	0.3086
Ind App	0.8208	0.3263
Cronbach's Alpha	0.9102	

Variable	Factor 1	Factor 2	Uniqueness
Job Sat	0.9524	-0.0005	0.0929
Ind App	0.9072	0.0079	0.1769
Fairness	0.8883	0.1046	0.2
Prof Dev	0.8876	0.0336	0.211
Culture	0.8758	0.0295	0.2321
DM	0.8747	0.0428	0.2331
Fit	0.8351	-0.0482	0.3003
Particip	0.8162	0.0256	0.3332
Job Enrich	0.7958	0.0769	0.3607
Employ Engage	0.7395	0.0189	0.4528
Sex	0.027	-0.7468	0.4416
Super	0.119	0.7118	0.4791
Agency Size	-0.0089	0.121	0.9853
Cronbach's Alpha All variables = 0.9275	0.9559	0.1174	

Table 25f: FEVS PCA All Variables

Table 25g: FEVS PCA Only APSM Variables

Variable	Factor1	Uniqueness
Particip	0.8285	0.3136
Job Enrich	0.8648	0.252
Ind App	0.9301	0.1349
Prof Dev	0.9261	0.1424
Fairness	0.875	0.2344
Cronbach's Alpha	0.9924	

Table 25h: FEVS PFA All Variables

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Uniqueness
Particip	0.7358	0.269	0.0204	0.0273	0.1533	0.0029	0.3615
Job Enrich	0.6217	0.5731	0.0569	-0.0059	0.0214	-0.0008	0.2813
Ind App	0.7876	0.4778	-0.0304	0.0148	-0.0384	0.002	0.1488
Prof dev	0.7508	0.517	-0.0034	-0.0116	0.0158	-0.0004	0.1686
Fairness	0.8721	0.181	0.1566	-0.059	-0.0711	0.0009	0.1736
DM	0.8616	0.1422	0.0382	-0.0314	0.1267	-0.0051	0.219
Job Sat	0.9447	0.1933	-0.0438	0.0501	0.0083	-0.0029	0.0657
Employ							
Engage	0.6047	0.3794	-0.001	0.2342	0.0123	0.0016	0.4354
Culture	0.8914	0.076	0.0477	-0.0336	-0.0243	0.0088	0.1955
Fit	0.8535	0.0196	-0.0704	0.1855	-0.0157	-0.0027	0.2315

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Uniqueness
Super	0.1118	0.0707	0.3041	-0.0035	0.0114	0.0037	0.8898
Sex	-0.0031	-0.0046	-0.2087	0.0357	-0.0084	0.0114	0.9549
Agency Size	-0.0043	0.0009	0.0271	0.0079	0.0095	0.0384	0.9976
Cronbach's							
Alpha							
All variables							
= 0.9275	0.9559	0.9135					

Table 25i: FEVS PFA Only APSM Variables

Variable	Factor1	Factor2	Uniqueness
Particip	0.5537	0.5345	0.4077
Job Enrich	0.7402	0.3897	0.3003
Ind App	0.7224	0.5632	0.161
Prof Dev	0.756	0.5081	0.1703
Fairness	0.5828	0.6106	0.2875
Cronbach's Alpha	0.9224		

Table 26a: APS Simple Path Analysis - Direct Effects

	Ol	Μ				
	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
Structural						
APSM						
DM	0.7375455	0.00279	264.35	0	0.7320771	0.7430139
Job Sat						
APSM	0.636595	0.0037757	168.6	0	0.6291947	0.6439953
DM	0.2495658	0.0036528	68.32	0	0.2424065	0.2567251
Employ Engage						
APSM	0.5040012	0.0047491	106.12	0	0.4946931	0.5133094
DM	0.2851568	0.0045945	62.07	0	0.2761518	0.2941618

Table 26b:	APS Sim	ole Path An	nalysis – I	Indirect Effects
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	OIM					
		0.1 F		D	[95%	T (11
	Coef.	Std. Err.	Z	P>Z	Conf.	Interval
Structural		-	-	-		-
APSM						
DM	0	(no path)				
Job Sat						
APSM	0	(no path)				
DM	0.4695178	0.003303	142.15	0	0.4630441	0.4759915
Employ Engage						
APSM	0	(no path)				
DM	0.3717239	0.0037744	98.48	0	0.3643261	0.3791216

Table 26c: APS Simple Path Analysis - Goodness of Fit

	Variance					
depvars	fitted	predicted	residual	R-squared	mc	mc2
observed						
APSM	0.3486675	0.2026519	0.1460156	0.5812182	0.7623767	0.5812182
Job Sat	0.3566193	0.2518068	0.1048125	0.7060941	0.8402941	0.7060941
Employ Engage	0.3636591	0.1978386	0.1658204	0.5440223	0.7375786	0.5440223
overall				0.641826		
Table 2/a: FEVS Simple Path Analysis – Direct Effect						
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	OIM					
	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
Structural						
APSM						
DM	0.6809253	0.0008917	763.63	0	0.6791777	0.682673
Job Sat						
APSM	0.539551	0.0011343	475.69	0	0.5373279	0.5417741
DM	0.3021262	0.0009567	315.79	0	0.300251	0.3040013
Employ Engage						
APSM	0.4387049	0.0014092	311.31	0	0.4359428	0.4414669
DM	0.0022907	0.0011887	1.93	0.054	0.0000391	0.0046205

Table 27b: FEVS Simple Path Analysis - Indirect Effects

	OIM					
	Coef.	Std. Err.	Z	P>z	[95% Conf.	Interval]
Structural		-	-	-	-	-
APSM						
DM	0	(no path)				
Job Sat						
APSM	0	(no path)				
DM	0.367394	0.0009099	403.76	0	0.3656105	0.3691774
Employ Engage						
APSM	0	(no path)				
DM	0.2987253	0.0010363	288.27	0	0.2966943	0.3007563

		Variance					
depvars		fitted	predicted	residual	R-squared	mc	mc2
observed							
		0.751632	0.489823	0.261808	0.651679	0.807266	0.651679
	APSM	3	6	8	7	8	7
		0.654752	0.549768	0.104983	0.839658		0.839658
	Job Sat	7	9	9	8	0.916329	8
		0.308168		0.162056	0.474130	0.688571	0.474130
	Employ Engage	1	0.146112	1	8	6	8
					0.736112		
overall					1		

Table 27c: FEVS Simple Path Analysis – Goodness of Fit

Table 28: APS-FEVS T-Tests

Decision-Making								
Data set	Obs	Mean	Std. Err.	Std. Dev.	95% Conf. Interval			
FEVS	311,684	3.464685	0.001841	1.027829	3.461077	3.468294		
APS	50,351	3.584827	0.0027201	0.6103667	3.579495	3.590158		
combined	362,035	3.481394	0.001631	0.9813496	3.478198	3.484591		
		-				-		
diff		0.1201411	0.0047092		-0.129371	0.1109112		
diff = mean	- mean		t = -25.5119					
Ho: diff = 0		degree	es of freedom	n = 362033				
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0				
Pr(T < t) = 0	Pr(T < t) = 0.0000 $Pr(T > t) = 0.0000$ $Pr(T > t) = 1.0000$							
				•				
		Jo	b Satisfactio	n				
Data set	Obs	Jo Mean	b Satisfactic Std. Err.	n Std. Dev.	[95% Conf.	nterval]		
Data set FEVS	Obs 311,684	Jc Mean 3.743788	bb Satisfactic Std. Err. 0.0014494	n Std. Dev. 0.8091692	[95% Conf. 3.740947	nterval] 3.746629		
Data set FEVS APS	Obs 311,684 50,351	Jo Mean 3.743788 3.690131	bb Satisfactic Std. Err. 0.0014494 0.0026614	on Std. Dev. 0.8091692 0.597182	[95% Conf. 3.740947 3.684915	nterval] 3.746629 3.695347		
Data set FEVS APS combined	Obs 311,684 50,351 362,035	Jo Mean 3.743788 3.690131 3.736326	b Satisfactic Std. Err. 0.0014494 0.0026614 0.0013019	n Std. Dev. 0.8091692 0.597182 0.7833489	[95% Conf. 3.740947 3.684915 3.733774	nterval] 3.746629 3.695347 3.738877		
Data set FEVS APS combined diff	Obs 311,684 50,351 362,035	Jo Mean 3.743788 3.690131 3.736326 0.0536572	bb Satisfactic Std. Err. 0.0014494 0.0026614 0.0013019 0.0037614	on Std. Dev. 0.8091692 0.597182 0.7833489	[95% Conf. I 3.740947 3.684915 3.733774 0.046285	nterval] 3.746629 3.695347 3.738877 0.0610294		
Data set FEVS APS combined diff diff = mean	Obs 311,684 50,351 362,035 - mean	Jo Mean 3.743788 3.690131 3.736326 0.0536572	b Satisfactic Std. Err. 0.0014494 0.0026614 0.0013019 0.0037614 t = 14.2653	n Std. Dev. 0.8091692 0.597182 0.7833489	[95% Conf. 3.740947 3.684915 3.733774 0.046285	nterval] 3.746629 3.695347 3.738877 0.0610294		
Data set FEVS APS combined diff diff = mean Ho: diff = 0	Obs 311,684 50,351 362,035 - mean	Jo Mean 3.743788 3.690131 3.736326 0.0536572 degree	bb Satisfactic Std. Err. 0.0014494 0.0026614 0.0013019 0.0037614 t = 14.2653 es of freedom	n Std. Dev. 0.8091692 0.597182 0.7833489 n = 362033	[95% Conf. 3.740947 3.684915 3.733774 0.046285	nterval] 3.746629 3.695347 3.738877 0.0610294		
Data set FEVS APS combined diff diff = mean Ho: diff = 0 Ha: diff < 0	Obs 311,684 50,351 362,035 - mean Ha: c	Jo Mean 3.743788 3.690131 3.736326 0.0536572 degree	b Satisfactic Std. Err. 0.0014494 0.0026614 0.0013019 0.0037614 t = 14.2653 es of freedom Ha: diff >	n Std. Dev. 0.8091692 0.597182 0.7833489 n = 362033 0	[95% Conf. 3.740947 3.684915 3.733774 0.046285	nterval] 3.746629 3.695347 3.738877 0.0610294		

Employee Engagement								
Data set	Obs Mean Std. Err. Std. Dev. [95% Conf. Interval]					nterval]		
FEVS	311,684	4.432552	0.0009943	0.5551298	4.430603	4.434501		
APS	50,351	3.804326	0.0026875	0.6030475	3.799059	3.809594		
combined	362,035	4.34518	0.0010015	0.6026128	4.343217	4.347143		
diff		0.6282255	0.0026995		0.6229346	0.6335164		
diff = mean - mean t = 232.7209								
Ho: diff = 0		degree	es of freedom	n = 361976				
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0				
Pr(T < t) = 1	.0000 Pr	(T > t) = C).0000 P	r(T > t) = 0.00	000			
	1	1	Culture	1				
Data set	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. I	nterval]		
FEVS	311,684	3.569576	0.00176	0.9826039	3.566127	3.573026		
APS	50,294	3.691619	0.0025093	0.5627518	3.686701	3.696538		
combined	361,978	3.586533	0.0015567	0.936559	3.583482	3.589584		
		-			-			
diff		0.1220429	0.0044959		0.1308548	-0.113231		
diff = mean	- mean		t = -27.1452					
Ho: diff = 0		degree	es of freedom	n = 361976				
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0				
Pr(T < t) = 0	.0000 Pr	(T > t) = 0).0000 P	r(T > t) = 1.00	000			
			Fit					
Data set	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. I	nterval]		
FEVS	311,684	3.669797	0.0014899	0.8317972	3.666877	3.672717		
APS	50,263	3.913429	0.0021102	0.4730961	3.909293	3.917565		
combined	361,947	3.70363	0.0013235	0.7962313	3.701036	3.706224		
		-			-	-		
diff		0.2436324	0.0038057		0.2510915	0.2361733		
diff = mean	- mean		t = -64.0176					
Ho: diff = 0		degree	es of freedom	n = 361945				
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0				
Pr(T < t) = 0	Pr(T < t) = 0.0000 $Pr(T > t) = 0.0000$ $Pr(T > t) = 1.0000$							

APSM							
Data set	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]	
FEVS	311,684	3.795466	0.0015529	0.8669687	3.792423	3.79851	
APS	50,351	3.762684	0.0026315	0.5904866	3.757526	3.767841	
combined	362,035	3.790907	0.0013863	0.834098	3.78819	3.793624	
diff		0.0327829	0.0040058		0.0249316	0.0406342	
diff = mean - mean t = 8.1838							
Ho: diff = 0 degrees of freedom = 362033							
Ha: diff < 0	Ha: diff < 0 Ha: diff != 0 Ha: diff > 0						
Pr(T < t) = 1.0000 $Pr(T > t) = 0.0000$ $Pr(T > t) = 0.0000$							

Table 29: FEVS-FEVS EPA Only T-Tests

Decision-Making								
Data set	Obs	Mean	Std. Err.	Std. Dev.	95% Conf. Interval			
FEVS	311,684	3.464685	0.001841	1.027829	3.461077	3.468294		
APS	3,117	3.313442	0.0181648	1.014144	3.277826	3.349059		
combined	314,801	3.463188	0.0018319	1.027802	3.459597	3.466778		
diff		0.151243	0.0184994		0.1149848	0.1875012		
diff = mean	- mean		t = 8.1756					
Ho: diff = 0		degree	es of freedom	n = 314799				
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0				
Pr(T < t) = 1.0000 $Pr(T > t) = 0.0000$ $Pr(T > t) = 0.0000$								
Job Satisfaction								
Data set	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. I	nterval]		
FEVS	311,684	3.743788	0.0014494	0.8091692	3.740947	3.746629		
APS	3,117	3.646401	0.0136151	0.7601307	3.619706	3.673097		
combined	314,801	3.742824	0.0014414	0.8087546	3.739999	3.745649		
diff		0.0973868	0.0145572		0.068855	0.1259185		
diff = mean	- mean		t = 6.6899					
Ho: diff = 0		degree	es of freedom	n = 314799				
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0				
Pr(T < t) = 1	.0000 Pr	(T > t) = 0).0000 P	r(T > t) = 0.00	000			

Employee Engagement									
Data set	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]				
FEVS	311,684	4.432552	0.0009943	0.5551298	4.430603	4.434501			
APS	3,117	4.428697	0.0096053	0.5362622	4.409864	4.447531			
combined	314,801	4.432514	0.0009891	0.5549454	4.430575	4.434452			
diff		0.6282255	0.0026995		0.6229346	0.6335164			
diff = mean - mean t = 0.3858									
Ho: diff = 0		degree	es of freedom	ו = 314799					
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0					
Pr(T < t) = 0	.6502 Pr	(T > t) = 0).6996 P	r(T > t) = 0.34	198				
			Culture						
Data set	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	nterval]			
FEVS	311,684	3.569576	0.00176	0.9826039	3.566127	3.573026			
APS	3,117	3.442947	0.0168496	0.9407159	3.40991	3.475985			
combined	314,801	3.568323	0.0017507	0.9822765	3.564891	3.571754			
diff		0.1266291	0.0176804		0.091976	0.1612821			
diff = mean	- mean		t = -7.1621						
Ho: diff = 0		degree	es of freedom	ו = 314799					
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0					
Pr(T < t) = 1	.0000 Pr	(T > t) = 0).0000 P	r(T > t) = 0.00	000				
			Fit						
Data set	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	nterval]			
FEVS	311,684	3.669797	0.0014899	0.8317972	3.666877	3.672717			
APS	3,117	3.352583	0.0152682	0.8524258	3.322646	3.382519			
combined	314,801	3.666656	0.0014839	0.8325952	3.663748	3.669565			
diff		0.3172144	0.0149768		0.2878603	0.3465684			
diff = mean	- mean		t = -21.1804						
Ho: diff = 0		degree	es of freedom	ו = 314799					
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0					
Pr(T < t) = 1	Pr(T < t) = 1.0000 Pr(T > t) = 0.0000 Pr(T > t) = 0.0000								

APSM								
Data set	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. I	nterval]		
FEVS	311,684	3.795466	0.0015529	0.8669687	3.792423	3.79851		
APS	3,117	3.834214	0.0143904	0.8034198	3.805998	3.86243		
combined	314,801	3.79585	0.0015441	0.8663696	3.792824	3.798877		
		-			-	-		
diff		0.0387473	0.0155952		0.0693136	0.0081811		
diff = mean - mean t = 2.4846								
Ho: diff = 0	Ho: diff = 0 degrees of freedom = 314799							
Ha: diff < 0	Ha: d	diff != 0	Ha: diff >	0				
Pr(T < t) = 0	Pr(T < t) = 0.0065 $Pr(T > t) = 0.0130$ $Pr(T > t) = 0.9935$							