Organizational Stress and Well-being in Public Service Executives: The Role of Stewardship

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Abstract

Over the past few decades, we have observed a transformation of the economy and a shift to more knowledge-based and fast-paced work. Against the backdrop of complex organizational issues and multifaceted job demands, research has evolved to better integrate the social context into models of organizational stress and well-being. Stewardship has been proposed as an organizational approach that emphasizes a sense of purpose towards the common good through the sharing of power, resources and information across networks to work through complex issues. The main objective of this thesis is to develop and empirically test an analytical framework examining the role of stewardship in the relationship between organizational stress and well-being. A central premise of this research is that contextual factors of the work environment can play a key role in the mitigation of work stress. More specifically, stewardship is viewed as an organizational approach that helps executives to navigate their complex demands and be more resilient to organizational stress. The predictive power of this conceptual model was evaluated through the examination of senior executives from the public service of Canada. Using a mixed-methods approach this thesis is organized around three scientific articles. Using a large sample of public service executives (N = 2314), the first study developed and tested a questionnaire measure of organizational stewardship and used this measure to investigate the relationship between this construct and established measures of organizational stressors, work resources, perceived stress and well-being. Findings supported the validity of the instrument. In addition, results indicated that stewardship was negatively associated with work stressors and perceived stress and positively associated with traditional organizational resources and indicators of individual and organizational well-being. The second study furthered the conceptualization of organizational stewardship through a qualitative approach using interviews among senior executives (N = 15). Findings revealed that organizational stewardship was conceptualized with four key elements: i) service over self-interest, ii) sustainability of the public
service beyond one’s career, iii) working with a collective orientation and iv) mission-focused management of resources. In addition, the barriers and facilitators of stewardship were centred on organizational processes and practices within the public service context. In the third study (N = 1996), a multi-level analysis of survey data demonstrated that organizational stewardship played a moderating role in the relationship between role ambiguity and distress among senior executives: departmental stewardship acted as a buffer against job stressors. Overall, the findings from this thesis support stewardship as an organizational resource in the relationship between organizational stress and well-being and emphasize the need to increase our current understanding of this concept as it relates to organizational health.
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Chapter 1: Theoretical Foundations and Context

In Canada and abroad the nature of work has been rapidly changing over the past few decades. While there has been a reduction in the quantity and intensity of physical work demands, there has been an increase in mental demands, “knowledge” work and competitive pressure in the marketplace (Tausig, Fenwick, Murphy, & Graif, 2004; WHO, 1984). Recently, it has been acknowledged that the reshaping of work has created challenges for researchers to capture the contemporary work context using traditional organizational models (Dewe & Cooper, 2017). More specifically, in the context of multifaceted work demands organizational stress has been proposed as a multi-level construct that can be influenced by both individual and contextual factors (Cox & Griffiths, 1994; Cox, Karanika, Griffiths, & Houdmont, 2007) yet empirical research has relied mainly on individual-focused models that fail to adequately address organizational-level solutions (Bliese & Jex, 1999; Lee et al., 2016; Skogstad, Torsheim, Einarsen, & Hauge, 2011). At the organizational level, stewardship has been conceptualized as an approach in which power, resources and information are distributed across networks to foster a shared understanding and shared accountability for organizational outcomes (Block, 1993; Hubbard & Paquet, 2016). While research of this concept is limited, scholars of public administration maintain that it is an essential and effective organizational approach to address complex modern challenges in an interdependent society (Hubbard, Paquet, & Wilson, 2012; Paquet, 2009) and it has been associated with improved organizational functioning and well-being (e.g., Segal, 2012; Waters, Bortree, & Tindall, 2013). The goal of this thesis is to examine the concept of stewardship and investigate how it plays a role in the relationship between organizational stress and well-being outcomes. More specifically, the present research will propose a measure of organizational stewardship and investigate how it may moderate the
relationship between stressful work conditions and indicators of mental health among executives using three separate studies. The first study conveys a measure of stewardship at the organizational level, testing its psychometric properties as well as its construct validity within the framework of organizational stress and well-being. The second study pursues the concept of stewardship through qualitative inquiry and the third study involves a multi-level analysis of the relationship between work stressors, stewardship and executive well-being.

Stress

Hans Selye has been identified as coining the term “stress” for the demands pressed onto a living organism from new external stimuli, which led to his famous biological description of the General Adaptation Syndrome (Selye, 1956). Extending from the reaction to physical stressor, Lazarus described stress as a subjective phenomenon that is psychological and meaning-centred. His approach led to the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), which contends that stressful experiences result from an appraisal of the severity of a stressor that is encountered, and an appraisal of how well the stressor can be managed by the individual. For example, in a working context, an organizational stressor, otherwise known as a work demand, can be physical (i.e., noise, light, heat) or psychological, which includes factors such as role conflict, workload, responsibility for people and relations with work groups (Hurrell, Nelson, & Simmons, 1998; Landy & Conte, 2010). Organizational stress is not always harmful; in fact, the experience of stress is often described as a normal, adaptive response to stressors in the environment (e.g., Lemyre & Tessier, 2003; Schneiderman, Ironson, & Siegel, 2005). When an employee perceives a stressor as challenging this can energize or motivate them, increasing their ability to positively react; however, when a stressor is prolonged or an employee feels they do not have the resources to cope with the demand, negative reactions can occur (Selye, 1993).
The Transactional Model of Stress and Coping was fundamental in reframing the notion of work stress as a complex interaction between stressors, the perception of how harmful/threatening it will be, and an employee’s ability to cope. While this understanding of stress as a process is instrumental to organizational research, the focus of this approach is individual patterns of stress, with less concern for work conditions that can affect well-being. According to Brief and George (1995), the study of work stress differs from other forms of stress (e.g., at school, at home) because of contextual boundaries unique to the workplace, and it is thus important to identify work conditions that can affect the well-being of most people who are exposed to them. Accordingly, this thesis recognizes that while individual appraisal is important for understanding organizational stress, workplace stress models that highlight the role of the social environment may be more encompassing for theory development in this context.

Traditional Models of Organizational Stress

Two dominant theoretical models of workplace stress highly cited in the scientific literature are the Demand-Control-Support Model developed from the seminal work of Theorell and Karasek (1979; 1990) (DCS; Johnson & Hall, 1988) and the Effort-Reward Imbalance Model (ERI; Siegrist, 1996).

The demand-control-support model (DCS). The DCS model (Johnson & Hall, 1988) is an expansion of the Job Demand-Control model (JDC; Karasek, 1979; Karasek & Theorell, 1990) which focuses on the interaction between the objective demands of the workplace and job control. Job control, also termed “decision latitude”, includes control over one’s work situation and skill discretion. The DCS is situation-centred model, akin to the renowned Person-Environment Fit model (P-E fit model; Caplan, 1983; French & Caplan, 1972; Lewin, 1951) arguing that the social environment can shape the behaviours of individuals. In other words, this
model focuses on the structural and functional features of an individual’s interactions with their environment. According to Karasek (1979), when high job demands are combined with low control (a high-strain situation), negative outcomes of psychological strain can result (e.g., increased depression, fatigue and cardiovascular disease). Figure 1 demonstrates the interaction of demand and control. In the expanded model work situations characterized by high demands, low control and low social support can increase the risk of negative outcomes, and ultimately, can result in poor health (Johnson & Hall, 1988). Conditions of high demands include, for instance, excessive workload and inadequate time to meet job demands. Conditions of low control affect one’s mastery of work, like reduced decision-making autonomy, and components that can affect one’s self-fulfilment at work, such as limited learning opportunities.

Figure 1. Job demand-control model (adapted from Karasek, 1979; Karasek & Theorell, 1990).

According to this model, high-strain jobs (high demands, low control), can lead to diminished feeling of mastery, restricting an employee’s ability to cope with high demands. Alternatively, active-learning jobs (high demands, high control) are stimulating and optimal for
active learning and motivation, helping employees to cope with potential work stress (Karasek & Theorell, 1990). Essentially, the DCS model hypothesizes that the primary sources of work stress are inherent in the job itself; moreover, work characterized by high demands can be moderated by conditions of high job control and high social support, potentially buffering negative effects of the stress response.

There is also a large amount of evidence to support the DCS model in relation to psychological well-being. A recent review of studies published between 1998 to 2007 by Häusser, Mojzisch, Niesel, & Schulz-Hardt (2010) found that job demands were significantly associated with negative well-being outcomes (e.g., emotional exhaustion) and job control and social support with positive well-being outcomes (e.g., job satisfaction), in a variety of populations. However, evidence for the interactive effects was found to be very weak overall, with very few studies providing support for the buffering effect of social support. Moreover, while social support has been studied extensively, results concerning its moderating effect on the stress process remain inconsistent. For instance, research has shown that receiving social support may not alleviate the negative impact of work stressors in some instances (Beehr, Jex, Stacy, & Murray, 2000; Koniarek & Dudek, 1996; Lepore, Evans, & Schneider, 1991) and some studies even found a “reverse buffering effect”, meaning that social support may sometimes intensify negative consequences of stress (Glaser, Tatym, Nebeker, Sorenson, & Aiello, 1999; Kaufmann & Beehr, 1986). While methodological limitations may explain part of this controversy, an article by Taris (2006) raised the question of whether this buffer effect actually exists, considering the presence of contradictory evidence.

Although the DCS model is widely used in current organizational stress research, there have been many changes to the workplace since this model was constructed. First, researchers
point out that because the job-demand-control structure was originally developed when investigating male blue-collar work conditions, it is adjusted to these task-oriented work qualities, which can lead to different results for men and women (Söderberg, Rosengren, Hillström, Lissner, & Torén, 2012). In fact, “active work” conditions, considered to be optimal by this model, have been linked to poor health outcomes in women. A study conducted among women in Sweden found that those working in “active jobs” were at increased risk for long spells of sickness absence compared to women in high strain jobs (Krantz & Östergren, 2002). Another study of men and women examining the relationship between job strain and coronary heart disease (CHD) over a 10 year period found that women with active job strain had an increased risk of CHD compared to women with high job strain (Eaker, Sullivan, Kelly-Hayes, D’Agostino, & Benjamin, 2004). Further, a study by Johnson & Hall (1988) (1998) demonstrated that conditions of high demand and low control have been shown to be more predicative of illness for blue-collar men compared to white collar men.

Because the DCS places a strong emphasis on work tasks, which more accurately reflects the context of and realities of particular occupations (e.g., blue collar work), its applicability to various occupations has been questioned (Calnan, Wadsworth, May, Smith, & Wainwright, 2004). Research has also acknowledged the limitations of DCS with regard to its practical implications. For instance, the implication of using the DCS model for job redesign assumes that it is possible to alter the levels of demand, support or control (Mark & Smith, 2008). However, many jobs, especially among high-level employees, are inherently demanding, and it may not be possible to alter factors of the job recommended by these models. Also, the DCS model emphasizes the role of the work environment in the prediction of stress outcomes. If the aim of the research is to fix the work environment and not the work situation of each individual
employee, it becomes evident that conditions at the organizational level, such as structural factors and work climate, should be included in work stress models. As work environments are transforming and becoming more complex, new models capturing the relationship between job demands, well-being, and multi-stressor environments in the contemporary workplace continue to develop. A theoretical model of work stress that complements the DCS model in predicting corresponding pathways to organizational health outcomes is the Effort-Reward Imbalance (ERI) model (Siegrist, 1996).

**The effort-reward imbalance model (ERI).** As a more recent model of work stress, the ERI model takes a transactional approach by introducing the concept of reciprocity, which emphasizes rewards rather than control. Reciprocity depends on the balance between efforts spent, in terms of psychological and physical demands, and rewards received in turn (Kuper, Singh-Manoux, Siegrist, & Marmot, 2002). Rewards can include money, esteem, career opportunities and job security. In terms of effort, this model takes into account the intrinsic motivation (i.e., personal motivations of the individual) and extrinsic motivation (i.e., external pressures like workload and pay). The idea behind this model was originally developed by Siegrist and colleagues (1986) to test the onset of symptoms related to cardiovascular disease (CVD). This ERI takes into account the role of individual characteristics in the coping process and the subjective perception of the environment and stressful experiences. Negative consequences occur when effort and reward are mismatched (Peter & Siegrist, 1999). Conditions of high effort and low reward can create emotional tension in individuals that can lead to negative health outcomes related to stress. This is consistent with equity theory (Adams, 1965), which maintains that employees feel distressed when they perceive that they are not getting a fair
return for their inputs, which can result in attitudes such as job dissatisfaction and lack of commitment.

While the DCS model represents a structural approach to work stress, an important distinction is made between the personal (intrinsic) and the situational (extrinsic) components of the ERI. More specifically, this model asserts that employees who exhibit a specific coping pattern characterized by excessive engagement and the desire to be in control (i.e., over-commitment) will be more susceptible to stress responses with adverse effects on health. According to this model, examining both an employee’s extrinsic effort (like psychological and physical demands) as well as intrinsic elements (their sense of over-commitment) will provide a more accurate estimate of experiencing stress than one of these sources alone (Peter & Siegrist, 1999). Moreover, the ERI assumes that it is not the “actual” level of mismatch that creates an imbalance, but rather an employee’s “perceived” mismatch (Siegrist, 1996). For instance, working hard without receiving the recognition one feels they deserve is an example of a stressful imbalance. Figure 2 demonstrates this model.

Figure 2. Effort-Reward imbalance model (adapted from Siegrist, 1996).
The ERI model has been tested in a large number of empirical studies and increasing evidence has shown its role in explaining adverse physical health symptoms (see van Vegchel, De Jonge, Bosma, & Schaufeli, 2005 for a review). Since the ERI model was developed with a main focus on CVD many studies include a CVD-related outcome measure; a review of these studies maintains that employees working in a high-effort-low-reward situation show an elevated risk of CVD incidence over 1 to almost 9 times as high as those employees working in a low effort and high reward situation (van Vegchel et al., 2005). The ERI investigations concerning work-related outcomes are less common but a large-scale cross-sectional study by de Jonge et al. (2000) of Dutch men and women found that employees reporting high efforts (psychological and physical) and low rewards (i.e., poor salary, job insecurity, low work support) had elevated risks for emotional exhaustion, psychosomatic complaints, physical health symptoms and job dissatisfaction. Their results also indicated that overcommitted employees had a high risk of poor well-being due to a mismatch between effort and rewards. Moreover, over-commitment has been linked to job dissatisfaction (Calnan, Wrainwright, & Almond, 2000), anxiety and depression (Mark & Smith, 2012) and emotional exhaustion (Bakker, Killmer, Siegrist, & Schaufeli, 2000).

The general idea behind these models is that a stressful work environment, represented by challenging work conditions (i.e., high demands, high effort) can lead to perceived stress, which can be either good (motivating) or bad (overwhelming). While the DCS and ERI models have been very valuable in work stress research, they were developed within a context of industrial work and have thus been criticized as being too simplistic and failing to capture the complexity of the work environment (Bakker, Demerouti, & Euwema, 2005). To better understand key aspects of the stress process it has been suggested that new approaches to stress research attempt
to incorporate job characteristics from these traditional models, but also investigate moderating effects of job resources on outcomes (Mark & Smith, 2008).

**The Job demands-resources model (JD-R).** The JD-R model (Evangelia Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) extends upon the DCS and ERI models by stating that many different resources may buffer the impact of many different demands on stress outcomes (Bakker et al., 2005). This model categorizes psychosocial factors as job demands or job resources, and examines how these factors can impact organizational well-being (Llorens, Bakker, Schaufeli, & Salanova, 2006). Demands refer to physical, social or organizational aspects of the work environment that require effort (Schaufeli & Bakker, 2004). Resources are physical, psychological, social or, organizational aspects of work that can either/or (1) reduce job demands and their accompanying physiological and psychological costs; (2) help employees to achieve their work goals; (3) stimulate the personal growth and learning of employees (Schaufeli & Taris, 2014).

The JD-R model states that work demands and resources are linked to health outcomes through two underlying psychological processes. In the health impairment process sustained effort (e.g., mental exertion) to manage job demands can deplete an individual’s energy resources, contributing to negative outcomes (Schaufeli & Bakker, 2004). Empirical research has found that job demands such as quantitative workload and work pressure can affect employee health outcomes like depression and sickness absence, through the health impairment process (Bakker, Schaufeli, & Verbeke, 2004; Hakanen, Schaufeli, & Ahola, 2008; Schaufeli, Bakker, & Van Rhenen, 2009). The second, motivational process is driven by job resources, which can contribute to outcomes such as commitment and performance by playing either an intrinsic motivational role (fostering employee growth, learning and development), or an
extrinsic motivational role as they are instrumental in aiding in goal attainment (Schaufeli & Bakker, 2004). Empirical support for the motivational process has demonstrated the relationships between various job resources and positive employee outcomes such as work engagement. For instance, a two-year longitudinal study by Mauno, Kinnunen and Ruokolainen (2007) found that between 4% and 10% of additional variance in work engagement was explained by baseline levels of job resources (i.e., job control, organization-based self-esteem), after controlling for baseline job demands. In addition, Bakker, Hakanen, Demerouti, & Xanthopoulou (2007) showed that work resources (i.e., job control, supervisor support, climate, innovativeness, information and appreciation) among Finnish teachers were positively associated with all three work engagement dimensions (i.e., vigor, dedication, absorption).

Beyond the main effects, the JD-R model also proposes that the interaction between work demands and resources is critical to the development of stress outcomes. The assumption that job resources can buffer the impact of job demands on stress outcomes is consistent with the DCS and ERI models; the JD-R model extends beyond previous models by stating that many different job resources may buffer the effect of various demands on stress outcomes, and this depends on specific job characteristics in a given context (Bakker, Demerouti, & Euwema, 2005). This buffering hypothesis is also consistent with Kahn and Byosiere's (1992) process of stress development in organizations, which states that buffering variables can function by reducing the tendency of organizational stressors to occur, altering the perceptions of the stressor, moderating responses to the stressors, or reducing potential health-damaging consequences of the stress response.

In sum, the JD-R is considered as a promising alternative framework that combines principles from work motivation and job stress literature and can be applied to all work
environments and to any specific occupational setting (Bakker & Demerouti, 2016). Moreover, the JD-R model compensates for limitations of the DCS and ERI models by providing a more flexible and rigorous framework that is useful to effectively study organizational stress and well-being. While the JD-R model tells us what kinds of job factors lead to particular psychological states and outcomes, it fails to explain why this may occur. As a result, it is suggested that additional explanatory theoretical frameworks are used to explain why particular demands interact with particular resources (Schaufeli & Taris, 2014). Moreover, studies using the JD-R model have focused largely on work characteristics such as job control and social support, with some research aimed at examining personal resources like self-efficacy (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). While these individual-level resources are important components of stress management, Demerouti & Bakker (2011) have suggested an expansion of the JD-R model to include high-level constructs in order to capture the different levels and complexities of the work environment. Expanding current stress models beyond individual-level demands and resources can be better understood through a socio-ecological approach to organizational well-being.

A Socio-Ecological Approach to Organizational Well-being

Given the growing body of knowledge demonstrating the adverse health effects of certain combinations of psychosocial work characteristics, researchers and practitioners have called for a more systemic approach to workplace well-being, shifting the focus from individual attitudes and behaviours to a more comprehensive examination of the context one is working in (Bliese & Jex, 1999; Cooper, Flint-Taylor, & Pearn, 2013). Applying a more systemic approach to organizational research can be understood using Brofenbrenner’s (1979, 1999) systems theory framework. Originally developed to explain how different systems can influence childhood
development, this framework emphasizes the interactions between the environment and the individual. In this framework the social environment is divided into various systems (i.e., microsystem, mesosystem, macrosystem). According to Bronfenbrenner (1979) the innermost level is the microsystem which includes relations between the individual and other individuals (for instance, two employees within an immediate work team). The mesosystem is composed of various microsystems, in which the individual is an active participant (such as employee’s organization). The most overarching concept in this framework is the macrosystem, which includes the overall structural patterns of the culture in which the individual lives, for instance, the economy, laws, political events and religious beliefs of the social context. According to Stokols (1996), the social ecological paradigm takes into account the cumulative effect of multiple factors of the physical and social environment, as well as situational and personal factors, on employee well-being. Moreover, this approach also incorporates concepts of systems theory (e.g., interdependence, negative feedback) to understand the dynamic relationship between employees and their environment (Stokols, 1996). In other words, employees are influenced by their environmental context (e.g., collective agreements, organizational policies, procedures, and their work climate) and, in turn, employees can impact their environment, establishing an interactive relationship (Bone, 2015). Thus, an ecological approach expands upon the immediate job-worker interaction and takes into consideration how different layers and facets of the system may influence employee well-being.

**Context as a Moderator in the Stress Process**

As illustrated by the ecological systems model, individuals are influenced by phenomena at the group or organizational level, yet empirical studies of contextual moderators in the organizational domain are limited and the specific psychological mechanisms through which
higher-level processes affect the individual-level stress process is still not well understood (Tucker, Sinclair, & Thomas, 2005). Despite the positioning of occupational stress as a multi-level construct (Cox & Griffiths, 1994; Cox et al., 2007), research has commonly relied on the use of individual difference moderators, such as self-esteem, hardiness or personality characteristics (Bliese & Jex, 1999). According to researchers, modelling contextual factors is not only critical to extend our understanding of the stress process, but the inconsistent results associated with interpersonal moderators like social support are likely caused by an overreliance on individual-level analysis (Bliese & Jex, 1999; Cooper, Dewe, & O’Discroll, 2001).

Contextual moderators can exacerbate or diminish the association between a stressor and an outcome. From an ecological perspective, factors that exacerbate this relationship are considered vulnerability factors, and factors that attenuate this relationship are considered protective factors (Rutter, 1990). Rather than eliminating stressors, group-level protective factors can mitigate stress by creating a work environment that is perceived as conducive and supportive. For instance, a qualitative study by Lansisalmi, Peiro & Kivimaki (2000) suggested that stress responses can be collectively learned and the organizational environment can function as a “general medicine,” providing properties that seem to be crucial for coping with high demands. Because it is often impractical or impossible to eliminate work stressors identifying factors of the work environment that are modifiable is an important avenue of research (Bliese & Jex, 2002).

Over the past two decades the concept of stewardship has received increased attention as an organizational factor that involves practices and procedures of engagement, meaning-making, and community-building to serve the public good (Hubbard & Paquet, 2016). The emergence of this concept in the organizational literature has offered a promising alternative to “top down”
management procedures and has been associated with many positive work-related outcomes (Armstrong, 1997). Despite this newfound attention, knowledge and empirical data concerning how this concept functions in organizational settings remains quite limited.

The Concept of Stewardship

Historically, stewardship was a means to govern a kingdom for the sake of a king who was not old enough to govern himself (Block, 1993). This idea of stewardship is not new, it can be traced as far back as Plato (e.g. Republic 4.424a; 5449) as well as the Old and New Testament to describe the idea that caring and protecting property is a shared responsibility, as all resources and powers are not our own, but entrusted to us for the common good (Attfield, 2014; Spears, 1998). In this view, one could say that individuals are stewards of the planet, in service of God (Whelchel, 2012). More recently, the term stewardship has been more commonly used in the fields of environmental protection and religious institutions to describe responsibility for the proper care and management of the natural world with a focus on sustainability (Armstrong, 1997; Attfield, 2014; McCuddy & Pirie, 2007). Stated simply, the concept of stewardship represents a sense of obligation to others; by choosing service over self-interest stewards build the capacity for the next generation to govern themselves (Block, 1993).

Peter Block, the author of *Stewardship – Choosing Service over Self-interest* (1993) is considered to be a pioneer of stewardship in organizations, which he described as a willingness to be accountable for the well-being of the larger organization by operating in service to others, rather than controlling them. Davis and colleagues (1997) were among the first to discuss relevant psychological and situational factors that may influence stewardship behaviours in organizations. Emphasizing the personal values of organizational leaders, they suggested that stewardship is influenced by the higher-order needs and the intrinsic motivation of individuals as
well a collective culture and high levels of trust in management. Taking upper level managers as their unit of analysis, they defined stewardship as pro-organizational conduct, specifically the modelling of behaviours that prioritize the long-term interests of the organization and its stakeholders ahead of self-interest. Subsequently, organizational researchers began to explore stewardship as an alternative to agency theory or “top down” management which relies heavily on mandate and force. Stewardship was believed to focus on values and purpose rather than simply rules and management techniques (Caldwell & Karri, 2005).

Hernandez (2012) expanded beyond the individual level and theorized the cross-level causal influence that organizational factors, categorized into control and reward systems, can have on stewardship behaviours. According to her model of stewardship antecedents, organizational control systems allowing for a high degree of collaboration, autonomy and responsibility and reward systems emphasizing intrinsic rewards influence stewardship behaviours among employees.

According to Hernandez (2012, p. 178) stewardship governance employs a “shared leadership dynamic” and a “flexible and inclusive culture” to foster relationship-centred collaboration. In particular, employees are given more control over their work and more opportunities to contribute to organizational objectives; they are also encouraged to mobilize their resources to achieve collective goals, fuelling a culture of empowerment and high involvement (Caldwell & Karri, 2005). She also suggests that stewardship can arise when the organization and its leaders provide clear communication and consistent expectations with regard to the organizational mission, vision and objectives (Hernandez, 2008). This feature of stewardship is consistent with the research on goal-setting theory (Locke & Latham, 1990). According to this theory, goals that are specific and clear (i.e., unambiguous) can increase
motivation and result in better performance. Further, this coordination around the broader mission can help employees to better understand the implications of organizational decisions, reinforcing a sense of community (McCuddy, 2008). Through stewardship, employees can also become more aware of what other employees are doing and the significance of each individual role within the collective process.

Hernandez (2012) also maintained that stewardship reward systems are designed to invest in the long-term effectiveness of employees through providing them with developmental opportunities, increased responsibility and challenges. This includes practices that encourage employees to develop their knowledge and task-level expertise, helping them to realize their full potential within the organization (McCuddy, 2008). This aspect of stewardship relates to Hackman & Oldham’s (1980) job characteristic approach to job enrichment. According to this model, providing employees with more interesting work (through increasing their job control and responsibility) can increase their sense of meaning and value, which can lead to positive personal and work-related outcomes. Likewise, scholars of stewardship maintain that providing employees with more ownership over their work and well-defined expectations can help them to develop a strong sense of identification with the organization (Davis et al., 1997). According to Hernandez (2008) these work conditions can foster “psychological ownership”, where employees internalize organizational values and wish to see the organization succeed. In other words, providing increased opportunities for autonomy and growth can foster employee commitment to organizational and stakeholder interests, promoting stewardship behaviours in which employees work harder on behalf of the organization (Davis et al., 1997; Hernandez, 2012).
While the literature on stewardship has mainly focused on the organizational benefits of this phenomenon, authors have also made a point to discuss the potential negative impact of stewardship behaviours. According to McCuddy (2008), increased personal ownership and the act of putting the collective interest before one’s own may cause employees to feel overwhelmed. Moreover, he states that workaholism and job burnout are negative individual outcomes that can result when employees rely too much on behaviours related to stewardship. Workaholism is defined as “an irresistible internal drive to work excessively hard” (Schaufeli, Bakker, van der Heijden, & Prins, 2009, p. 156). In certain conditions, working in service of the organization (or others) may cause employees to adopt external standards of self-worth and social approval, in which they may work beyond what is reasonably expected and neglect a work-life balance. Job burnout is commonly understood as a state of mental weariness, and has been conceptualized by Maslach (1993) as a three-dimensional construct consisting of exhaustion, cynicism and lack of professional efficacy. In addition, workaholism has been associated with health issues (distress and psychosomatic complaints) and burnout is related to impaired social functioning, health problems (distress, depression, anxiety and psychosomatic health complaints) and low work satisfaction (Schaufeli, Taris, & Van Rhenen, 2008). Taken together, these findings suggest that in some cases, stewardship may transform into this excessive behaviour with harmful consequences. Finally, Hernandez (2008) argues that a strong sense of community fostered through stewardship may create a context in which employees lose sight of their own moral principles when faced with a moral dilemma within the organizational context. In other words, individuals risk becoming “moral social loafers”, where they will accept organizational values over broader ethical implications.
In summary, scholars of stewardship in the organizational literature have maintained that other-regarding, pro-organizational behaviours encompassed by stewardship can be shaped by a combination of situational factors (i.e., management philosophy and culture), structural factors (i.e., control and reward systems) and psychological factors (i.e., the motivations and identification of individuals) (Hernandez, 2012; Davis et al., 1997). While this perspective of stewardship is interesting, it remains focused on stewardship behaviours endorsed at the individual level. Furthermore, the situational and structural factors discussed in past research are used to highlight their influence on an individual’s mental or cognitive aspects, keeping the focus of stewardship on the individual as opposed to the context (Teh, 2016). Thus, the research on stewardship could benefit from taking a different perspective and incorporating a different unit of analysis. In addition, while stewardship behaviours have been associated with mainly positive organizational outcomes, scholars have also raised concerns with regard to putting the collective interest before one’s own. Evidently, this concept is worthy of further investigation to determine its true potential in an organizational setting.

**Stewardship Redefined**

Recently, scholars of public administration have begun to reframe stewardship not as behaviour, but as an approach to governance. According to these scholars, since organizations are operating in a profoundly interdependent environment where the tempo is quicker and dynamics are becoming more complex, stewardship must also be thought of in a new way (e.g., Hubbard & Paquet, 2016; Hubbard et al., 2012; Paquet, 2008; Wilson, 2013). These authors postulate that stewardship requires communication, collaboration and adaptability between organizational actors and stakeholders to generate a shared understanding and shared accountability for organizational outcomes. This aligns with research by Waters (2009) which
proposes four stewardship “strategies” (reciprocity, responsibility, reporting and relationship nurturing) that are considered important components of relationship management in the public relations process. Through nurturing relationships within and between organizations, stewardship practices are believed to build a sense of community, encouraging the trust and dialogue necessary to work through complex issues. This requires “making sense of people’s experience by putting it into larger context, thereby providing a sense of purpose, a story of why people do what they do; and, a way to shape the organization by building a shared vision with many stakeholders” (Hubbard & Paquet, 2016, p. 195). In other words, stewardship at the meso-level can be achieved through aligning organizational policies, procedures and behaviours with a common, well-defined purpose that contributes to the common good. Similarly, research by Segal (2012) maintains that stewardship can be achieved by building an organization’s capacity for shared responsibility, through organizational processes that generate trust and the sharing of power.

As a result, stewardship can be reframed as a meso-level construct. While previous research has tended to focus on stewardship behaviour at the individual or interpersonal level, stewardship can also be thought of as an approach employed at the work unit- and organization-level. Returning to Bronfrenbrenner’s system theory framework, the concept of stewardship can be pursued from a different angle in empirical research, extending beyond the microsystem to aspects of the larger organization. Figure 3 demonstrates this ecological approach to stewardship.
Figure 3. Ecological Model of Stewardship adapted from Brofenbrenner’s Systems Theory Framework (1979, 1999)

Based on previous research and the re-framing of this concept, an organizational stewardship approach can be observed through practices that emphasize a sense of purpose towards the common good through the sharing of power, resources and information across boundaries to generate trust and a shared responsibility for the public interest in a long-term context. In this way, stewardship can be thought of as a latent construct, measured through the use of manifest variables (observed organizational practices) that are regarded as indicators of this approach. It should be noted that we do not intent to impose a new construct, but rather clarify and operationalize an existing construct. To aid in this clarification, stewardship will be compared and contrasted with related constructs from organizational literature.
**Distinguishing stewardship from similar concepts.** While stewardship is considered to be a distinctive construct in the organizational literature, it is known to share some tenets with other established constructs such as organizational citizenship behaviours (OCBs) as well as moral, charismatic and relationship-centred approaches to leadership such as servant leadership.

OCBs are defined as voluntary employee behaviours that, when combined, result in organizational effectiveness (Organ, 1988). These include a range of activities aimed to help coworkers or the organization itself, such as assisting other employees with their work and speaking highly of the organization to others. Similarly to stewardship, OCBs may result in trust, cohesiveness and effective collaboration through fostering strong interpersonal networks among colleagues. However, according to Hernandez (2012), while OCBs may improve the organization in the long-term, this is not generally the aim of those enacting these behaviours. For instance, employees may engage in OCBs by helping other individuals within the organization (e.g., colleagues), which can indirectly lead to long-term organizational well-being. Stewardship, on the other hand, centres on the long-term collective well-being. This is achieved through departmental processes that connect employees to the bigger picture, reminding them explicitly of the mission and of the beneficiaries of their work. In addition, stewardship is a property of social systems rather than individual units of behaviour. While individuals can perceive a sense of stewardship, it is processes and practices at the organizational level that foster this sense of stewardship. Smith, Organ and Near (1983) describe the nature of OCBs as the “day-to-day spontaneous prosocial gestures of individual accommodation to the work needs of others”. In other words, OCBs refer more to the social patterns within organizations, and can be observed through interpersonal relationships and dynamics. Stewardship at the meso-level is regarded as a function of the formal organization, observed through processes that foster inter-
organizational trust and collaboration in pursuit of collective, long-term objectives.

Stewardship can also be distinguished from well-known leadership approaches such as servant leadership. In their review of servant leadership Barbuto and Wheeler (2006, p. 303) found that, “notions of service, selflessness and positive intentions are tantamount” to both stewardship and servant leadership. Coined by Greenleaf (1977), servant leadership is concerned with the sharing of power and putting the needs of others first. With a foundation of moral leadership, servant leaders prioritize the caring of others to achieve a higher purpose objective that benefits individuals, organizations and societies (van Dierendonck, 2010). According to leadership research by Parolini, Patterson and Winston (2009), servant leadership is more focused on the needs of the individual than the organization. Stewardship, on the other hand, takes a broader perspective through preparing individuals and the organization for contributions to society (Barbuto & Wheeler, 2006). In fact, stewardship has been described as requiring the competencies of servant leadership (e.g., Barbuto & Wheeler, 2006). Moreover, while servant leadership can be thought of as taking accountability for employee’s welfare, stewardship can be thought of as taking accountability for the public interest.

There also appears to be some conceptual overlap between stewardship and various other approaches to leadership. According to Bass (1990), transformational leaders provide employees with a clear vision and sense of mission, instilling pride and establishing trust between leaders and their followers. Moreover, Bass (1990) maintains that transformational leaders inspire followers to go beyond self-interests for the good of the collective. Participative leadership and Leader-Member-Exchange (LMX) theory also share some tenets with stewardship, particularly in the context of high-quality social exchanges. Participative leadership is an approach in which the leader involves subordinates in organizational decision-making (Koopman & Wierdsma,
1998) and high-LMX leaders work to develop trusting and mutually beneficial relationships with other members of the organization (Graen & Uhl-Bien, 1995). Perhaps one of the best ways to distinguish stewardship from leadership is by returning to the ecological model presented in Figure 3. According to Bass (1990) leadership represents an interaction between two or more individuals within a group, often involving the modification of motivations and competencies of those within the group. Based on this definition, leadership is centred on interpersonal dynamics, rooted in the microsystem. Indeed, the field of leadership has rapidly evolved in the past 30 years, expanding beyond the role of one individual to include the collective contribution of the group. Nonetheless, the study of leadership remains focused on interpersonal exchange. In contrast, stewardship can be viewed as a meta-phenomenon, reflected in organizational structures and collaborative processes, characterizing the meso-level.

**Stewardship and Organizational Outcomes**

Empirical investigations of the link between stewardship and organizational outcomes have been slow to emerge. This relationship is perhaps most frequently examined within the family-business domain, where stewardship is understood as being a “caretaker of a family’s assets” and being “motivated by the success and longevity of the family firm” (Neubaum, Thomas, Dibrell, & Craig, 2017, p. 37). For example, recent reviews of the family business literature (e.g., Madison, Holt, Kellermanns, & Ranft, 2016; Shukla, Carney, & Gedajlovic, 2014) have observed the increasing popularity of using stewardship to explain performance-related outcomes such as strategic flexibility, innovativeness and performance (e.g., Eddleston & Kellermanns, 2007; Zahra, Hayton, Neubaum, Dibrell, & Craig, 2008). According to Miller & Le Breton-Miller (2006), family businesses can be more successful by exhibiting stewardship considerations, such as investing more in building long term reputation and building social
capital in the form of enduring relationships with outsiders (i.e., forming networks and partnerships).

With regard to financial performance, McCuddy & Pirie (2007) contend that truly successful organizations incorporate stewardship values, such as reasonable concern for the common good, into their decision-making. They theorize that a balance between financial considerations and stewardship considerations with regard to organizational decision-making is the key to long-term survival (McCuddy & Pirie, 2007). To test this empirically, they examined over 300 organizations acknowledged for their excellence in Fortune magazine’s (March, 2002) Global Most Admired Companies List (Pirie & McCuddy, 2007). According to the results, highly successful organizations had mission statements that highlighted both stewardship considerations and financial considerations, as opposed to just one exclusively. The authors concluded that financial decision-making can no longer be devoid of stewardship considerations if an organization is to survive and thrive over the long term. Moreover, they suggested that managers incorporate stewardship values into their decision-making.

In the public sector, pro-social variables consistent with stewardship have been linked with organizational efficiency. In Segal’s (2012) qualitative case study of the Edmonton Public School (EPS) system employees were asked about organizational level processes related to decentralization of authority, controls, integrity, efficiency and accountability. In this study, stewardship was proposed as feature of organizational culture, defined as “a sense of voluntary civic responsibility and awareness of the impact of one’s activities on the larger world” (p. 12). Results demonstrated that a culture of stewardship helped to encourage integrity among employees, contributing to organizational efficiency.
Empirical research relating stewardship to indicators of employee well-being is even less common. Recently, Waters and colleagues (2013) examined whether employees who perceived their organization to display more stewardship reported positive organizational outcomes. Participants included over 400 employees working in technology centres within the USA. Stewardship was measured according to four dimensions outlined by Kelly (2001): (1) reciprocity (the organization demonstrates gratitude for employee involvement); (2) responsibility (the organization acts in a socially responsible manner towards its employees); (3) reporting (the organization keeps employees informed); and (4) relationships nurturing (the organization builds and maintains ongoing relationships with employees). They found that perceived organizational stewardship was associated with higher levels of trust, commitment and work satisfaction among employees (Waters et al., 2013). In addition, the authors point out that certain stewardship mechanisms may not always be in the best interest of the organization. For instance, in situations of organizational crisis, openness and transparency of information may cause further complications.

While the concept of stewardship has been advancing in workplace literature since the 1990s, our knowledge about this concept remains quite limited. Most of this literature concerns the theoretical development of the various processes involved in stewardship behaviour, while empirical studies remain few and far between. Of the empirical research on stewardship that does exist, researchers have created their own scales based on their specialization, the organization of interest, or they have relied on variables believed to be related to stewardship behaviour. For instance, a study of family firms by Eddleston & Kellermanns (2007) measured altruism and employee participation as indicators of stewardship. In 2017, researchers Neubaum, Thomas and Dibrell acknowledged the lack of a valid or reliable measure of stewardship in organizational
research. To address this gap they developed the Stewardship Climate Scale to operationalize stewardship as a higher-order construct reflected in the social climate. While their research represents an advancement of stewardship research, scale items remained rooted in the individual/interpersonal aspects of stewardship which includes mainly cognitions and behaviours apparent within the microsystem. Because stewardship has been proposed as a meso-level construct observed through organizational-level practices, measures should also be created that adhere to this perspective.

It can therefore be argued that the absence of an established measure for organizational-level stewardship has greatly hindered the development and expansion of this construct in the organizational literature. In addition, although research has examined the role stewardship in performance-related outcomes and job attitudes, the role of stewardship within the framework of organizational stress and well-being has not been investigated. Given its theoretical assumptions, its link with motivational processes (e.g., Hackman & Oldham, 1980; Locke & Latham, 1990), its association with positive work-related attitudes (e.g., work satisfaction, commitment), and its advocacy among organizational scholars, stewardship can be proposed as a relevant concept to investigate in the framework of work demands, stress and well-being.

**Stewardship in the Public Service Context**

Despite the breadth of research regarding organizational stress and well-being outcomes, empirical studies dedicated to stress in public service organizations are limited (Giauque & Anderfuhren-biget, 2013; Noblet & Rodwell, 2009). As governments across the world have been challenged to reinvent, downsize, decentralize and delayer their institutions, public servants have faced the challenge of “doing more with less” in an environment of performance monitoring and external accountability (Noblet & Rodwell, 2009; Salamon, 2002). In addition, public service
work deals with a wide range of major public policy issues that are considered complex or “wicked”, meaning there is no clear definition or an agreed solution (e.g., climate change response, health care policy and programs and natural resource management) (Head & Alford, 2015). The traditional hierarchical organizational setting and system of control in which public service employees are embedded may not only create barriers to addressing these complex issues (Head & Alford, 2015) but may also subject public service employees to additional sources of stress as they are often confronted with new practices and operational procedures in a top-down manner (De Simone, Cicotto, Pinna, & Giustiniano, 2016). Thus, it becomes imperative to examine particular organizational factors that can help public service employees to work more efficiently and effectively when faced with stressful work demands.

At its core, organizational stewardship involves working towards the greater good by being in service to something bigger than oneself (or one’s unit/department). Because of this emphasis on the organizational mission, the public service is an ideal environment to explore the concept of stewardship. Public service employees are required to serve the public interest, and are thus expected to look beyond their own self-interest to the well-being of society. In this context, many different levels of hierarchy must operate collaboratively and rely on the combined efforts of various departments, agencies, commissions, crown corporations and other federal organizations to deliver quality service to the public. While the structures of departments, agencies and intra-organizations are fragmented, their missions are interdependent; thus, they must form networks to build relationships of mutual trust and reciprocity to achieve a common goal. There is considerable theoretical support for the notion that stewardship, through its reliance on engagement and transparency, can help to bring government networks and resources together in pursuit of a common aim (e.g., Hubbard & Paquet, 2016; Paquet, 2008; Wilkins,
Although stewardship is believed to be an effective approach to public administration, a comprehensive understanding of this concept within the public service context remains quite vague.

**The Specific Case for Organizational Executives**

Although stewardship can be modelled by employees at any level of the organizational hierarchy, it is argued that those in senior positions play a key role in establishing stewardship, as their influence and authority have great bearing on those working under them, as well as the decisions made among their group (Caldwell, Hayes, Bernal, & Karri, 2008). The interaction of top management and lower levels within a social system is highlighted by Beckhard’s (1969) approach to organizational development which states that organizational effectiveness and well-being can be fostered when planned, system-wide changes are made to organizational processes. Further, this approach maintains that changes made to these processes must be supported and modelled by top management in order to be effective. Thus, it can be theorized that stewardship among organizational leaders is imperative for cultivating a sense of stewardship across the organization.

With regard to stress and well-being, senior executives are a unique sample of interest in organizational literature. Because their work involves high levels of responsibility, problem-solving and decision-making, executives are given considerable control (i.e., autonomy and decision latitude) with regard to their work demands. However, just like any employee, when an executive’s demands exceed their resources this can translate into work-related tension which may impact their mental and physical health. The well-being of organizational leaders is of special concern as they are considered “the touchstone for organizational health” (Quick, Macik-Frey, & Cooper, 2007).
According to Quick, Gavin, Cooper, & Quick (2000), healthy executives can have a significant influence on organizational functioning not only through superior performance, but also through reinforcing healthy behaviours by personal example and active encouragement. They state that an unhealthy executive is not only a hazard to him/herself, but can also have a toxic effect on the work environment and those within it. Likewise, the poor health of executives can have a direct effect on financial and emotional well-being of an entire organization. Highly stressed executives can cause a cascading effect of negative emotions and organizational outcomes (such as job dissatisfaction or low morale) throughout different levels of the organization. Even with this awareness, organizational literature has acknowledged the paucity of research concerning executive work demands, well-being and the specific interactions involved (Hambrick et al., 2005; Stock, Bauer, & Bieling, 2014).

Altogether, this implies that a better understanding of environmental factors that may contribute to a psychologically healthy work environment among executives may be conducive in protecting the health and well-being of the entire organization. With the exception of the Whitehall Studies of the UK Civil Service (Marmot et al., 1991), and recent studies by the Association of Professional Executives of the Public Service of Canada (APEX) in collaboration with researchers at the University of Ottawa in 2002, 2007 and 2012 under the direction of Dr. Lemyre as principal investigator, there are few studies with access to a population of senior executives in public administration. Lemyre and colleagues (2001) developed the model of Executive Work and Health based on the core elements of a healthy and learning organization from a synthesis of the scientific literature. As illustrated in Figure 4, the main input for this model is the organizational environment of executives.
As this model indicates, the work environment is comprised of many different components, which include factors of work demands, the organizational climate and organizational change. Based on past research, the model theorizes that the impact of the work environment on executive stress and well-being is affected by psychosocial moderators, such as job control and social support.

As previously discussed, it is imperative to look beyond the traditional resources of job control and social support to identify higher-order factors that may help executives build resilience to stressful work. This research attempts to build and improve on the Executive Work and Health Model by incorporating the concept of stewardship, which aims to capture different levels and complexities of the work environment.
In our review of the literature we have not found published studies investigating the role of stewardship within the framework of organizational stress and well-being outcomes. As outlined in the introduction, work resources can buffer stress-related outcomes through helping employees to achieve their work goals and stimulating their personal growth and learning. While the research on organizational stress has been expanding, less well-known is how organizational resources function for executives, who are responsible for leading the organization and its employees. Given that stewardship is believed to generate a context of mutual trust and provide employees with a sense of meaning and community, it is important to determine whether stewardship is a relevant construct for executive stress and if it is linked to indicators of individual and organizational well-being.

**Research Questions**

The primary objectives of this research are:

1. To develop and test a preliminary measure of organizational stewardship
2. To investigate if stewardship is a relevant construct for organizational stress and well-being
3. To develop a more comprehensive understanding of what stewardship is and how it functions within the public service
4. To test stewardship as a contextual moderator of the relationship between stressful work conditions and indicators of mental health
Relevance

The relevance of this study is theoretical, methodological and practical of nature. From a theoretical point of view, this thesis contributes to our understanding of stewardship as a pertinent construct with regard to individual and organizational well-being. Regarding organizational stress research, the empirical investigation of stewardship within the framework of executive stress and well-being will contribute to the limited knowledge on this population of interest. Moreover, this thesis attempts to capture the multi-level nature of the work environment and contributes to a more systemic approach to organizational stress and well-being.

The methodological relevance of this thesis concerns the development of a preliminary measure of stewardship and results of this thesis can be used in the application from knowledge to practice. Furthermore, the research design, with the combination of quantitative and qualitative methods, and large sample of high-level executives, is a major strength to this thesis.

Proposed Model

A schematic representation of the hypothetical relationships between organizational stressors, stewardship, and individual and organizational outcomes are presented in Figure 5.
Figure 5. Conceptual model of organizational stewardship in the context of the executive work environment, stress and well-being (Simpkins & Lemyre, 2013)

This conceptual model incorporates several components to characterize the work environment. Work demands include workload, role stressors, and interpersonal stressors. According to the literature, elements of job control (e.g., shared power, autonomy) and social support (e.g., nurturing relationships) may contribute to a stewardship approach (e.g., Hernandez, 2012; Hubbard & Paquet, 2012; Davis et al., 1997, Block 1993); however stewardship as an organizational resource is positioned at the meso-level, beyond individual and interpersonal behaviours. From this perspective, organizational-level practices emphasizing a sense of purpose towards the common good through sharing information, power and resources create a context of stewardship, protecting against the impact of a stressful work environment. As shown in the model, stewardship may coincide with individual and interpersonal resources such as job control
and social support. Perceived stress is positioned as an outcome of work demands as well as a potential mediator between work demands and well-being outcomes. Outcomes of well-being include indicators of individual health (mental and physical health) and indicators of organizational health (job-related attitudes and behaviours).

Comparable to Cohen & Wills’ (1985) theory of social support in the stress-illness process this study posits that stewardship may play a role at two different points in the causal chain linking stress to well-being. These two processes are depicted by the dashed lines in Figure 5. First, we propose that stewardship may intervene between work demands and perceived stress by attenuating a stress appraisal response. That is, a context of stewardship, through generating a sense of community with a shared purpose, may redefine the potential for harm posed by the job demand and/or reinforce an employee’s perceived ability to cope with imposed work demands, preventing a particular situation from being appraised as highly stressful. In addition, a context of stewardship may intervene between the experience of stress and the onset of pathological and organizational outcomes by reducing the stress reaction or by directly influencing physiological or organizational processes. For instance, stewardship may alleviate the impact of perceived stress by providing a solution to the problem (e.g., networks nurtured through stewardship can incite collaboration of resources), by reducing the perceived importance of the problem (e.g., redirecting one’s focus to the larger purpose of their work), or by facilitating healthful behaviours (e.g., building a sense of community among employees).

As demonstrated in Figure 5, organizational stewardship represents a contextual resource that may play a role in the relationship between various work demands, psychological stress and the individual and organizational well-being of executives. Central to this conceptual model is the notion that the dynamics of these effects do not occur simply at the individual level. Thus,
this model taps into organizational functioning by proposing that the relationship between organizational stress and work-related outcomes can be mitigated by organizational stewardship.

Although this thesis will not test all pathways depicted in Figure 5, this research will serve as a starting point to begin empirically exploring these assumptions. To examine stewardship in the organizational environment we will use the opportunity of a national survey to develop and test a measure among executives in the public service. We will also explore the associations between this measure of stewardship, work stressors, work resources, and indicators of individual and organizational well-being. A second study will pursue the concept of organizational stewardship through qualitative interviews with senior executives to develop a more comprehensive understanding within the public service context. This study will also investigate facilitators and barriers of organizational stewardship. Study 3 will take a multi-level approach to investigate whether departmental stewardship moderates the relationship between role stressors and psychological distress among public service executives at the meso-level.

These three studies are included in the next sections of the dissertation followed by a General Discussion of their findings which includes research and practical implications. Because of the structure of the thesis, as three self-standing articles, it will entail some repetition for which we apologize in advance to the thesis reviewers.
Chapter 2

Study 1: Organizational Stewardship among Executives in the Canadian Public Service: A survey study

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University of Ottawa
Preamble

Given the opportunity to gather data from a large, national sample of executives, we developed and included a short measure of organizational stewardship in the 2012 Work and Health Survey conducted in collaboration with APEX (Association of Public Service Executives). The development of the research design and thesis proposal occurred simultaneously with the preparation of this national survey, which did not allow the time to take a more comprehensive approach to measure development. On the other hand, capitalizing on the opportunity did allow this original measure of stewardship to be tested among a large sample of public service executives, generating preliminary findings.
Contribution of Co-Authors and Author Note

The work presented in this manuscript was conducted as part of the first author’s doctoral dissertation. The first author helped to develop the section of the questionnaire used for this paper, planned as well as carried out all analyses, and wrote the manuscript. Louise Lemyre was the Principal Investigator of the larger project for which this survey was conducted in collaboration with the Association of Professional Executives of the Public Service of Canada (APEX). She contributed to the design of the survey questionnaire in addition to providing feedback on the experimental design, planned analyses and early drafts of the manuscript. She has agreed to the use of this paper in the first author’s dissertation, and to its eventual publication consistent with any limitations set by publisher requirements. This project was supported financially by the Social Sciences and Humanities Research Council (SSHRC) of Canada with a grant to Louise Lemyre. The authors would like to highlight the collaboration of APEX as a research partner in this larger study and acknowledge the contributions of the APEX 2012 Work and Health Survey research team which includes Wayne Corneil, Jacques Barrette, Nancy Beauregard, Martin Lauzier, Celine Pinsent and Gail Hepburn who all contributed to the development of the 2012 questionnaire.
ORGANIZATIONAL STRESS, WELL-BEING AND STEWARDSHIP

Abstract

Recently, scholars and practitioners have called for a more systemic approach to workplace well-being, shifting the focus from individual attitudes and behaviours to underlying factors of the work environment as key ingredients in the mitigation of work stress. Stewardship is proposed as an organizational approach that emphasizes a sense of purpose towards the common good through the sharing of power, resources and information to work through complex issues. The present study examines the concept of stewardship within the framework of organizational stress and well-being using a large sample of 2,314 senior executives from the Canadian public service. A questionnaire measure of stewardship was developed and tested using exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and reliability estimates. Results indicated that the 5-item scale was reliable (α = 0.88), displayed a unitary factor structure and correlated significantly with established measures of work stressors, perceived stress and indicators of well-being. Hierarchical regression analyses revealed that stewardship contributed little to the explained variance in the relationship between work demands and psychological stress, but contributed significant incremental variance in the relationship between psychological stress and measures of distress (2%), cynicism (7%) and engagement (7%). Moreover, hierarchical regression results revealed that stewardship is conceptually distinct from other established job resources (job control and social support), sharing only 16% common variance. Overall, the results from this study supported the notion of stewardship as an important organizational resource among executives. These findings have significant implications for researchers who wish to empirically test the concept of stewardship in organizational settings and for practitioners interested in the prevention organizational stress among executives.

Keywords: Stewardship, organizational stress, job control, social support, cynicism, distress, work engagement, executives
Organizational Stewardship among Executives in the Canadian Public Service: A survey study

Workplace stress is a timely and important issue associated with far-reaching practical and economic consequences. Given the shift from physical to more knowledge-based demands across industries, research has called for the expansion of stress models to include high-level constructs that capture the true complexity of the work environment (Demerouti & Bakker, 2011). It has also been recognized that many of the social issues faced by knowledge-based organizations are complex and multifaceted and cannot be properly addressed by any one individual or organization. In such a work environment organizational factors that help employees to manage complex challenges and work efficiently can be regarded as important components of organizational stress research. Stewardship, an ancient concept redefined in the organizational literature, is proposed as a mission-focused organizational approach that emphasizes open communication and collaboration to generate trust and a shared responsibility for the public interest in a long-term context (e.g., Block, 1993; Hernandez, 2012; Hubbard & Paquet, 2016; Wilson, 2013). Recently, scholars of public administration have positioned stewardship as essential to working more efficiently across boundaries and addressing modern work challenges (Hubbard & Paquet, 2016; Wilson, 2013). Despite being considered an important organizational approach, there is a paucity of research on the concept of stewardship and relatively few organizational studies have provided empirical insights into how to develop, manage or practice this approach. The current study aims to advance our understanding of this concept by establishing a measure of organizational stewardship and verifying its psychometric properties among a large sample of public service executives. Secondly, this study will test the incremental validity of stewardship as an organizational resource within the framework of stress and well-being.
Organizational Stress

In economically advanced societies, the nature of work has undergone major changes due to globalization and technological progress (Siegrist, 2010). Thus, present day work environments are fast paced and increasingly complex, with multiple demands and high expectations placed on employees and on the organizations as a whole. Organizational stress refers to employee’s perception and response to work demands, also called stressors (Colligan & Higgins, 2005). Due to the changing nature of work, employees in modern economies are more frequently exposed to mental and emotional demands (often termed psycho-social stressors), rather than physical demands (Siegrist, 2010) and their response to these stressors can be emotional, cognitive, behavioural or physiological. Although work stressors are not necessarily negative, when a stressor is prolonged or an employee feels that they do not have the adequate resources to cope with the demand, this can lead to physical, behavioral or psychological consequences that affect the well-being of the employee and the organization.

Because it is not always possible or prudent to eliminate or reduce work demands that are stressful, stress prevention strategies have focused on the identification and reinforcement of “buffering” variables or resources that build resilience to current challenges (e.g., Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Lovelace, Manz, & Alves, 2007; Quick, Macik-Frey, & Cooper, 2007; Rook, Hellwig, & Florent-treacy, 2016). Research building from traditional theories of work stress like Karasek and Theorell’s Job Demands Control model (JD-C: Karasek, 1979; Karasek & Theorell, 1990) and Johnson & Hall’s Demand Control Support model (DCS; 1988) have tended to focus on work resources at the individual/interpersonal level, such as job control and social support. Job control refers to an employee’s ability to make decisions about how to complete their job tasks (also labelled as decision latitude) (Karasek, 1979). The
construct of social support can refer to emotional, instrumental or informational support one perceives from their co-workers or supervisor. Siegrist’s Effort Reward Imbalance model (ERI; 1996) builds on the notion of social reciprocity through emphasizing the concept of rewards, which include money, esteem, and career opportunities. While these traditional models have been very valuable to organizational stress research, they have been criticized as being too simplistic and failing to capture the complex reality of the work environment (Bakker et al., 2005). For instance, the ERI model suggests basic redesign principles such as fair rewards, however, these factors may not be possible to alter in most jobs. In addition, the JD-C and DCS were developed within the context of industrial work and strong emphasis is placed on work tasks, which is more applicable to blue collar workers than white collar workers (Mark & Smith, 2008). In addition, the empirical evidence demonstrating the buffering effect of social support has been inconsistent (Taris, 2006). The Job Demand-Resource (JD-R) model (Demerouti et al., 2001) is an alternative framework that combines principles from work motivation and job stress literature and can be applied to all work environments and to any specific occupational setting (Bakker & Demerouti, 2016).

**The Job-Demand Resource Model of Work Stress**

According to Demerouti, Nachreiner, Bakker, & Schaufeli (2001), regardless of the type of job, employee health and well-being results from a balance between psychosocial work factors categorized as job demands and job resources. Resources are physical, psychological, social or, organizational aspects of work that can either/or (1) reduce job demands and their accompanying physiological and psychological costs; (2) help employees to achieve their work goals; (3) stimulate the personal growth and learning of employees (Schaufeli & Taris, 2014).
Consistent with the Job Demands Control (JD-C; Karask, 1979; Karasek & Theorell, 1990) model and Siegrist’s (1996) Effort Reward Imbalance (ERI) model, the JD-R model proposes that job resources may buffer the impact of job demands on stress outcomes. The JD-R model expands on these traditional stress models by stating that many different job resources may buffer the effect of various demands on stress outcomes, and this depends on specific job characteristics in a given context (Bakker et al., 2005).

The JD-R model states that work demands and resources are linked to health outcomes through two underlying psychological processes. In the health impairment process sustained effort (e.g., mental exertion) to manage job demands can deplete an individual’s energy resources, contributing to strain outcomes (Schaufeli & Bakker, 2004). The second, motivational process is driven by job resources, which can contribute to outcomes such as commitment and performance by playing either an intrinsic motivational role (fostering employee growth, learning and development), or an extrinsic motivational role as they are instrumental in aiding in goal attainment (Schaufeli & Bakker, 2004).

While the JD-R model tells us what kinds of job factors lead to particular psychological states and outcomes, it fails to explain why this may occur. As a result, researchers have suggested that additional explanatory theoretical frameworks be used to explain why particular demands interact with particular resources (Schaufeli & Taris, 2014). Moreover, studies using the JD-R model have focused largely on work characteristics such as job control and social support. While these job resources have been valuable components in stress research, Demerouti & Bakker (2011) have suggested an expansion of the JD-R model to include high-level constructs in order to capture the different levels and complexities of the work environment. The
present study addresses this issue by proposing organizational-level stewardship as job resource that is especially relevant to the public service context.

**The Concept of Stewardship**

The concept of stewardship can be traced back through history, representing a moral paradigm of managing or taking care of property that is entrusted to you. According to Block (1993) this concept represents a sense of obligation to others; by choosing service over self-interest stewards build the capacity for the next generation to govern themselves. Over the past few decades the concept of stewardship has received increased attention in organizational literature, proposed as an organizational approach that involves empowering and high-involvement work practices believed to instil trust, organizational identification and shared accountability among employees (e.g., Davis et al., 1997; Hernandez, 2012; Hubbard & Paquet, 2016).

Davis, Shoorman & Donaldson (1997) were among the first to discuss stewardship as an alternative to agency theory or top-down management. These researchers maintained that organizational stewardship is fostered through the pro-organizational conduct of managers, specifically the modelling of behaviours that prioritize the long-term interests of the organization and its stakeholders ahead of self-interest. Hernandez (2012) expanded on this concept by stating that stewardship can be fostered through individual motivations and behaviours as well as organizational conditions, such as control and reward systems. According to her model, stewardship antecedents include communication and well-defined expectations regarding the organizational mission, vision and objectives to help employees better understand the implications of higher-level decisions and their role within the larger organization. In addition, stewardship behaviours are fostered through “relationship-centred collaboration”: lateral
influence exchanges occurring between and within networks where information is shared fairly openly and employees are encouraged to participate in organizational processes (Hernandez, 2012; Cam Caldwell et al., 2008). These organizational antecedents are believed to instil “psychological ownership” among employees, where organizational values are internalized. As a result, stewardship is generated, conceptualized as behaviours that demonstrate social accountability and instil a sense of responsibility in followers for the long-term well-being of the organization and society (Davis et al., 1997; Hernandez, 2012).

More recently, stewardship has been reframed as an organizational approach focused on building and maintaining relationships within and across organizations to foster the coordination and dialogue necessary to work through complex issues (Hubbard & Paquet, 2016; Wilson, 2013). As a high-level construct, stewardship represents a shared responsibility for the common good. While previous research has focused on stewardship behaviours at the individual level of analysis, the reframing of this concept positions stewardship as a contextual factor that can be observed through organizational-level practices in which knowledge, power and information is shared across boundaries to generate trust and a shared responsibility for the public interest in a long-term context. According to Hubbard & Paquet (2016) stewardship requires open communication and adaptability between organizational actors and stakeholders in order to align their actions around the broader mission. They also maintain that the collaboration of various actors, levels and organizations can help independent entities better understand where the organization is headed and their role in this process. As a result, stewardship practices are believed to instill a greater sense of meaning among employees, reinforcing their value and place within the larger organization. Moreover, stewardship is believed to generate a collective
intelligence, helping interdependent organizations address complex issues and arrive at better outcomes than would be accomplished independently (Wilson, 2013).

**Stewardship and Organizational Well-being**

While stewardship has been suggested as a promising organizational approach that can contribute to positive organizational outcomes (e.g., Hubbard et al., 2012; Hubbard & Paquet, 2016; Hernandez, 2008; 2012; Davis et al., 1997), the empirical research testing this theory is limited. In the public sector, stewardship has been linked to organizational efficiency. A qualitative case study of the Edmonton Public School (EPS) system conducted by Segal (2012) asked employees to described their work conditions which included organizational controls and incentives. Results demonstrated that organizational processes consistent with stewardship theory (e.g., distribution of power, shared decision-making) fostered integrity among employees, contributing to organizational efficiency.

Empirical research relating stewardship to indicators of employee well-being is even less common. Recently, Waters et al. (2013) examined whether employees who perceived their organization to display more stewardship had more positive organizational outcomes. Stewardship was measured according to four dimensions outlined by Kelly (2001): (1) reciprocity (the organization demonstrates gratitude for employee involvement); (2) responsibility (the organization acts in a socially responsible manner towards its employees); (3) reporting (the organization keeps employees informed); and (4) relationships nurturing (the organization builds and maintains ongoing relationships with employees). This study concluded that perceived organizational stewardship was associated with higher levels of trust, commitment and work satisfaction among employees.
Of the empirical research on stewardship that does exist, authors have created their own scales based on their specialization, the type of organization under investigation, or they have relied on organizational variables believed to be related to stewardship. For instance, a study of family firms by Eddleston & Kellermanns (2007) measured altruism, employee participation and hierarchical control as indicators of stewardship. Recently, a study by Neubaum, Thomas and Dibrell (2017) acknowledged the lack of a valid or reliable measure of stewardship in organizational research. To address this gap, they developed a Stewardship Climate Scale based on six dimensions consistent with Davis, Schoorman and Donaldson’s conceptualization of stewardship (1997). While this research provides further support for the relevance of stewardship as an organizational concept, the scale developed by Neubaum et al (2017) measures how employees identify with the organization (e.g., “when someone praises the company, it feels like a personal compliment” and whether employees embrace a collectivist orientation (e.g., “cooperation among team members usually helps solve problems”). Moreover, this scale measures employee’s perceptions of manager and supervisor behaviour (e.g., “managers make most decisions without consulting subordinates” and “supervisors are individuals that employees can identify with”). To capture stewardship as an aspect of the work environment (i.e., “work climate”) the authors used a referent shift in which respondents were asked to rate the behaviours, beliefs, or attitudes of the people within their organization and the level of interrater agreement within organizations was assessed. While this scale provides interesting insight into stewardship climate assessment based on Davis et al.’s (1997) conceptualization, their framework remains centred on the individual/interpersonal aspects of stewardship which include mainly cognitions and behaviors rooted in the microsystem.
Drawing on the reframed interpretation of stewardship functioning beyond the microsystem, organizational stewardship represents a latent construct that can be assessed through the use if manifest variables (observed organizational-level practices). Thus, organizational measures should be created that adhere to this conceptualization. From this perspective, it is proposed that more useful approach to measure stewardship would be to evaluate the degree to which organizations engage in mechanisms at the meso-level, towards a higher-level goal of inter-organizational collaboration. Thus, despite being considered a promising organizational approach to help organizations and their employees work more efficiently in the context of complex work, these propositions have remained speculative in the absence of a valid measure.

**Conceptual Model**

As demonstrated in the previous sections, stewardship is regarded as an important organizational approach in the context of complex work as it is believed to generate trust and a shared understanding to better address interdependent issues and work more efficiently (Wilson, 2013; Hubbard & Paquet, 2016). Despite the renewed interest in stewardship and the suggested organizational benefits, there is a large gap in knowledge concerning what this concept means and how it can be measured in organizations. In order to capitalize effectively on this organizational approach and prepare the way for exploring this concept empirically, this study proposes a conceptual framework that allows for the integration of various streams of research with regard to individual and organizational well-being. While the implied organizational benefits of stewardship are indeed interesting from a business perspective, the examination of stewardship within a workplace health framework will broaden our understanding of this concept and may have important implications for individuals, organizations and society. To build a
model for our study we will work in conjunction with the Job-Demands-Resources (JD-R) model of work stress (Demerouti, Nachreiner, Bakker, & Schaufeli, 2001) and the model of Executive Work and Health (Lemyre et al., 2001). Our conceptual model builds and improves on these models by positioning stewardship as a meso-level construct that may help executives to be more resilient to stressful work demands. As demonstrated in Figure 6, organizational stewardship is reflected in organizational-level practices, functioning beyond individual- and interpersonal-level resources such as job control and social support.

**Figure 6.** Conceptual model of organizational stewardship in the context of the executive work environment, stress and well-being.

Although the current study is not testing all pathways depicted in Figure 6 the development of a stewardship measure and the exploration of its associations to particular
variables within this conceptual model is nonetheless an important and valid contribution to this theoretical framework. Like Cohen & Wills’ (1985) theory of social support in the stress-illness process this study posits that stewardship may play a role at two different points in the causal chain linking stress to well-being. These two processes are depicted in Figure 6.

First, we propose that stewardship may intervene between work demands and perceived stress by attenuating a stress appraisal response (Path A). That is, organizational stewardship may redefine the potential for harm posed by the job demand and/or reinforce an employee’s perceived ability to cope with imposed work demands, preventing a particular situation from being appraised as highly stressful. For instance, working in a context of stewardship may help employees feel more capable of managing high work demands. As depicted in Path B, sense of stewardship may intervene between the experience of stress and the onset of pathological and organizational outcomes by reducing the stress reaction or by directly influencing physiological or organizational processes. For instance, stewardship may alleviate the impact of perceived stress by providing a solution to the problem (e.g., collaborating with colleagues and coming to a solution), by reducing the perceived importance of the problem (e.g., redirecting one’s focus to the larger purpose of their work), or by facilitating healthful behaviors (e.g., building a sense of community among employees).
Figure 7. Study model of organizational stewardship in the context of the executive work environment, stress and well-being.

Purpose

The overall purpose of this study is to advance our understanding of organizational stewardship by developing a measure that extends beyond the organizational microsystem and assesses the degree to which organizations engage in stewardship. A second goal of this research is to test the validity of this construct within an organizational health framework by examining its relation with work demands, stress, and indicators of individual and organizational well-being. More specifically, this study examines whether stewardship significantly contributes to the relationship between work demands and stress-related outcomes. A third, related goal is to examine if stewardship is conceptually distinct from other established measures of work resources.
This paper is composed of two main parts. Part 1 involves an exploration of the preliminary necessary conditions to establish the construct validity of a new scale, including reliability estimates, factor structure and associations with sociodemographic, regional and sample factors of interest. Then, using a hypothetico-deductive approach, Part 2 further validates the stewardship scale by examining relationships between this scale and other variables within the work stress and well-being framework. Notably, this study examines whether stewardship displays significant incremental variance in the relationship between work demands and perceived stress (Path A). Moreover, this study investigates whether stewardship displays significant incremental variance in the relationship between perceived stress and organizational well-being criteria (psychological distress, cynicism and work engagement) (Path B). Finally, a hierarchical regression is used to investigate whether stewardship is a distinct concept from other job resources including job control, supervisor support and colleague support.

The Context of Public Service Executives

Stewardship as an organizational approach may be especially important in the context of public service work, where many different levels of hierarchy must operate collaboratively and rely on the combined efforts of various departments, agencies, commissions, crown corporations and other federal organizations to deliver quality service to the public. According to Hubbard & Paquet (2016), stewardship is a process in which employees at every level of the organization must partake. However, because employees in high ranking position, (i.e., senior executives, senior managers and supervisors) are expected to effect change, they are considered to play an especially important role in establishing a context of stewardship (Caldwell et al., 2008; Hubbard & Paquet, 2016). Executives have responsibility for high-level roles and tasks, are expected to lead others, and participate in decision-making that can greatly affect organizational well-being.
In addition, the executive cadre is a unique sample of interest in organizational literature since they can have a significant influence on the health and well-being of the entire organization (Quick et al., 2000). More specifically, the stress levels of executives can have a ripple-effect on an entire organization and research has called for the examination of macro or system-wide factors that can potentially modify the experience of stress among high-level employees (Hambrick et al., 2005; Lovelace et al., 2007). With the exception of the Whitehall Studies of the UK Civil Service (Marmot et al., 1991), and recent studies by the Association of Professional Executives of the Public Service of Canada (APEX) in collaboration with researchers at the University of Ottawa in 2002, 2007 and 2012 under the direction of Dr. Lemyre as principal investigator, there are few studies with access to a population of senior executives in public administration.

**Method**

**Participants and Procedure**

The data used for the present study comes from the pan-Canadian national survey on Work and Health conducted in 2012 (Lemyre et al., 2013) in partnership with the Association of Professional Executives of the Public Service of Canada (APEX). This survey represents the fourth cycle of a multi-phase research project examining the health status of executives, from Director (EX-1) to Deputy Minister (EX-5), in the federal Public Service of Canada. Ethics approval was obtained from the University of Ottawa Research Ethics Board (see Appendix A). A total of 6688 self-administered anonymous questionnaires were distributed via e-mail to senior-management executives in the Canadian federal public service. A letter emphasizing voluntary participation and confidentiality of the participants was also included. Over two thousand respondents returned the questionnaires (N=2314), representing a response rate of 35%.
The final sample maintained fully proportional representation of the actual distribution of Canadian public service executives by gender, executive level, region and age.

The final sample comprised 51% male and 49% female executives. The majority of participants indicated that their work was located in the National Capital Region, Ottawa, (73%) and their average age was $M=50.1$ years. The majority of participants had either a post-grad education (52%) or a university education (39%). Participants had been working at the executive level for 7.3 years, on average. While just over half (57%) of executives in this sample worked at the EX-1 (Director) level, 24% worked at the EX-2 (Executive Director) level and 20% of participants worked at the EX-3, EX-4 or EX-5 (Director General, Associate/Assistant Deputy Minister, Deputy Minister) level.

**Item Generation of Stewardship Scale**

A seven item scale of organizational stewardship was developed for the purpose of this research. The measure was intended to tap aspects of how one’s work environment can be perceived as engaging in stewardship through organizational practices that establish trust and collaboration across networks. A deductive approach to scale development was used by reviewing the available literature on stewardship to develop a theoretical definition of this construct (Hinkin, 1998). Items were generated based on Block’s (1993) description of stewardship and Paquet’s (2008) conceptualization of stewardship in a public service context, as well as on-going discussion among a team of researchers with diverse areas of expertise within organizational research. To ensure that statements were applicable to the public service context, items were reviewed by a research associate who had experience working as a public service executive. Seven positively formulated items were developed based on the main elements of stewardship identified in the public administration literature. These items reflected elements of a
collective orientation, shared effort and responsibility, a focus on the public interest and long-term objectives, and mutual trust and respect. In several meetings, researchers and the main author discussed the extent to which these items reflected stewardship, based on the elements mentioned above, whether crucial aspects had been overlooked, and whether items could be properly applied in a public service organization. In order to capture characteristics of the work environment at a broader level, participants were asked to report on the extent to which their department or agency engaged in certain organizational processes (stewardship criteria), as opposed to their individual behaviours. This approach also attempted to reduce the possibility of social desirability bias and obtaining highly inter-correlated perceptions from respondents. This seven-item scale asked respondents to indicate the degree to which their department/agency demonstrates stewardship. The responses were rated on a 5-point Likert response scale ranging from 1 (“never”) to 5 (“always”), which is the suggested scaling for new measures (Hinkin, 1998). A sixth choice was also provided for respondents who did not know/had no opinion about their department/agency’s stewardship or if the item was not applicable to them. Example items of organizational stewardship were “In my department/agency we are committed to the achievements of the overall federal government before the achievements of our own department/agency” and “In my department/agency we work and collaborate well inter-departmentally.” This scale was administered to a large sample of public service executives as part of the 2012 Work and Health survey.

Measures

The majority of instruments measuring organizational conditions and behaviors used in Part 2 of this study cover scales for which the psychometric qualities were reviewed by APA and
the National Institute of Occupational Safety and Health (NIOSH) (Hurrell et al., 1998). A copy of relevant sections of this questionnaire can be found in Appendix B.

Measures of workload, role conflict, role ambiguity, intragroup conflict, intergroup conflict, job control and social support were assessed using the Generic Job Stress Questionnaire (Hurrell & McLaney, 1988).

Workload was assessed using a five-item scale which measures the amount of work one must do and the amount of concentration and effort required to do one’s work. Items were rated using a 5-point response scale ranging from 1 (“rarely”) to 5 (“fairly often”). (Cronbach’s α=.85). Example item: “Is there a marked increase in the amount of concentration required on your job?”

Role conflict was assessed using a five-item scale which measures the degree to which an individual is confronted with conflicting roles or by tasks that are not a part of their job. Items were rated using a 7-point response scale ranging from 1 (“very inaccurate”) to 7 (“very accurate”) (Cronbach’s α=.76). Example item: “I receive an assignment without the help I need to complete it”

Role ambiguity was assessed using a four-item scale which measures the degree to which an individual do not have a clear sense of their work objectives, expectations or the scope and responsibilities of their job. Items were rated using a 7-point response scale ranging from 1 (“very inaccurate”) to 7 (“very accurate”) (Cronbach’s α=.88). Example item: “I know exactly what is expected of me”. Items were reverse coded such that higher scores reflected higher levels of role ambiguity.

Intragroup Conflict was assessed using a three-item scale which measures the degree of interpersonal conflict within one’s work group. Items were rated on a 5-point response scale
from 1 ("strongly disagree") to 5 ("strongly agree") (Cronbach’s α=.81). Example item: “In our group, we have lots of bickering over who should do what job”.

*Intergroup Conflict* was assessed using a four-item scale which measures the degree of interpersonal conflict between one’s own work group and other work groups. Items were rated on a 5-point response scale from 1 ("strongly disagree") to 5 ("strongly agree") (Cronbach’s α=.80). Example item: “There is lack of mutual assistance between my group and other groups”.

*Job control* was assessed using a ten-item scale that measures an individual’s task control (their ability to make decisions concerning how best to complete the work) and decisional latitude (their ability to make decisions concerning the work at hand). Items were rated on a five-point Likert scale ranging from 1 ("very little") to 5 ("very much") (Cronbach’s α = .86). Example item: “How much influence do you have over the amount of work you do?” (task control) and “the decisions as to when things will be done in your work unit?” (decisional latitude).

*Social support* was examined by source: supervisor (two items; Cronbach’s α = .83) and colleague (two items; Cronbach’s α = .80). On a four-point Likert scale from 1 ("very much") to 4 ("not at all") respondents indicated the extent to which their immediate supervisor or colleagues’ support was available. Items were reverse coded such that higher scores reflected higher levels of social support. Example items: “How much can your immediate supervisor be relied on when things get tough at work?” and “How easy is it to talk with colleagues at work?”

*Perceived Stress* was assessed using the nine-item version of the Psychological Stress Measure (PSM9; Lemyre & Tessier, 1988, 2003; Lemyre, Tessier, & Fillion, 1990). This scale asks participants to indicate the degree of stress they felt within the last 4-5 days. The PSM was
designed for the use with normal populations and provides information on the somatic, cognitive-affective, and behavioural aspects of the subject’s perception of their stress state (α = .90). This short version of the PSM is highly correlated with the original 49-item version of the PSM (.98) (Lemyre, Tessier, & Fillion, 1991). Each item is measured on an 8-point Likert scale ranging from 1 (“not at all”) to 8 (“extremely”). Reverse items were recoded such that higher scores reflected higher levels of perceived stress. The score is the sum of the items, producing a total score ranging from 9 to 72.

Psychological distress was measured using the 20-item version of the General Health Questionnaire (GHQ). This scale assesses psychiatric disturbances over the past month at the lowest level of mental illness suitable to use in general populations. Answers are scored on a 4-point response scale ranging from 0 (“less than usual”) to 3 (“much more than usual”) (Cronbach’s α=.95). The scores have been interpreted as indicative of the severity of psychological disturbances on a continuum from 0-60. Scores are summed and this total score provides a basis for screening for the probability of being diagnosed as a psychiatric case. Thus, an increased score on the General Health Questionnaire represents an increase in minor psychiatric morbidity. One sample item was “Have you recently over the past month been feeling unhappy and depressed?”

Cynicism was measured using a five-item subscale from the General version of the Maslach Burnout Inventory (MBI; Schaufeli, Leiter, Maslach, & Jackson, 1996). This scale was designed to measure the degree to which one feels indifferent towards their work, perhaps losing one’s interest, and losing the meaning of their work. Cynicism is considered a core aspect of burnout for those working outside human services occupations (Lee & Ashforth, 1996; Schaufeli & Bakker, 2004) (α = .87). These items were measured on a 7-point scale ranging from 1
(“never”) to 7 (“everyday”). One sample item was “I have become more cynical about whether my work contributes anything.”

Also included in the questionnaire are items assessing gender, department and region of work.

*Work engagement* was measured using the refined nine-item Utrecht Work Engagement Scale (UWES; Schaufeli, Bakker, & Salanova, 2006). This scale assesses the degree to which one experiences a persistent and pervasive affective-cognitive state while working. A previous study by Hallberg and Schaufeli (2006) highlighted the high inter-correlations among the subscales of vigor, dedication and absorption used in this scale and recommended that the use of a unidimensional representation of this construct as opposed to the three-factor solution. Thus, work engagement was conceptualized as a one-factor construct in this study. Items were measured on a 7-point scale ranging from 1 (“never”) to 7 (“always”). (Cronbach’s α=.88). One sample item was “I am immersed in my job”.

**Analyses**

The first part of this study involved testing the psychometric properties of the stewardship measurement. In order to examine the structure of the organizational stewardship scale its internal reliability and factor structure were investigated. Reliability coefficients were calculated using Cronbach’s alpha and the split-half reliability method using the Spearman-Brown formula. Next, a two-pronged approach was taken to the analysis of these items to measure stewardship. An EFA was performed using SPSS for Windows version 22 on data from a randomly derived sub-sample of approximately 50% of senior executives. The EFA was used to determine the number of latent variables that could be used to best describe the underlying structure of stewardship. In order to validate results found with EFA described above, a CFA was performed on the remaining sub-sample of senior executives. This CFA analysis was based on covariance matrices using maximum likelihood estimation procedures and was carried out
with EQS 6.1 software (Bentler, 2006). Following scale analysis, descriptive statistics and univariate analyses were conducted to examine the distribution of stewardship and its associations with sociodemographic, regional and sample factors of interest.

The second part of this study aimed to expand existing knowledge of stewardship as an organizational concept while also assessing the validity of this stewardship measurement. This step involved demonstrating that the pattern of correlations with measures of other constructs conforms to theoretical propositions regarding organizational antecedents and outcomes of the construct (Wiggins, 1973). Associations between organizational stewardship, work stressors, work resources, and indicators of individual and organizational well-being were investigated using correlations. Extreme Groups Approach (EGA; Preacher, Rucker, MacCallum, & Nicewander, 2005) was used to detect general trends in the data. A series of independent sample t-tests were conducted to find whether any significant difference existed between participants in the upper tertile and lower tertile of perceived stewardship in relation to perceived stress and indicators of individual and organizational well-being. Finally, hierarchical regression analyses were used to test the incremental validity of stewardship among the work demands-stress and stress-well-being relationships depicted in Path A and Path B of Figure 7. A final hierarchical regression was used to investigate the amount of shared variance between established job resource scales and organizational stewardship to determine if the organizational stewardship scale is indeed a unique contribution to the organizational stress and well-being framework.

The results of these analyses are summarized below.
Results

Scale Psychometrics
Table 1 presents distributional properties of the seven-item Organizational Stewardship Scale, as well as reliability estimates. Both reliability estimates were above .80 suggesting high internal consistency.
Table 1

*Means, Standard Deviations and Reliability Estimates of the Seven-Item Organizational Stewardship Scale*

<table>
<thead>
<tr>
<th>Stewardship items</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my department/agency, we:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) …work and collaborate well inter-departmentally when making decisions</td>
<td>3.52</td>
<td>.81</td>
</tr>
<tr>
<td>b) …consider our immediate outcomes as well as the horizontal outcomes (across the public service) to be shared responsibility among all departments/agencies</td>
<td>3.54</td>
<td>.87</td>
</tr>
<tr>
<td>c) …work and collaborate with agencies at the provincial and local level when making decisions</td>
<td>3.44</td>
<td>.95</td>
</tr>
<tr>
<td>d) …work and collaborate with the private or voluntary sectors when making decisions</td>
<td>3.26</td>
<td>.98</td>
</tr>
<tr>
<td>e) …are committed to the achievements of the overall federal government before the achievements of our own department/agency.</td>
<td>3.57</td>
<td>.92</td>
</tr>
<tr>
<td>f) …have mutual trust and respect between our department/agency and other departments/agencies</td>
<td>3.68</td>
<td>.81</td>
</tr>
<tr>
<td>g) …share effort with other departments/agencies to achieve a better outcome</td>
<td>3.64</td>
<td>.84</td>
</tr>
<tr>
<td>Total Stewardship score</td>
<td>3.53</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.91</td>
</tr>
</tbody>
</table>
**EFA results.** In order to determine underlying scale dimensionality an EFA using principal axis factoring extraction and oblimin rotation with listwise deletion. Principal axis factoring extraction technique was employed with oblique rotation since it allowed extracted factors to covary. We identified and removed 9 multivariate outliers from the first sample of senior executives \((n_1 = 820)\) using Mahalanobis distance criterion of \(p < .001\) prior to analyses. The Bartlett’s test of sphericity was also found to be significant \((p<.001)\). To determine the appropriateness of factor analysis, the Kaiser-Meyer-Olkin measure of sampling adequacy indicated an acceptable level of .86 – a value of .60 or above is required (Tabachnick & Fidell, 2001). While the most commonly employed rule for determining the number of factors is to retain those with eigenvalues greater than 1.0 proposed by Kaiser (1960), this rule has been criticized as sometimes underestimating the number of components (Zwick & Velicer, 1982, 2010). Furthermore it has been suggested that when EFA is used for theory development and there is an absence of guidelines about the number of factors it is not wise to use Kaiser’s criterion. Jolliffe’s criterion, on the other hand, recommends retaining factors greater than .70 (Jolliffe, 1972). A systematic review of factor analysis research by Ford, MacCallum and Tait (1986) concluded that a good strategy for deciding how many factors to retain is to consider multiple decision methods. On the basis of eigenvalues, examination of the scree plot, per cent of explained variance and interpretability of the factors a two-factor solution was extracted (see Table 2). Eigenvalues of the factors were above .70 with all items reaching adequate communalities of above .40.

We named the first factor “Collective Responsibility” which accounted for 58.8% of the variance. Items in this factor reflected collaboration within the public service and a shared accountability for the overall federal government. We named the second factor “Intersectoral
Collaboration” which accounted for 13.1% of the variance. Items in this factor reflected the collaboration and shared accountability with organizations outside of the federal government.

**Table 2**

*Factor Loadings, Communalities (h²), and Percent of Variance Explained by the Two-Factor Analysis with Principal Axis Factoring Extraction and Oblimin Rotation of Organizational Stewardship among Public Service Executives*

<table>
<thead>
<tr>
<th>Item: In my department/agency, we:</th>
<th>F1</th>
<th>F2</th>
<th>h²</th>
</tr>
</thead>
<tbody>
<tr>
<td>…share effort with other departments/agencies to achieve a better outcome</td>
<td>.88</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>…have mutual trust and respect between our department/agency and other departments/agencies</td>
<td>.83</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>…work and collaborate well inter-departmentally when making decisions</td>
<td>.72</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>…consider our immediate outcomes as well as the horizontal outcomes (across the public service) to be shared responsibility among all departments/agencies</td>
<td>.71</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>…are committed to the achievements of the overall federal government before the achievements of our own department/agency.</td>
<td>.60</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>…work and collaborate with the private or voluntary sectors when making decisions</td>
<td>.83</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>…work and collaborate with agencies at the provincial and local level when making decisions</td>
<td>.74</td>
<td>.63</td>
<td></td>
</tr>
</tbody>
</table>

Variance explained (%)  
58.8 13.1

Note: Factor labels were F1 = Collective Responsibility, F2 = Intersectoral Collaboration.
CFA results. The proposed two-factor model structure derived in the EFA was then applied to a second sample of senior executives \(n = 861\) and tested for model fit using CFA. We removed 14 multivariate outliers from sample prior to analyses. There was evidence of univariate (i.e., skewness and kurtosis > 1.0) and multivariate (i.e., Mardia’s coefficient of multivariate kurtosis was 13.57) non-normality. Hence, model fit was evaluated using Satorra–Bentler \(\chi^2\) scaled statistic \(\text{S-B } \chi^2\); Satorra & Bentler, 1988) together with robust Comparative Fit Index \(*\text{CFI},\) Bentler, 1990\) and Root Mean-Square Error of Approximation \(*\text{RMSEA}\) since S-B \(\chi^2\) is sensitive to large sample size (Byrne, 2006). A non-significant S-B \(\chi^2\) \(p > .05\), *CFI of at least .90 (Tanaka, 1987) and *RMSEA less than .08 indicate adequate fit (Browne & Cudeck, 1993). Mis-specified parameters were identified using Lagrange Multiplier \(\text{LM, p < .001}\) and Wald test statistics \(p > .25\). After adjustment of some parameters in the initial model, the model showed a good fit to the data: \(\text{S-B } \chi^2 (12) = 42.39, p < 0.001, \text{CFI} = .98, \text{RMSEA} = .06 \text{[90% CI (.037, .073)]}\). The proposed baseline model is presented in Figure 8. Further, the Cronbach’s alpha reliability coefficients for the two dimensions were all greater than .70 (.88 for “Collective Responsibility” and 0.79 for “Intersectoral Collaboration”).

\[\text{1 Post-hoc model fitting was done in an iterative fashion with the significant change in S-B } \chi^2 \text{ and *CFI assessed at } p < .05 \text{ and } \Delta \text{CFI } \geq .01, \text{ respectively. Hence, modifications that did not contribute to a significant improvement to the model were not retained to ensure model parsimony.}\]
Post-hoc analyses. Post-hoc analyses were conducted using chi-square procedures to further review these two distinct factors. These analyses showed that participants working in core departments and those working in the National Capital Region (NCR) were significantly more likely to respond “no answer” to Intersectoral Collaboration items (p<.001***). Core departments are departments which identify with the “core” public service. Separate agencies represent organizations that developed their own independent organizational cultures following a
shift in the structure of the federal government over the past decade. Results support the idea that this factor may be more representative of the type of work inherent in the department, and thus, not representative of a latent feature of stewardship. This conclusion is further supported by the fact that this factor accounted for only 13% of the total variance, which implies that this factor contributed little to the total variance in the data “explained” by the factor solution (Tabachnick & Fidell, 2007, p. 672). Moreover, this subscale contains only two items and some authors recommend that a minimum of three items should load significantly on each factor in a multidimensional scale, for all subscales to be successfully labeled (e.g., Raubenheimer, 2004; Tabachnick & Fidell, 2007), although there are exceptions. Based on the accumulation of these results and upon examining the clarity and meaningfulness of each factor, the author concluded that a more accurate measurement of stewardship would include only the factor of Collective Responsibility. As a result, items C and D were dropped from the scale, resulting in a unidimensional construct of Organizational Stewardship with five items. This revised five-item scale of organizational stewardship (M = 3.59, SD = .69) was used in all subsequent analyses. Reliability analyses were conducted using both Cronbach’s coefficient (0.88) and the split-half reliability (Spearman-Brown) method (.90).

**Descriptives.** Associations between scale scores, sociodemographic characteristics, regional and sample factors of interest are shown in Tables 3 and 4. Variables included gender (male, female), hierarchical level (EX-1, EX-2, EX3-5), type of organization and (Core, Non-Core) region of work (National Capital Region, Other). In general, scores clustered fairly closely around the mean; however, statistically significant differences in stewardship were present among respondents grouped by two variables of interest.
There was no significant difference in stewardship by gender. Reported stewardship was higher among respondents working in the National Capital Region but there was no difference among respondents working in core departments and those working in non-core departments and agencies. Participants in higher hierarchical levels had higher ratings of perceived stewardship.

Table 3

*t-Test Results Comparing Gender, Region of Work and Type of Department on Organizational Stewardship*

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1119</td>
<td>3.57</td>
<td>.68</td>
<td>-1.59</td>
</tr>
<tr>
<td>Female</td>
<td>1032</td>
<td>3.62</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td><strong>Region of Work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Capital Region</td>
<td>1538</td>
<td>3.62</td>
<td>.70</td>
<td>-1.98*</td>
</tr>
<tr>
<td>Other regions</td>
<td>567</td>
<td>3.55</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td><strong>Type of Department</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Department</td>
<td>1633</td>
<td>3.61</td>
<td>.67</td>
<td>1.36</td>
</tr>
<tr>
<td>Separate Agency</td>
<td>292</td>
<td>3.55</td>
<td>.67</td>
<td></td>
</tr>
</tbody>
</table>

Note. *p<.05
Table 4

Analysis of Variance (ANOVA) Results Comparing Occupational Level on Organizational Stewardship

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EX-1</td>
<td>1148</td>
<td>3.53</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>EX-2</td>
<td>496</td>
<td>3.63</td>
<td>.68</td>
<td>12.66***</td>
</tr>
<tr>
<td>EX-3,4,5</td>
<td>412</td>
<td>3.72</td>
<td>.66</td>
<td></td>
</tr>
</tbody>
</table>

Note. ***p<.001

Construct Hypothetico-Deductive Validity

In the second part of this study analyses were aimed to further validate the stewardship scale and position it as an organizational resource by examining its association with organizational variables of interest.

Correlation results. Table 5 reports correlations between measures of stewardship, work stressors, work resources and perceived stress. Stewardship was negatively correlated with the following work stressors: role conflict (r = -.31, p<.01), role ambiguity (r = -.31, p<.01), intragroup conflict (r = -.34, p<.01) and intergroup conflict (r = -.21, p<.01). Stewardship was not significantly correlated with perceived workload. Stewardship was positively correlated with other established work resources: job control (r = .27, p<.01), supervisor support (r = .32, p<.01), and co-worker support (r = .26, p<.01).

Table 6 reports correlations between measures of stewardship, perceived stress and indicators of individual and organizational well-being. Stewardship was negatively correlated with perceived stress (r = -.22, p<.01), psychological distress (r = -.35, p<.01) and cynicism
(r = -.36, p<.01). Stewardship was positively correlated with work engagement (r = .35, p<.01). These findings suggest that stewardship is a relevant concept to examine in the framework of stress and individual and organizational well-being. More specifically, results demonstrate that organizational stewardship is significantly associated with protective factors at the individual level, as well as positive organizational outcomes among executives. Results also demonstrate that stewardship is negatively related to reported work demands and perceived stress among executives.
### Table 5
*Correlations and Descriptive Statistics of Stewardship, Work Stressors, Work Resources and Psychological Stress*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stewardship</td>
<td>3.59</td>
<td>.69</td>
<td>.03</td>
<td>-.31**</td>
<td>-.31**</td>
<td>-.21**</td>
<td>-.34**</td>
<td>.27**</td>
<td>.32**</td>
<td>.26**</td>
<td>-.22**</td>
</tr>
<tr>
<td>2. Workload</td>
<td>4.25</td>
<td>.70</td>
<td></td>
<td>.31**</td>
<td>.05*</td>
<td>.09**</td>
<td>.10**</td>
<td>-.22**</td>
<td>-.09**</td>
<td>-.08**</td>
<td>.37**</td>
</tr>
<tr>
<td>3. Role Conflict</td>
<td>3.63</td>
<td>1.39</td>
<td></td>
<td></td>
<td>.38**</td>
<td>.30**</td>
<td>.41**</td>
<td>-.45**</td>
<td>-.36**</td>
<td>-.30**</td>
<td>.44**</td>
</tr>
<tr>
<td>4. Role Ambiguity</td>
<td>2.56</td>
<td>1.34</td>
<td></td>
<td></td>
<td></td>
<td>.25**</td>
<td>.36**</td>
<td>-.37**</td>
<td>-.37**</td>
<td>-.27**</td>
<td>.33**</td>
</tr>
<tr>
<td>5. Intragroup Conflict</td>
<td>2.01</td>
<td>.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.43**</td>
<td>-.26**</td>
<td>-.21**</td>
<td>-.25**</td>
<td>.27**</td>
</tr>
<tr>
<td>6. Intergroup Conflict</td>
<td>2.33</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.31**</td>
<td>-.29**</td>
<td>-.34**</td>
<td>.29**</td>
</tr>
<tr>
<td>7. Job Control</td>
<td>3.37</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.26**</td>
<td>.25**</td>
<td>-.39**</td>
</tr>
<tr>
<td>8. Supervisor Support</td>
<td>2.78</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.35**</td>
<td>-.28**</td>
</tr>
<tr>
<td>9. Colleague Support</td>
<td>3.21</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.32**</td>
</tr>
<tr>
<td>10. Psychological Stress</td>
<td>34.68</td>
<td>12.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. *p<.05, **p<.01*
Table 6  
Correlations and Descriptive Statistics of Stewardship, Psychological Stress and Indicators of Organizational Well-being

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stewardship</td>
<td>3.59</td>
<td>.69</td>
<td>-.22**</td>
<td>-.28**</td>
<td>-.36**</td>
<td>.35**</td>
</tr>
<tr>
<td>2. Psychological Stress</td>
<td>34.68</td>
<td>12.25</td>
<td>.75**</td>
<td>.47**</td>
<td>-.38**</td>
<td></td>
</tr>
<tr>
<td>3. Distress (GHQ)</td>
<td>21.39</td>
<td>10.83</td>
<td>.57**</td>
<td>-</td>
<td>.43**</td>
<td></td>
</tr>
<tr>
<td>4. Cynicism (Burnout)</td>
<td>2.77</td>
<td>1.54</td>
<td>-</td>
<td>-.62**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Work Engagement</td>
<td>4.66</td>
<td>1.11</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* **p<.01
**T-test results.** To further test the convergent validity of the scale in relation to perceived stress and indicators of individual and organizational well-being Extreme Groups Approach (EGA) was used. For this analysis only participants scoring in the upper (“high stewardship”) and lower (“low stewardship”) tertiles of the scale for stewardship were retained. According to Preacher et al., (2005) EGA can be useful in pilot studies and exploratory research when prior knowledge of a topic is limited. Comparisons were made between two sub-groups using independent sample t-tests.

The results revealed that there was a difference in reported distress for “high stewardship” (M=19.1, SD=9.3) and “low stewardship” (M=24.8, SD=11.9) groups; t(1236.2)=10.13, p<.001, with participants in the “low stewardship” group reporting significantly more distress. The results revealed that there was a difference in reported cynicism for “high stewardship” (M=2.3, SD=1.3) and “low stewardship” (M=3.4, SD=1.7) groups; t(1245.9)=14.19, p<.001, with participants in “low stewardship” group reporting significantly more cynicism. Finally, the results revealed that there was a difference in reported work engagement for “high stewardship” (M=5.0, SD=1.1) and “low stewardship” (M=4.2, SD=1.1) groups; t(1520)=14.23, p<.001, with participants in the “high stewardship” group reporting significantly more engagement.

According to Preacher et al., (2005) EGA techniques can be a valuable tool for determining whether an effect exists and the direction of the effect, however it has limitations with regard to determining the size of an effect. Because the results of these preliminary t-tests suggested that stewardship is significantly associated with key indicators of individual and organizational well-being, more sophisticated techniques were used to examine how stewardship may contribute to these relationships.
Hierarchical regression results. To test Path A of our conceptual model hierarchical regression analysis was used to examine if stewardship contributed to additional variance in the relationship between work demands and perceived stress. In the initial step of the regression, gender was included as a control variable since previous studies have documented gender differences on stress-related disorders such as anxiety and depression (e.g., Cleary, 1987; Matud, 2004; Mirowsky & Ross, 1995; Nolen-Hoeksema, Larson, & Grayson, 1999). The second step of the regressions included work demands. Following the guidelines of Cohen, Cohen, West and Aiken (2003), organizational stewardship was entered in the final step of the regression on psychological stress. The results are displayed in Table 7. Although adding stewardship did significantly improve the overall model ($R^2 = .30$, $F(1, 2046) = 10.55$, $p < .01$), it contributed little unique variance beyond work demands (explaining an additional 0%). Interestingly, when stewardship was added to the model in the final step, the coefficient for intergroup conflict was no longer significant. This suggests that organizational stewardship and perceived intergroup conflict share common information with regard to the outcome which will be addressed further in the discussion.
Table 7

Hierarchical Regression Analyses of the Associations between (a) Work Stressors and Stewardship and (b) Psychological Stress, Controlling for Gender

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.09**</td>
<td>.07***</td>
<td>.07***</td>
</tr>
<tr>
<td>Workload</td>
<td>.26***</td>
<td>.27***</td>
<td></td>
</tr>
<tr>
<td>Role Conflict</td>
<td>.23***</td>
<td>.22***</td>
<td></td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>.19***</td>
<td>.17***</td>
<td></td>
</tr>
<tr>
<td>Intragroup Conflict</td>
<td>.10***</td>
<td>.10***</td>
<td></td>
</tr>
<tr>
<td>Intergroup Conflict</td>
<td>.05*</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Stewardship</td>
<td></td>
<td>-.07**</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Adjusted R²</th>
<th>R² change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.01***</td>
<td>.29***</td>
</tr>
<tr>
<td></td>
<td>.30***</td>
<td>.00**</td>
</tr>
</tbody>
</table>

Note. Standardized regression coefficients are shown.

*p<.05, **p<.01, ***p<.001

To test Path B of our conceptual model we also conducted a series of hierarchical regression to examine if stewardship contributed to additional variance in the relationship between psychological stress and indicators of individual and organizational well-being. In the initial step of the regression, gender was included as a control variable. The second step of the regressions included psychological stress. In the final step of the regression, stewardship was regressed on psychological
distress, cynicism and on work engagement respectively. The results are displayed in Table 8.

Psychological stress and stewardship accounted for significant variance in psychological distress (R² = .57, F (1, 2062) = 69.25, p < .001), while stewardship explained 2% of unique variance above and beyond psychological stress. Although stewardship contributed relatively little to the explained variance in distress, this is an important finding as it confirms that stewardship as a job resource can play a significant role in the evolution of felt stress to the manifestation of mental and physical symptoms. Psychological stress and stewardship accounted for significant variance in cynicism (R² = .29, F (1, 2087) = 191.06, p < .001), with stewardship explaining 7% of the unique variance above and beyond psychological stress. Further, psychological stress and stewardship accounted for significant variance in work engagement (R² = .22, F (1, 2118) = 193.81, p < .001), with stewardship explaining 7% of the unique variance above and beyond psychological stress.
Table 8

Hierarchical Regressions of Psychological Stress and Stewardship to Predict Distress, Cynicism and Work Engagement, Controlling for Gender

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Distress</th>
<th>Cynicism</th>
<th>Reading</th>
<th>Work Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 3</td>
<td>Step 1</td>
</tr>
<tr>
<td>Gender</td>
<td>.03</td>
<td>-.02</td>
<td>-.02</td>
<td>-.07**</td>
</tr>
<tr>
<td>Psychological Stress</td>
<td>.74***</td>
<td>.72***</td>
<td></td>
<td>.47***</td>
</tr>
<tr>
<td>Stewardship</td>
<td>-.12***</td>
<td></td>
<td>-.26***</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.00</td>
<td>.55***</td>
<td>.56***</td>
<td>.01**</td>
</tr>
<tr>
<td>R² change</td>
<td>.55***</td>
<td>.02***</td>
<td></td>
<td>.22***</td>
</tr>
</tbody>
</table>

Note. Standardized regression coefficients are shown.

* p<.05, ** p<.01, *** p<.001
A final hierarchical regression was conducted to examine the variance in stewardship explained by other resources such as: job control, supervisor support and colleague support to assess the unique contribution of stewardship as a construct. Hierarchical level was used as a control variable since previous findings identified a relationship between this variable and stewardship. In the second step of the regression, job control, supervisor support and colleague support were regressed on stewardship. The results of this analysis are presented in Table 9. Although stewardship is moderately correlated with these three job resources (see Table 5), together, these job resources explained only 16% of the total variance in stewardship ($R^2 = .16$, $F(3, 2064) = 134.16, p<.001$).

Table 9

*Hierarchical Regression of Job Control, Supervisor Support, Colleague Support to Predict Stewardship, Controlling for Hierarchical Level*

<table>
<thead>
<tr>
<th>Stewardship</th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level</td>
<td>.11***</td>
<td>.08***</td>
</tr>
<tr>
<td>Job Control</td>
<td>.18***</td>
<td></td>
</tr>
<tr>
<td>Supervisor Support</td>
<td>.22***</td>
<td></td>
</tr>
<tr>
<td>Colleague Support</td>
<td></td>
<td>.15***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.01***</td>
<td>.17***</td>
</tr>
<tr>
<td>$R^2$ change</td>
<td></td>
<td>.16***</td>
</tr>
</tbody>
</table>

Note. ***$p< .001$
Discussion

Stewardship, an organizational approach that underscores a sense of purpose towards the common good through boundary spanning collaboration, is an important yet under-examined construct in the field of organizational psychology. This study constitutes an attempt to develop and test a brief, reliable and valid preliminary measure to facilitate future studies of this organizational-level phenomenon. The original seven-item stewardship scale displayed good levels of internal reliability and displayed a two factor structure. Post-hoc analyses on this scale suggested that the factor of Intersectoral Collaboration represents an organizational characteristic that is separate from the construct of stewardship. Furthermore, responses to this factor were not represented evenly in our sample and seemed to relate more to the type of work conducted within particular departments. As a result, this factor was dropped from the final stewardship scale, resulting in a five-item unidimensional construct. This revised one-factor stewardship scale showed good internal reliability and appeared to tap constructs related to – yet distinct from – established job resource measures which included job control and social support from a supervisor and colleagues. The validity of the scale was further corroborated by its negative association with various work demands, psychological stress, distress and cynicism, and its positive association with work engagement. Globally, all these results provide initial support for the predictive and discriminant validity of the organizational stewardship scale.

To our knowledge, this scale is unique in measuring stewardship from the perspective of organizational practices beyond the microsystem, and provides a potentially useful tool for organizational researchers interested in this construct more generally. The development of this scale was based on existing, up-to-date literature and focused on organizational factors as
opposed to individual factors (i.e., employee motivations and behaviours) typically addressed in stewardship research.

Before discussing the results in more detail, some study limitations should be addressed. Firstly, due to the cross-sectional nature of this study causal inferences cannot be made. All data analyzed in this study was collected by means of self-report measures, which may influence findings through common method bias. Moreover, the present study was conducted among a population of executives who were at work and not on sick leave, which may yield an underestimation of factors such as cynicism and distress, and may have attenuated the significance of results. Future research should use a qualitative approach to explore these relationships in more detail and to improve our understanding of stewardship. For instance, structured interviews may help researchers to uncover not only what stewardship consists of, but also whether the antecedents of this process reside at the individual or organizational level. Of course, results from a single study have limited generalizability and should be replicated in future research.

Despite these limitations, the organizational stewardship scale developed and evaluated in this initial study demonstrated adequate reliability and validity. This validates both the robustness of this measurement and the value of future testing this scale to improve on its content. For instance, while having the advantage of being shorter than most testing instruments used in organizations, future research could improve this instrument by identifying important elements that may have been overlooked in the present research. Qualitative inquiry may be especially valuable in adding to a more comprehensive understanding of stewardship, and identifying important organizational antecedents of this phenomenon. Gaining a more detailed
understanding of how stewardship functions in the public service work environment can improve the measurement of this concept. Finally, this measure should also be tested in other populations of interest to assess its validity across work contexts (e.g., in private sector firms and non-profit organizations).

**Stewardship, Sociodemographic Characteristics, Regional and Sample Factors**

Observed associations between stewardship scores and sociodemographic characteristics, regional and sample factors of interest are intriguing but require further investigation. For example, the difference in stewardship scores among participants working in the National Capital Region compared to regional departments is interesting but requires future confirmation since the group difference was relatively small in magnitude. Finally, the higher stewardship rating among more senior executive levels is an important avenue of future research. A possible explanation for this result is that higher hierarchical levels have more input and awareness with regard to mission-driven work objectives and the significance of their work. As a result, senior level executives are perhaps more likely to observe stewardship practices first-hand. Our findings raise the need for more research to elucidate these group differences in organizational stewardship.

**Stewardship, Stress and Indicators of Individual and Organizational Well-being**

This study provided empirical support for the validity of stewardship as an organizational variable and results supported our conceptual model positioning stewardship as a potential buffer in the organizational stress and well-being framework. First, this measure of stewardship displayed construct validity as evidenced by its correlations with work demands, job resources, psychological stress and indicators of individual and organizational well-being. As the JD-R
model suggests, job resources are associated with decreased burnout and increased work engagement. In order to capture a more comprehensive understanding of the work environment, this study expanded on this model to investigate stewardship as an organizational-level resource. Researchers have suggested that stewardship is comprised of underlying mechanisms contributing to employee empowerment and collectivism (Davis et al., 1997; Hernandez, 2012; Hubbard & Paquet, 2016). Likewise, this study theorized that organizational stewardship would provide employees with a sense of community and meaning in their work, which would contribute to positive individual and organizational outcomes. Consistent with the JD-R model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), participants reporting higher levels of organizational stewardship also reported lower levels of distress and cynicism and higher levels of work engagement.

The research model used in this study positions stewardship as an organizational-level phenomenon that may impact employee-related outcomes, calling for the adoption of a multi-level approach which should be tested in future studies.

Since the present study was cross-sectional, it was not possible to interpret whether perceived organizational stewardship became stronger as positive individual and organizational attitudes increased, or if organizational stewardship predicted these outcomes. Stewardship research does suggest that stewardship practices and procedures (e.g., open communication, shared decision-making) provide employees with well-defined expectations and more ownership over their work, helping them to develop a strong sense of identification with the organization (Davis et al., 1997; Wilson, 2013). Hence, a possible interpretation of our results is that stewardship practices may help employees stay connected to the larger purpose of their work,
thereby nurturing engagement and protecting against cynicism and distress. However, this theory requires future research and longitudinal data to determine causation.

EGA results demonstrated that participants rating their departments as “high stewardship” were associated with less distress, less cynicism and higher work engagement. Although these results are interesting, EGA is recommended to be used only in the exploratory phase of research to detect general trends in the data (Preacher et al., 2005). Moreover, it is important to investigate whether there is strong group consensus with regard to organizational stewardship. Thus, future research examining this relationship should employ more sophisticated techniques such as multi-level modeling to extract richer knowledge from the data.

It is interesting to note that while stewardship contributed unique variance to psychological stress above and beyond the contribution of various work demands, this increase was not substantial ($R^2$ change < 1%). These results do not provide adequate support for Path A of our conceptual model and one might interpret these results as evidence that stewardship is not a buffer variable in the relationship between work demands and perceived stress. Theoretically it was expected that a collective orientation generated through stewardship practices would help employees to better manage their demands, in which they would appraise their demands as less stressful. However, according to these results it appears that stewardship as a resource may not intervene within the work demand-appraisal process. One could argue that elements of stewardship are not as advantageous during the appraisal of executive work demands. The role of senior executive involves high levels of responsibility and demand, which can be appraised as stressful because there is often no way to decrease these demands. Resources like job control can be useful within primary appraisal as they deal more directly with the work demands themselves.
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On the other hand, a complex, higher-level concept like stewardship may play a more important role during secondary appraisal, when executives must decide how to react to their stressful work conditions. Further, stewardship was not significantly related to perceived workload (see Table 5), which supports the idea that stewardship may not intervene as strongly with direct measures of work demands. In other words, feeling more connected to the mission and community of their work may not necessarily help one to perceive their workload any differently. Indeed, future research should investigate this association further on theoretical grounds, especially since results indicated a significant change in variance once stewardship was added to the model (i.e., stewardship did significantly predict psychological stress while controlling for the effect of work demands).

Given that the regression coefficient for intergroup conflict was no longer significant once stewardship was added, the final model indicates that these concepts share common information with regard to the prediction of psychological stress. Results demonstrated that these two concepts were moderately negatively correlated ($r = -.34$, $p < .01$). Theoretically, this finding makes sense if we consider that executives who perceive interpersonal conflict between their work group and other work groups may be less likely to work in a collaborative environment of mutual trust and respect at a higher organizational level. Future research should examine if stewardship is a mediator of the relationship between intergroup conflict and psychological stress.

On the other hand, regression analyses of Path B relationships demonstrated that stewardship did account for significant incremental unique variance in distress, cynicism and work engagement over the variance explained by psychological stress. This lends support to the
theory that stewardship functions as an organizational resource that is especially useful under conditions of cumulative appraised stress, potentially influencing individual and organizational outcomes. While particular job demands may cause an employee to be psychologically stressed, it is when multiple problems accumulate (from within and outside of the work environment) that executives may feel the most threatened with regard to their work achievements and personal well-being. Under these stressful circumstances, employees who disconnect from the true meaning of their work or lack necessary resources to solve high-level, complex issues may lose their motivation to sustain effort, which has the potential for serious disorders to occur. Thus, this process by which appraised stress transitions into feelings of helplessness (cynicism, distress) may be buffered by stewardship practices. Although stewardship contributed little to the explained variance in distress, this finding is especially significant as it confirms that stewardship can play a significant role in the relationship between stress the manifestation of mental and physical symptoms, not just work-related outcomes. To our knowledge, this finding is the first of its kind in the literature on stewardship and represents an invitation to explore stewardship with regard to health-related outcomes. Further, stewardship, which is believed to emphasize a common purpose towards the common good, may help employees stay focused on the end goal and connected to the true meaning of their work, keeping them motivated and engaged, despite appraised stress.

In summary, while stewardship does not appear to play a role in the relationship between work demands and stress appraisal, it does seem to function as an organizational resource, potentially buffering the relationship between stress and physiological and organizational outcomes. The results of this study suggest that stewardship as an organizational resource may be more valuable as a predictor of more observable outcomes, such as symptoms of distress,
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burnout and engagement. It could also be the case that stewardship functions as a valuable resource for more specific work demands.

**Stewardship, Job Control and Social Support**

Finally, an investigation of the relationship between stewardship and traditional job resources demonstrated that stewardship was significantly correlated with job control, supervisor support and colleague support ($r = .26 - .32$). However, a hierarchical regression incorporating all four constructs demonstrated that they only shared 16% of common variance. Thus, results supported the discriminant validity of this measure of stewardship. These results also suggest that although it may contain elements of control and social support (as proposed by stewardship research), organizational stewardship is conceptually distinct from traditional work resources. As suggested in the literature, stewardship may function as a higher-order construct (e.g., Neubaum et al., 2017), reflecting the extent to which organizations engage in practices and procedures that reflect stewardship values. In line with this idea, our model states that stewardship is a multifaceted concept, functioning beyond the interpersonal level of traditional work resources.

The results from this study imply that more research on stewardship is needed to identify other important elements that account for this variance in stewardship.

**Future Research**

To evaluate an organizational stewardship measurement and its relationship with organizational well-being we used the opportunity of including this measure in a national survey of work and health. Future research can further explore the components of stewardship (i.e., what stewardship consists of), the dynamic process through which it contributes to individual and organizational well-being, and what factors of the work environment can facilitate or hinder this
organizational approach. A goal of better understanding an organizationally relevant construct is to provide practitioners with information and guidelines that can help organizations to achieve positive outcomes. Thus, future research should focus on identifying facilitators and barriers to stewardship so that practitioners can begin to address these issues through organizational development strategies. Given that the results of this study suggest that stewardship may buffer the effects of stress on indicators of organizational and individual health future studies should test this assumption more directly by investigating stewardship as a moderator within this framework using a multi-level approach. Because stewardship contributed significant additional variance to observable outcomes (distress, cynicism, engagement) future studies should attempt to identify specific work stressors in which stewardship may be especially useful with regard to these outcomes. Moreover, because this scale was developed for the purpose of this research, future studies can improve and further validate the psychometric integrity of this scale.

**Practical Implications**

The idea that stewardship may function as an important organizational resource with regard to the stress experienced by public service executives has important implications for both research and practice. While this research contributes to our understanding of stewardship in general, results also provide many research directions for scholars interested in exploring this concept within the organizational stress and well-being framework specifically. Results from this study point to systemic solutions for executives dealing with challenging work and a context of stewardship can be positioned as an important resource to help executives become more resilient to psychological stress. As such, effective management of stress may depend on the ability for practitioners (e.g., human resource managers) to train, develop and assess organizational stewardship. For instance, this measurement of stewardship can be used as a diagnostic tool to
identify organizations that may need training or intervention to prevent adverse outcomes of stress. If low stewardship contexts are identified, organizations can focus on ways to develop and strengthen stewardship through more mission-focused work practices, and procedures that strengthen trust and collectivity across networks. Stewardship may be a particular lever that organizations can target to enhance work engagement and decrease distress and cynicism among executives. In this way, organizations can increase work engagement and the prevention of adverse outcomes. A main barrier to the development of stewardship best practices and training is a lack of a clear understanding as to what this concept means and how it functions in particular work environments. While some implications from this research can be drawn, more work is needed in terms of qualitative inquiry and empirical testing before more concrete recommendations can be made.

**Conclusion**

In conclusion, this study provides empirical support for the value of stewardship in organizational stress research. This study demonstrated a reliable and valid measure of organizational stewardship, yet it remained an intermediate step in the development of a validated and generally applicable instrument to measure stewardship as a meso-level construct. As is true with the development of any new survey instrument, more research is needed to improve and further validate the psychometric integrity of this scale. For example, the measure could be improved through qualitative research on the concept of stewardship from the experience of executives. Nonetheless, this stewardship measure showed to be a significant and useful contribution in demonstrating the associations between work demands, job resources, stress and individual and organizational outcomes among a large sample of high-level public servants, a unique and notably difficult population to examine empirically in academic research.
Moreover, the results of this study respond to the call for a broader approach in the examination of organizational factors that can potentially modify the experience of stress, providing strong support for a stewardship as a moderator of stress-related outcomes. It remains that our understanding could be improved by a more discursive account of lived experiences, which a qualitative study with interviewed executives could provide in an alternative epistemological approach.
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Chapter 3

Study 2: A Qualitative Investigation of Stewardship among Public Service Executives

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University of Ottawa
ORGANIZATIONAL STRESS, WELL-BEING AND STEWARDSHIP

Preamble

Given the limitations of the survey data used in Study 1, we wished to develop a more comprehensive understanding of what stewardship is and how it functions within the public service. As a result, the next step in this investigation involved an in-depth, qualitative investigation.
Contribution of Co-Authors and Author Note

The work presented in this manuscript was conducted as part of the first author’s doctoral dissertation. The first author developed the interview schedule, organized the recruitment, carried out the interviews, planned as well as carried out the analyses presented in the paper, and wrote the manuscript. Louise Lemyre provided feedback on the interview schedule, the analytical strategy and early drafts of the manuscript. She has agreed to the use of this paper in the first author’s dissertation, and to its eventual publication consistent with any limitations set by publisher requirements. This project was supported financially by the Social Sciences and Humanities Research Council (SSHRC) of Canada with a grant to Louise Lemyre. The authors would like to highlight the support and collaboration of APEX as a research partner in this larger study. The contribution of Myriam Beaudry for her assistance in data reduction and collation must also be acknowledged.
Abstract

Stewardship has been proposed as an organizational approach that emphasizes a common purpose through the sharing of knowledge, power and resources across organizations and stakeholders to generate a sense of trust and shared responsibility for the public interest. Although there is an emerging body of literature suggesting the organizational benefits of this phenomenon, the empirical research is limited and definitions of this concept remain vague. This gap in knowledge has had a negative impact on both the development of theory and practice. The present study investigates the experience of stewardship among executives to develop a more comprehensive understanding of this concept as well as to identify factors of work environment that may act as barriers or facilitators to this phenomenon. Fifteen in-depth interviews with senior executives of various ranks in the public service led to a conceptual understanding of stewardship based on four themes: service over self-interest, sustainability of the public service beyond one’s career, working with a collective orientation and mission-focused management of resources. Executives reported that several organizational attributes and processes were barriers of stewardship, these included disempowering work processes and practices and contextual factors contributing to a competitive work environment. Executive’s accounts also revealed that facilitators of stewardship centered on organizational practices that empower, enable and rely on trust instead of control such as open communication, transparency and the nurturing of partnerships and networks. Research and practical implications for organizations are discussed, including ways in which public service organizations can incorporate stewardship criteria into organizational policies, programs and strategies.

Keywords: Stewardship, executives, public service, qualitative analysis
A Qualitative Investigation of Stewardship among Public Service Executives

Since the second half of the 20th century the evolution of global trade, technology and communication has accelerated at significant pace and intensity. In such a climate, social, environmental and political issues have become increasingly complex while society and organizations are more interconnected than ever before. In the public service specifically, it is well-recognized that managing these issues involves working across boundaries, involving various levels and departments, as well as external organizations and stakeholders. While the role of leadership is undoubtedly important in the current framework of rapid change and uncertainty, organizations must also advance structures that facilitate an inter-organizational and cross-sectoral environment. Stewardship, based on a sense of public duty, has been positioned as an organizational approach believed to be essential and effective in steering through a networked government to address modern challenges (Hubbard & Paquet, 2016; Hubbard et al., 2012). Although there is an emerging body of literature concerning the importance of stewardship, especially among organizational executives, definitions of this concept remain vague and there is a lack of understanding concerning how this organizational approach functions in real-world settings or how it can contribute to organizational well-being. This paper addresses this gap by conducting a qualitative investigation of stewardship among senior executives in order to deepen our understanding of this organizational phenomenon and to build a resource for further conceptualization and quantitative research.

From Leadership to Stewardship

For decades the topic of leadership, including trait, behavioural and situational approaches, has been an expanding phenomenon in organizational literature. Traditionally, leadership was viewed as the ability of a superior to influence the behaviour of subordinates and guide them
towards a goal (Barnard, 1938). Early leadership theories, such as transactional leadership, tended to focus on the exchange between a person of authority (i.e., the leader) and their followers, in which value attached to an individual “charismatic” leader (Bass, 1985; Burns, 1978). By the late 1950s researchers began to realize that effective leadership did not only depend on ideal traits and universal behaviours, but rather the right fit between the leader’s style and the situation the leader faces (Howell, Bowen, & Dorfman, 1990).

Following a shift from industrial labour to more knowledge-based work organizations began placing a premium on the flexibility of employees, teams and organizations (Bass, 1999). Given these circumstances encouraging the participation of subordinates through strong direction and support became an effective leadership strategy. Accordingly, “top-down” processes of leadership gave way to more advanced and dynamic models, such as transformational leadership, which aimed to foster autonomy and challenging work. In transformational leadership, a leader guides followers beyond immediate self-interest through charisma, inspiration, intellectual stimulation and/or consideration of developmental needs (Bass, 1999). Within the past few decades transformational leadership was among many different approaches attempting to shift the focus from top-down vertical relationships toward more horizontal, collaborative and collective processes used to address boundary spanning issues. Other examples include servant leadership (Greenleaf, 1977), shared leadership (Pearce & Conger, 2003), participative leadership (Koopman & Wierdsma, 1998) and distributed leadership (Spillane, 2006). While the evolution of leadership theories represented a movement towards greater employee empowerment, even alternate approaches remain within the confines of the organizational microsystem, centering on interpersonal dynamics.
Worldwide societal and economic changes have challenged organizational scholars to question deeply rooted assumptions about leadership strategies and to re-examine organizational approaches that can more adequately respond to the demands faced by present-day organizations. As a result, scholars have begun to recognize that interdependent and global work can counteract the potential power of leadership, making it challenging for those in positions of authority to have an impact on the work environment regardless of their leadership style or the fit between the leader and situation. For instance, Block (1993) has argued that many traditional approaches to leadership are incompatible with widely circulating responsibility in organizations. In the field of public administration scholars have suggested that when addressing boundary-spanning public issues in a context of shared knowledge, resources, and authority the language of leadership should be re-considered (e.g., Hubbard et al., 2012; Paquet, 2009; Wilson, 2013). In essence, these scholars have proposed the notion of stewardship as an organizational approach to guide the collective process in organizations. Instead of an alternative to leadership, stewardship is viewed as the ultimate outcome of effective leadership in modern, complex organizations.

**Background to the Concept of Stewardship**

Stewardship is more broadly understood as choosing service over self-interest and as being a trustee or guardian of goods such as time or money. The concept of stewardship can be traced back to ancient Greek literature (e.g., Plato’s Republic 4.424a; 5449c; Aelius, 16.241; Aristotle, Eth, Eud. 1237b), where it was used to describe an “ideal state” in which everything was held in common among the members of the community (Attfield, 2014). This term is also commonly used in the fields of environmental protection and religious institutions to describe responsibility for the proper care and management of the natural world with a focus on sustainability (Armstrong, 1997; Attfield, 2014; McCuddy & Pirie, 2007). In effect, stewardship is commonly
understood as a sense of obligation to others; by choosing "service over self-interest" stewards build the capacity for the next generation to govern themselves (Block, 1993).

Over the past two decades, the concept of stewardship has taken a more secular approach in organizational/management literature. Stewardship has been described as the accountability of corporate leaders and employees to preserve and enhance the value of organizational assets (Newton, 1997). Those who act as stewards of an organization wish to serve something greater than themselves (Peters & April, 2014); this bigger body includes not only the organization and its shareholders, but all stakeholders and the larger community affected by the organization, including future generations (Block, 1993; Hernandez, 2008; McCuddy & Pirie, 2007). From this perspective, stewardship has been described as pro-organizational behaviors that are promoted through empowering practices and procedures (Davis, Schoorman, & Donaldson, 1997; Hernandez, 2008). According to Hernandez (2012) stewardship antecedents provide employees with developmental opportunities and increased responsibility, nurturing their self-efficacy and self-determination and thereby investing in the long-term effectiveness of employees and the organization.

In the public service context, stewardship is proposed as an organizational approach that emphasizes a sense of purpose towards the common good through the sharing of knowledge, power and resources across networks. According to Hubbard and Paquet (2016), this approach to governance requires communication, collaboration and adaptability between organizational actors and stakeholders to generate trust and a shared understanding of the organizational mission. Moreover, this process is believed to help individuals view their work in a larger context, providing them with a sense of ownership and a better understanding of why they do
what they do. According to Pierce (2001), psychological ownership over one’s work can foster as a sense of “buy in”, where employees feel connected to the organization and its values.

**Stewardship and Organizational Well-being**

While the empirical evidence is limited, a growing body of research has suggested a link between stewardship and positive work-related outcomes. Caldwell, Hayes, Karri & Bernal (2008) contend that organizations working with a stewardship approach honor the duty of long-term wealth that benefits all stakeholders, rather than short-term self-interest. According to their review, organizational leaders who demonstrate these stewardship principles can build trust within the organization. Moreover, they believe that organizations adopting stewardship practices will create an enduring competitive advantage by creating a context in which employees feel valued and are more willing to invest in the achievement of organizational goals. In addition, the prudent and proper use of organizational resources demonstrated through stewardship practices is believed to contribute to organizational effectiveness, efficiency, profitability and sustainability (McCuddy, 2008).

An empirical study by Waters, Bortree, & Tindall (2013) measured stewardship based on four dimensions of relationship management: reciprocity, responsibility, reporting and relationship nurturing. They found that employees report higher levels of trust, commitment and work satisfaction when they perceive that their organization uses its resources wisely, recognizes employee contributions and shares information with stakeholders. Segal (2012) conducted a case study examining the decentralized organizational culture of a specific Canadian school district. Using in-depth interviews with school administrators this study found that features of stewardship, such as practices that built the trust and buy-in of employees, fostered integrity,
contributing to organizational efficiency (Segal, 2012). While the organizational benefits of stewardship are indeed interesting from a business point of view, these implications cannot be truly grasped without a clear understanding what stewardship is and how it functions within the workplace. Furthermore, while stewardship has been associated with positive organizational outcomes such as trust, commitment and efficiency, the empirical research is limited.

**Stewardship in the Public Service Context**

As societal and policy issues become increasingly complex strong partnerships among government agencies and across networks is considered vital; this is especially true since many global issues faced by organizations are considered “wicked problems”, in which there is no definite formula or an agree upon solution and (Head & Alford, 2015; Hubbard et al., 2012). As a result, strategies of public service renewal and reform have emphasized the importance of effective coordination and collaboration. Stewardship, with its focus on serving the public interest through practices that promote communication, collaboration and adaptability, reflects an organizational approach believed to be essential and effective in the current public service (Wilkins, 2014; Wilson, 2013).

In addition, stewardship literature has highlighted the importance of this concept with regard to government institutions. According to McCuddy (2008) the wise use, development and conservation of entrusted resources is crucial to organizational success and sustainability, and thus stewardship should be an important component of the decisions and activities of any governmental unit. In addition, Segal (2012) believes that stewardship is driven by a commitment to moral principles such as humility and collaboration and emphasizes social value instead of processes and input, which may improve integrity and efficiency in modern
governments. In addition, because public service employees are expected to be driven by public service values (e.g., high regard for mission, service to the community, concern for the welfare of others) (Dicke & Ott, 2002) examining stewardship within this context may be more relevant than other sectors. In fact, stewardship is considered a core value for the Canadian public service (“Values and Ethics Code for the Public Sector,” n.d.), where it is simply described as the responsible use and care of entrusted public resources, for both short term and long term benefits. Thus, the understanding of this concept and how it functions within the public service remains unclear. As such, the Canadian public service is an ideal environment to further develop our understanding regarding this organizational approach.

The Case of Senior Executives

While stewardship is proposed as a meso-level phenomenon beyond individual traits or behaviour (Wilson, 2013), a deeper understanding of the intricacies of this concept must begin at the individual and group level. According to Beckhard’s (1969) approach to organizational development, in order to increase organizational effectiveness and well-being, there must be planned changes made to an organization’s systemic and individual processes. Thus, if we wish to improve organizational processes and practices we must first understand individual perceptions of this process.

Beckhard (1969) also maintained that changes made to these processes need to be supported and modelled by top-management in order to be effective. Although stewardship can be modelled by employees at any level of the organizational hierarchy, research has positioned this approach to be especially important for upper echelon employees (e.g., managers, executives) as their influence and authority has great bearing on those working under them, as well as the
decisions made among their group (e.g., Caldwell et al., 2008; Hernandez, 2008; Hubbard & Paquet, 2016). According to Hernandez (2008), organizational leaders who embrace stewardship behave with social accountability and instil this responsibility in their followers.

Public service executives are considered top management and central actors in the public service work environment. Executives are of strategic interest in the investigation of organizational strategy as they have more power to genuinely influence organizational decisions that can greatly affect organizational well-being (Campbell et al., 2000; Quick, Macik-Frey, & Cooper, 2007). Executives, as direct leaders, play a critical role between the organization and its members by interpreting and disseminating organizational values, procedures and policies from top leaders, ensuring clarity and consistency of practices (Grojean, Resick, Dickson, & Smith, 2004). This implies that a better understanding of organizational factors that may contribute to the efficiency and well-being of those in high-level positions may be conducive in protecting the health and well-being of the entire organization.

Given that executives can contribute significantly to the development and improvement of organizational factors examining stewardship from their perspective can yield rich and important insights. We therefore consider our approach to be an important addition to stewardship research, as certain aspects of this organizational approach may only be visible from the perspective of organizational leaders. Furthermore, with the exception of the Whitehall Studies of the UK Civil Service (Marmot et al., 1991) and cross-sectional research by the Association of Professional Executives of the Public Service of Canada (APEX) in collaboration with researchers at the University of Ottawa in 2002, 2007 and 2012 under the direction of Dr. Lemyre as principal
investigator, very few empirical studies have had access to a population of senior executives in public administration.

**Purpose of Study**

**Goal**

The purpose of the present study is to present qualitative data relating to the concept of stewardship in the public service work environment from a sample of senior executives. A more in-depth understanding of organizational stewardship is necessary in order to build a conceptual model that can be used in future research. In view of the paucity of literature regarding stewardship in organizations, this investigation is best suited to a qualitative methodology (Creswell, 2003; Meyers, 2013).

**Objectives**

The first objective of this study is to develop a more comprehensive understanding of stewardship among senior executives in the Canadian public service using a grounded theory approach to qualitative inquiry. This study will also provide a rich exploration of the factors influencing a context of stewardship in order to identify the facilitators and barriers of this phenomenon within the Canadian public service.

**Research Questions**

1) What is stewardship in the public service work environment and what does it mean to senior executives?

2) What are the barriers and facilitators of stewardship in the public service work environment?
Method

Participants

Participants included senior executives from various departments and agencies within the Canadian federal public service recruited via the pan-Canadian national survey on Work and Health conducted by Lemyre et al. (2012) in partnership with the Association of Professional Executives of the Public Service of Canada (APEX). This survey was the fourth cycle of a multi-phase research project examining the health status of executives, from Director (EX-1) to Deputy Minister (EX-5), in the federal Public Service of Canada. Respondents of the survey were invited to leave their contact information should they be interested in taking part in future studies; this page was separated from the rest of the responses to ensure anonymity of the survey. Ethics approval was obtained from the University of Ottawa Research Ethics Board (see Appendix A).

Of those who volunteered their information, a purposive sample of executives was selected based on the incorporation of both genders, different occupational levels and varied departmental affiliation, within the National Capital Region. Executives were randomly chosen from a pool of participants who met these criteria and were subsequently contacted via e-mail and invited to take part in an individual interview. During three waves of recruitment on-going analyses suggested saturation, in which no new information was being presented (Bowen, 2008), thus further recruitment was not required following the third wave.

In total 15 executives participated in this study (eight males; seven females). One participant was a recently retired executive and the remaining were currently working as executives, for at least nine years (M=9.9 years), thus all were in a good position to provide insight into the executive experience. All participants had extensive experience working in the federal public
service (M=19.9 years). The final sample was split into three occupational level categories (EX-1, EX-2 and EX-3-5) with five participants occupying each category. Twelve of the fifteen interviews were conducted in the participants’ private office. Two interviews were conducted in a private conference room at the University of Ottawa. One interview was conducted via telephone. All interviews were conducted in English by the first author.

**Materials**

Semi-structured interview schedules were developed based on available and recent literature of organizational stewardship. Interviews were piloted with research associates and one executive recently retired from the Canadian public service. Interview questions were discussed and revised to improve clarity and divided into four parts. Part one included questions regarding the participants’ career in the public service. Part two of the interview asked participants to describe general factors of their work environment such as the perceived climate, leadership, stressful situations and interpersonal relationships. Part three of the interview included questions regarding participants’ experiences with interdepartmental relationships and collaboration. Part four of the interview asked participants directly about their understanding of stewardship and their experience of stewardship in the work environment. The first part of the interview was used to collect information about the interviewee (e.g., their occupational level, professional experience, level of education). The second part of the interview was developed to collect information regarding organizational practices employed by executives and their current work conditions. The third part of the interview was developed to elicit more detailed information concerning concepts believed to be linked to stewardship, based on previous literature. Finally, the final part of the interview aimed to collect detailed information on participants’ knowledge of
stewardship as an explicit concept as well as factors of the work environment that were believed to facilitate or impair stewardship. The main reason for dividing the interview into separate parts was to avoid priming participants to the concept of stewardship and to avoid socially desirable answers concerning stewardship. This final part of the interview allowed for the discovering of unanticipated conceptualizations of stewardship based on executive’s personal definitions, prior to being read a definition of stewardship based on the literature. The final interview schedule used for this study is provided in Appendix C.

**Procedure**

The process of data collection took place from July 8th to August 7th, 2014. It is understood that particular events leading up to this time-frame may have affected participant responses. Thus, a brief description of the Canadian public service context in the years prior to this study is provided.

In 2012, following two consecutive minority governments and a re-elected majority government, the Conservative Party of Canada announced that it was cutting public service spending over the subsequent five years in an effort to achieve a balanced budget. This period of government restraint included the elimination of public service jobs, estimating a loss of over 19,000 federal positions, mostly in the National Capital Region, with around 600 of these cuts occurring at the executive ranks. Because this reduction was mandated by the Conservative government, executives did not have much control over decisions related to the cutbacks.

Organizational downsizing has been shown to affect remaining executive-level managers through an increase in job insecurity and powerlessness, as well as an increase in perceived workload (Armstrong-Stassen, 2005). Because the present study was conducted in the aftermath
of a massive reorganisation, it was recognized that participants may have been particularly worried about the impact of this reform at the time of their interview.

Individual, semi-structured interviews were conducted by the author of this study. Ethical approval was obtained through the University of Ottawa Research Ethics Board (see Appendix A). Prior to the interviews, participants were assured of the anonymity of their input such that no information would be published in a way that would identify or provide a direct reference to their person and/or department/agency. Participants were asked to sign a consent form (Appendix D). To facilitate confidentiality, each participant was assigned an alpha numeric code.

The lengths of the interviews varied between an hour to an hour and half. Interviews were audio-recorded with the participants’ consent and subsequently transcribed into written form verbatim. The interviewer also took notes while conducting the interviews.

**Data Analysis**

To assist in the process of theory development of stewardship among public service executives, grounded theory analysis and QDA Miner, a qualitative software tool were used. QDA Miner was used to store the interviews and to electronically code the data.

Because the research on organizational stewardship is limited and there is little known about executive’s experience of stewardship in the public service, grounded theory was chosen as an appropriate approach to analyze the data in this study. Grounded theory is considered a rigorous, inductive methodological approach to research that allows the development of a theoretical account of a given topic while grounding the account in empirical observations of data (Glaser & Strauss, 1967). In other words, the intention of this approach is to develop a theory which can be
recognized by those who experience the phenomena and in which participants can identify a degree of “fit” with their personal experience (Glaser & Strauss, 1967). Typically unstructured, open interviews are used to gather the data, which ensures that the subjective views of participants are able to emerge, and thus, the resulting theory is said to be grounded in the data, and not based on preconceived concepts (Charmaz, 2006). In this study, the first three parts of the interview used a more focused and structured approach to elicit detailed information about the executive work environment and to help the researcher make links between concepts. The data used for this study was taken mainly from final part of the interview, as the goal was to use a more open framework to better understand the concept of stewardship. Subjects were given the opportunity to describe their personal understanding of stewardship prior to being exposed to the researcher’s understanding of this concept based on the literature. Thus, while an existing understanding of stewardship allowed us to narrow and direct part of the interview, we allowed for the definition of this concept to change based on the data gathered. In addition, the identification of barriers and facilitators of stewardship in the public service was completely grounded in the data.

Data was analyzed in five phases. In the first phase field notes and memos were analyzed for emerging themes in order to develop a priori coding grid; this first phase occurred concurrently with data collection. Field notes can be used to record observations and reflections during data collection (Charmaz, 2006). Analytic and self-reflective memos consisted of questions or speculations about the data and emerging relationships. Another useful tool used in this study was the production of a contact summary form for each interview. These forms produced a one-page summary and synthesis of the most salient data from each interview, documenting the main concepts, themes and issues that arose during the interview for further reflection or analysis.
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(Miles, Huberman, & Saldana, 2013). The initial coding grid included nine themes with two to three specific codes based on each theme. An operant definition was developed for each code. The purpose of this first phase was to help the researcher make sense of the data before moving to more detailed coding as well as to help determine when saturation was reached. In the second phase, once all interviews were completed, the preliminary data analysis efforts involved reading the transcript of each interview in its entirety.

The second phase of data analysis was conducted in an iterative process which began with open coding of the first five interviews. Data was read line by line and codes were applied informally to open up the inquiry and to avoid assumptions and biases of the researcher. This involved descriptive codes, capturing the meaning of the text at a basic level, and in-vivo codes, words or short phrases from actual language in the transcription (Saldana, 2009). As per the recommendation of Miles and Huberman (1994), after coding the first interview a second researcher was given a portion of this interview to code using the preliminary grid. The two researchers met to discuss coding agreement/disagreements and to decide how to proceed with the analysis. This process granted the author an opportunity to maintain reliability and to refine and re-organize the coding grid before proceeding with the analysis. The open coding of the first five interviews resulted in 329 codes which were organized into 31 potential categories. Following this, a review and re-organization of the entire list of codes and categories was performed. Similar codes were merged together and related codes were moved under a broader category. The final ten interviews involved focused coding. Focussed codes are more concentrated, selective and conceptual than the initial open coding (Glaser, 1978). Throughout this process the author took note of repeated concepts and emerging themes, as well as the addition of new codes and categories. Once again, the re-organization and condensation stage
involved the merging or grouping of similar codes and identifying major categories or themes. Once all codes became saturated, signaling that the codes sufficiently represented the data, a coding manual was produced, resulting in 10 categories, 31 sub-categories and 84 individual codes. This revised version of the coding scheme was comprised of category and code labels and operational definitions; this coding scheme was developed and discussed by the research team. A copy of the revised coding scheme can be found in Appendix E. As described by Auerbach & Silverstein (2003), steps of coding can be compared to staircase, moving from lower understanding (open-coding) to a more abstract level, where relationships and theories can be evoked. This phase of the data analysis process helped to lay the groundwork for the next stage of coding.

The third phase of data analysis involved axial and selective coding. Axial coding is the process of reassembling the data that were identified and coded during open coding (Strauss & Corbin, 1998). Each category was analyzed individually aiming to produce an understanding of variability, the relationships within categories as well as between categories. The author also identified links made by participants when discussing certain categories and codes. For instance, using the revised coding scheme the authors examined the category labelled “stewardship” more closely, linking codes from other categories that overlapped with the facilitators and barriers of stewardship identified by participants. Based on this analysis, a final re-organization and condensation stage involved identifying and labelling major categories and themes in the data for presentation. Definitions of categories were produced using the descriptions of participants in an attempt to avoid bias. Selective coding is the “process of integrating and refining the theory” (Strauss & Corbin, 1998, p. 143), in which a storyline is developed through the identified relationships. Through this it was uncovered that although executives valued the concept of
stewardship in their current work environment and believed it contributed to positive outcomes, they described a malaise in the system, in which they felt short-term outcomes and processes were taking priority over the long-term well-being and sustainability of the public service. This storyline was the driver that impelled the research forward to not only better understand the concept of stewardship, but also the barriers and facilitators of this concept.

The fourth phase of data analysis involved the development of visual diagrams to further comprehend the data. Major categories identified through data software were assigned to individual cue-cards to be moved around, and eventually mapped out by hand both vertically and horizontally. This strategy, known as concept mapping, allowed the researcher to reduce the data into three major themes of stewardship: dimensions, barriers and facilitators. Moreover it allowed for the visual identification of themes and patterns which helped to detect interconnections and meanings in the data. Following concept mapping, tables were created to organize the condensed material into a simple format for “reflection, verification, conclusion drawing, and other analytic acts” (Miles et al., 2013, p. 91). More specifically, two tables were created, one for barriers and one for facilitators of stewardship, as outlined by participants. Each table included a column for the category, the specific code of reference as well as a column for a quote taken directly from an interview to highlight the point. The last column of each table was used for the researcher to include any notes or further explanations. Concept mapping and tables were used to not only condense the data so that it was easier to interpret, but also to provide a credible and trustworthy analysis. As outlined by Miles et al., (2013) sound analysis “requires, and is driven by, displays that are focused enough to permit a viewing of a full data set in the same location and are arranged systematically to answer the research questions at hand” (p. 108).
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In the final phase of data analysis, to reduce vulnerability to bias, a test of inter-rater reliability (IRR) was conducted to assess the consistency of judgement between coders. The method selected for determining reliability was Cohen’s kappa, which is considered one of the most robust measures of IRR and is used widely in academic research (Carletta, 1996). According to guidelines of Landis & Koch (1977), a kappa coefficient between 0.61 and 0.80 establishes substantial agreement, while a kappa of 0.81 or above can be considered as almost perfect or perfect agreement. A research assistant acted as a second coder and was given a copy of the codebook. The study author met with the second coder to discuss the coding scheme, including the definitions, examples, and classification rules in order to establish a common understanding of the codes prior to coding. Following this discussion the second coder was given just over 10% of the data to code. The results revealed a kappa of .78, signaling a substantial level of inter-rater agreement. These independent coding efforts were subsequently compared with a third coder and the differences in coding were discussed until an excellent level of agreement was reached.

Results

Defining the Concept of Stewardship

The majority of participants (14 out of 15) replied that they were familiar with the term stewardship in an organizational context. When discussing their personal understanding of the concept of stewardship within the workplace, responses fell into four themes.

Two themes were characterized as moral rules or beliefs: 1) *service over self-interest* and 2) *sustainability of the public service beyond one’s career* which in turn influenced behaviours in the workplace. The two remaining themes were conduct-based: 3) *working with a collective*
orientation and 4) mission-focused management of resources, which represented the mode or standard of behaviour influenced by the moral rules or beliefs.

**Service over self-interest.** The dominant response among executives when asked to define stewardship was the notion of service over self-interest, referring to serving the broader government-wide goals over one’s personal or departmental interest. Stewardship was described as a commitment to the common good as the over-arching goal and focus of all work, providing value for the public interest. At an individual level, this could be manifested through a focus on organizational goals as opposed to career advancement or individual work tasks. “I think that’s a key to stewardship, is that A) it’s not about you” (Executive 10, EX-2, Male). “[Stewardship] for me it is taking responsibility for your work unit, for your departmental mission. It’s just like taking the responsibility of the department or of the mandate as well as the work” (Executive 11, EX-1, Female).

Participants explained that this element of stewardship can be identified based on conduct and how decisions are made:

“I guess it's really for the good of the agency, not for their own personal good. . . .when it's a tough decision that you know that it needs to be done to meet the mission, meet the vision, whatever, of the corporation and not them personally. That's when you see it.” (Executive 13, EX-2, Female)

On a collective level stewardship was described as the alignment of visions towards the common good: “everybody has to be willing to look for the ultimate outcome to be served rather than the immediate empire building to be served” (Executive 10, EX-2, Male, EX-2, Male). Another
participant explained that this vision involves prioritizing the public good above their departmental agenda. She described a situation in which a departmental objective may conflict with providing the best possible service to the public:

“In the Government of Canada there’s also broader stewardship where we’re responsible for our own organizations and our own deliverables, and then we’re asked to look beyond that in terms of what is part of the greater good for the government, for the taxpayers, for the people.” (Executive 2, EX-3-5, Female)

Sustainability of the public service beyond one’s career. This theme involved taking a longer-term perspective through ensuring that the organization succeeds in the present, but also for future generations. According to participants, stewardship involves acknowledging the impact of current decisions on long-term objectives and ensures organizational resources are used effectively to develop and maintain a sustainable public service. Executives believed a focus on long-term objectives, as opposed to short-term goals, can help ensure that entrusted resources are improved upon for the next generation.

“...I think of it as referring to the concept that as a manager part of my role is to ensure that when I leave, things are going to be in at least as good shape as they were when I came; that I’m not depleting the organization ... either driving the good people away or letting them all grow to be 64 years old at the same time; or you know, that the human resource base is being renewed and tended to; that the processes are being tended to; that everything about the organization that I’m responsible for is tended to so that it's in good shape when I leave.” (Executive 10, EX-2, Male)
Executives described stewardship as the acknowledgement that while short-term government objectives are critical, it is also important to assure that long-term priorities, such as the functioning of the public service organization and its employees, are upheld as well. When describing a leader who exemplified stewardship of their organization during a crisis, one participant stated:

*We couldn’t do it to our employees. We couldn’t continue to patch and fix an organization where our employees went through sort of a rollercoaster of workload and pressure and demand. We had to stabilize the agency, both for the external users and for internal purposes. . . . he understood that he had two roles: one was an external focus of service to the public, and supporting government goals. You know, the passports... in the post-9/11 era, it was pretty critical to our anti-terrorism agenda. But he also understood we had to fix it once and for all for our employees. . . . that goes back to what the nature of the public service should be, right; which is for the greater good of the country, long-term, sustainable improvement of Canada”* (Executive 5, EX-3-5, Female).

Sustainability also referred to improvement and innovative approaches to practices and procedures and putting “*in place the best programs that can really improve the level of innovation in the country, so we have very common goals*” (Executive 14, EX-3-5, Male).

*“We were building and improving an organization not just to resolve one particular crisis but to ensure it was sustainable. And we did that. And it was actually recognized as a best practice across government. Innovative change, didn’t cost us a lot of money. We changed the culture of the agency. We built a longer vision, a sense of what the agency*
meant in sort of the greater government, which I think are elements of stewardship.”

(Executive 5, EX-3-5, Female)

**Working with a collective orientation.** Participants recognized that one of the best ways to emphasize a shared purpose towards the public good was through partnerships, networking and the sharing of information. According to participants, stewardship could also be described as the realization “if you don't have the collaboration of key stakeholders and all the players and those involved in the project, it's not going to go anywhere” (Executive 4, EX-1, Male). A sense of stewardship was strengthened when executives empowered others and encouraged the development of skills and abilities in their team members. Participants explained that the more knowledge and power was spread among the collective, the more the organization was able to thrive. As one executive acknowledged:

“You never have sort of infinite wisdom on something. You have to empower [your team] to think differently to be able to assemble the best information for you. . . . So you’re managing down with your team, but you also have to manage up with your own boss and his network.” (Executive 7, EX-2, Male)

As one executive explained, stewardship involves the realization that all elements need to be brought together to ensure the success of an initiative.

“Ok well I have to collaborate because, yup, we’re all in it together, so we might as well participate… it comes from a very different place. This comes from a knowing or from a philosophy of how you pull resources together to achieve a greater goal.” (Executive 15, EX-3-5, Female)
Another participant explained how this collective orientation helps to keep the organizational functioning effectively, even in the absence of a leader: “If [the leader] knows that something is going on, he probably passes that on to us, so that we also know it. Which means that if he gets hit by a bus, there are other people who know what he knows” (Executive 10, EX-2, Male).

Two participants discussed what can happen when an organization works without a collective orientation. When information and power are not properly distributed, members of an organization or work team can become dependent on particular individuals to manage certain functions. As a result, the rest of the organization does not learn how to perform these functions, which leaves the organization vulnerable to risk when these individuals are no longer around. One participant illustrated this point by describing a situation in which he was moved to a new public service department. He soon discovered that the department’s reliance on one particular individual caused major dysfunction:

“I had no idea what I was doing. And so I was relying on these folks, and it quickly became apparent, if I couldn't get a hold of that guy, I wasn't getting any of the answers because his staff were so nervous. I mean, this one woman, like, literally would cry. . . . She does know what to do. She's just been led to kind of operate in an environment where she did nothing without his approval. And so he happened to be on sick leave at the time, and so I was trying to get people to stop relying on him and rely on themselves. They could not do it. . . . And so it creates a very tense organization. It creates people who don't have faith in themselves. It's certainly, frankly, it's a waste of resources. You're paying people very good money not to work because this guy's doing it all. . . . But it's
fascinating to look at the dysfunction that can become ingrained. And I don't even think people see it necessarily. They just become a part of it. And they don't kind of understand that unhealthy relationship that's grown up between that manager and the rest of them because they're just so co-dependent.” (Executive 12, EX-3-5, Male)

**Mission-focused management of resources.** Management of resources referred to safeguarding the resources (such as allocated funds) for which government departments are responsible and ensuring that they are utilized in a fair, sound and ethical manner accountable to the taxpayer and in accordance with established government policies and procedures.

“Our understanding at least in the public service environment – is the role that the public service has as a caretaker of government... funds and resources, and by extension the taxpayers’ funds and resources. So proper stewardship means its proper care and due diligence in using these resources.” (Executive 9, EX-2, Female)

“So we talk about financial stewardship, of making value for money decisions and not wasting taxpayer dollars and making sure that we have the financial controls in place to say if we're spending money it's for the right reasons.” (Executive 13, EX-2, Female)

“I’m being a steward of taxpayers’ dollars. My salary is paid by Canadian citizens, and I have a job to do, and I do it to the best of my ability. So that's how I would interpret stewardship.” (Executive 1, EX-1, Male)

Many participants also mentioned the appropriate handling of information as a trusted resource: “But we talk about data stewardship, so we have a lot of data here, obviously, from
many sources, so we have measures in place to protect the data, the confidentiality, the signing in, all that good stuff.” (Executive 13, EX-2, Female).

The four key elements to define stewardship in the public service, as described by participants, are labelled and summarized in Table 10. Additional quotes to highlight these elements can be found in Appendix F. Together these principles and practices are believed to shape stewardship as an organizational approach.
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Table 10

*Key Elements to Define Stewardship in the Public Service Based on Participants’ Reports*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Service over self-interest</td>
<td>Motives align with the higher purpose of the organization as opposed to personal gain. Exercise of power is guided by shared values and ethics</td>
</tr>
<tr>
<td>2) Sustainability of public service beyond one’s career</td>
<td>The willingness to be accountable for a greater good for future generations</td>
</tr>
<tr>
<td>3) Working with a collective orientation</td>
<td>The propensity to work in a collective manner where knowledge, resources and power are shared across boundaries of departments and disciplines to connect individuals and create opportunity for the organization</td>
</tr>
<tr>
<td>4) Mission-focused management of resources</td>
<td>The planning and management of resources on behalf of the Canadian people and public interest in an ethical manner</td>
</tr>
</tbody>
</table>

The need for stewardship in the public service work environment

Across informants, many respondents valued the practice of stewardship in the work environment but acknowledged the need for improvement. Several participants stated that the long-term protection of the public interest was being eroded by organizational barriers to stewardship, mostly at the systemic level. Frustration and disengagement among the executives
interviewed was evident as they described rigid strategies and slow bureaucratic processes that hindered their ability to improve service quality, disconnecting them from the purpose of their work. As one participant described: “I think there is an element of broad stewardship absolutely missing”. This participant labelled the issue as a “malaise”, referring to an illness beneath the surface of the work environment: “You can’t pinpoint it. Because people still come to work and they still work super, super hard. But there is a malaise” (Executive 5, EX-3-5, Female).

In addition, when discussing stressors experienced at the executive level respondents discussed factors related to an increased workload, lack of resources and role stress. As one participant mentioned “workload is an issue” since “execs routinely work in excess of 60 hours a week, when they’re not sick”. (Executive 3, EX-1, Male). Another respondent explained “so the frustration comes from not having enough people to do what they feel is being asked for them” (Executive 5, EX-3-5, Female). Across participants, considerable comments were made regarding role conflict and ambiguity. As one executive reported: “I think at times there are conflicting views of roles. And also, it could be different views of what should be the priorities and how things should be done” (Executive 14, EX-3-5, Male).

Comments such as this were frequent across respondents, and reflected the aftermath of re-organization and mergers across the public service. Another participant explained how uncertainties regarding roles and accountabilities can emerge following re-organization, creating a significant challenge for executives:

“So I've got a lot of really good people, but I don't really have really good roles for all the really good people. I've got a lot of high-level people who, many of them, are well
According to participants, this issue of role stress was a major challenge to effective collaboration and organizational well-being. As one executive explained:

“So people didn’t know what each other did. There was a high level of cynicism, which just kind of meant that, you know, people weren’t committed to their jobs, which makes collaboration kind of difficult if you’re working with people that you know aren’t dedicated, or if you’re being asked to work with people and you’re not dedicated.”

(Executive 12, Ex-3-5, Male)

Thus, results reflected the need to strengthen stewardship and tackle the “malaise” that has invaded the system. According to the results, strengthening a sense of stewardship may play a role in reducing the negative impact of stressors caused by re-organization and downsizing.

**Barriers to Stewardship.** Several themes arose when participants reflected on organizational barriers hindering stewardship in the public service. The concept mapping diagram used to categorize barriers to stewardship can be found in Appendix G.

**Disempowering work processes and practices.** According to participants, disempowering processes and practices involved methods of work in which employees felt they had little control and/or little input in organizational decision-making. These include top-down decision-making, organizational rigidity, issues with the promotion system, lack of support for risk-taking, lack of resources, and a focus on output over employee well-being. Participants believed such factors acted as barriers to serving the public interest in a long-term context as they had far-reaching
impacts on executives and the quality of public service outputs. One participant reflected that when decisions are implemented without incorporating different perspectives, “there are flaws” and “it’s obvious that expertise and perspectives were missing at that stewardship table”. As a result, employees feel “less empowered”, and “there’s a sense that they aren’t fully in control of their sphere of work” (Executive 15, EX-3-5, Female). One participant felt that there was a lack of “idea generation” and “working things through the system, discussing them”. (Executive 5, EX-3-5, Female)

Top-down decision making. Executives described their frustration when decisions that directly impact their work are made at higher levels, without their input. As one participant described, it is challenging when “ideas come from the top and are imposed, whether they're really what a subject matter expert would recommend or not” (Executive 5, EX-3-5, Female). According to another executive: “If the decision comes from outside of your control, there's not much you can do. You can only adjust, see what can be recuperated, and realign” (Executive 4, EX-1, Male).

The influence of political imperatives was identified as a specific barrier to practicing stewardship and serving the public interest, consistent with top-down decision making.

“Unless it's something the government really, really wants, and if the bureaucracy doesn't agree with it, it's irrelevant. So if the bureaucracy wants something and the political system wants something, the system moves. If just the bureaucracy does and the political system doesn't, things don't move. And if the political system wants something, it moves.”

(Executive 5, EX-3-5, Female)
Organizational rigidity. Organizational rigidity was used to describe structural and onerous procedures that made it difficult for participants to take control of their work and practice stewardship. Constant reporting and manoeuvring layers of approval were among the many formal processes cited as frustrating for executives. Participants explained that such processes required an excess of steps, time and energy and this hindered their ability to work efficiently towards departmental objectives. The amount of onerous procedures and paper-work built into the organizational system acted as barriers to the ultimate organizational mission: effective and efficient service to the public.

“And so the barrier that’s being created is that there’s so many of them you can’t get to the [work] that you need to have done, the substantive business of the department because you’re responding to Treasury Board all the time on stuff that’s repetitive and duplicative, and they change their minds. So you get caught in this paperwork, maelstrom of paperwork, and you can’t get to the core business to be efficient. So while I highly value having some mechanisms in place, I think they need to ask themselves are these many required?” (Executive 8, EX-1, Female)

Issues with the promotion system. Participants noted that another systemic barrier to stewardship involved the career advancement of organizational leaders. Participants discussed incidences where some employees had advanced through the system for unfitting reasons or “rising very quickly ahead of their abilities”, contributing to many issues at the interpersonal level that would eventually impact a context of stewardship (Executive 8, EX-1, Female). For instance, some employees had been promoted to management positions when they did not have the proper skills and competencies to manage others effectively. As one participant explained,
“the biggest weakness in our system” involves the fact that experience and expertise are weighed heavily when advancing employees through the ranks of the public service, while interpersonal skills are not properly assessed. She elaborated:

“People get promoted to get them off your plate. And there are too many managers with sort of Jesus complexes, who think that, well I'll be able to fix this individual. I believe people should get second chances, but not third and fourth. But people get promoted to move them on, period. People don't give honest references.” (Executive 5, EX-3-5, Female)

Lack of support for risk-taking. Many executives felt that their current work environment allowed for very limited risk-taking, hindering stewardship through organizational sustainability. Limited support from their superiors for innovative solutions and trial and error thwarted opportunities to openly discuss mistakes and learn from them. Without these learning opportunities participants believed that innovation is stifled, as is organizational growth and sustainability. A participant who demonstrated frustration with this low tolerance for risk explained:

“And things go right, things go wrong in massive operations. But if your concern is always nothing can go wrong, you don't allow anything to go right. You don't allow for innovation, you don't allow for initiative because you're too preoccupied with perception and – I'm not sure what the other word I'm looking for – how things appear, appearance.” (Executive 5, EX-3-5, Female)
Participants acknowledged that the lack of opportunities to think independently and challenge traditional ideas resulted in a demoralized and inefficient public service. Participants believed this leads to public servants who are “robots” and “cookie-cutter” type of executives.

“I think people have given up. They just come in in the morning, do their job. ... what do you think we should do tomorrow? They're all going, well, it doesn't matter what we think. This is what the organization is going to do, so I may as well answer that.”

(Executive 6, EX-2, Male)

Participants felt they were not trusted to take calculated risks within their department. One participant explained: “I spend more of my time defending things I've done than improving, working on improving.” (Executive 6, EX-2, Male). As a result of this low tolerance for risk taking, executives felt disengaged from a common purpose towards the common good.

_Lack of resources._ Participants believed that a major challenge to working with a collective orientation was not having the adequate resources to do so. These resources include time, staff and money. For instance, when the amount of time given to complete a task was insufficient it became difficult to exchange information and align objectives. When time deficiency occurred “you're going to let the collaboration slide in favour of meeting the deadline.” (Executive 10, EX-2, Male). Another participant explained: “I don’t think the system allows for it because there’s no think time. There’s no time to reflect and plan. It’s initiative to initiative to initiative, crisis, crisis, crisis.” (Executive 5, EX-3-5, Female).

As a result of organizational down-sizing across the public service, participants felt their workload had increased while the available resources had decreased, challenging them to do
more with less. In describing her work unit one participant commented: “I think that everybody's got their head down, working really hard on their individual thing because they don't have enough people to give them that time to look up and look horizontally and look ahead.” She attributed this to government reform: “Because the policy work, program work that used to be done by three people is now being done by one. And all they can do is execute their own task. And that's a problem.” (Executive 5, EX-3-5, Female)

Doing more with less was also described as a threat to sustainability. According to participants, while cutting back on public service spending seemed beneficial in the short-term (for the government mandate), it created issues for the future by limiting operational functioning, as well as investments in constructive government programs and initiatives. As one executive explained:

“Our budgets are being cut. Our assets are not being invested in. And so the quality of the assets are going down. People are coming and going, the demographics. People are retiring. They're not hiring young people. So it makes it harder to meet the operational needs…” (Executive 6, EX-2, Male)

Focus on output over employee well-being. Participants felt that the current system focused too heavily on formal processes, procedures and output and seemed to be less concerned with the health and well-being of employees. This lack of care and concern for the well-being of employees was mostly evident through management practices:

“Number crunching... the old way of reporting is that we want to know numbers. They're not necessarily interested in the health of the organization, how people feel. is our
employee engaged, have employees the right competency for the work that they're doing, what we're asking of them? So we're getting there slowly, but we're not there yet. So the biggest barrier is to bring our senior management to understand that not only numbers matter, okay, but people too matter, even more so.” (Executive 4, EX-1, Male)

**Competitive environment.** Participants believed that one of the biggest factors hindering stewardship was competition that arose between units, departments and outside organizations when working on a similar issue.

**Competition at senior levels.** Participants observed competition between ministers regarding political matters. In this context, participants felt that contradictory approaches to an issue without proper collaboration did not allow for efficient work throughout the system. “Well, there's two parallel systems. There's the public service, and then there's Minister's offices. And they don't always align. And the office of different ministers are very often very clearly competing against each other.” (Executive 3, EX-1, Male) Another executive stated: “I think it's to the detriment of the Canadian public because who knows whether the Canadian public will get value for money? . . . It's all about competition, or people at the top” (Executive 8, EX-1, Female).

Some participants felt that competition stemmed from a difference in mandates and priorities. It was recognized that this resistance to collaboration at higher levels sets a bad example for the rest of the organization.

“You have an event, and all of a sudden you've got five ministers who are wanting to be at the event and have their name in the press and kind of be the one that says the
Government of Canada is taking care of Canadians. Because the politics matter. It's really bad public policy in the sense of how we manage events.” (Executive 12, EX-3-5, Male)

One executive shared the experience of working in a unit where information was not openly shared which resulted in the discovery that he had been working on a forecast that was being developed in another part of the organization. Of course, this situation reflected a lack of stewardship, which was believed to be caused by competition at the senior level:

“And their ADM is kind of competing with my ADM. So their ADM will try and poke holes in my forecast ..., so my ADM will come back and go hey, the ADM of Fiscal thinks that your Quebec number's wrong. Why does he think that? And so yes, ... Like a couple of kids fighting for attention, but it's at the ADM level.” (Executive 1, EX-1, Male)

Territorial over work/expertise. Participants described “turf wars”, referring to situations where employees became territorial of their work, guarding their responsibilities as opposed to sharing them with employees from other units or departments. In these situations it was difficult to align objectives and work collectively:

“And I think it was an issue of who had responsibility for what, and I think there was a kind of territoriality. People are really a bit more concerned about what's their territory and less about, well, let's work together to solve this. So I think people were not focused enough on what do we have to do for Canadians and as the Government of Canada, but they were more concerned about what do we have to do as [department x], and that part of [department x]” (Executive 14, EX-3-5, Male)
One participant described her experience when attempting to align visions:

“I think we have issues there and having possibly a lot of experts in the room, all having their own perspectives on things, and acting and feeling like experts, debating and arguing for their own domains of expertise, and not looking at what they're trying to influence and what they're trying to achieve and the community that will be impacted by those changes.” (Executive 15, EX-3-5, Female)

Participants believed that another barrier to stewardship and thus the sharing of information within a department/agency was the desire for power and control over a certain subject matter. “You know, if you had policy being done in two or three different places, they were competing with one another because they saw themselves as the policy experts” (Executive 12, EX-3-5, Male).

“People try to retain information about their own work unit. You don't want to show how work is organized, who's really working for you, how you organize your budget, so that other people within the organization won't be able to use that information against you. . . . You're practically at war with the rest of the organization when there's a climate like that. It's more stressful, there's little to no cooperation, so you really work in silos and you don't share information between units.” (Executive 3, EX-1, Male)

Tensions often arose during threats of cutbacks, where units within the organization felt they needed to compete with each other to prevent losses. This resulted in a stressful work environment where units did not cooperate or share relevant information with one another:
“I've seen it where managers of another part of the organization couldn't see a corporate benefit. And instead of managing on behalf of the whole organization, they managed on behalf of their work unit at the expense of others. And it becomes an us vs them. It becomes very... it's very dark. And it's not fun for the employees because they feel like it's a battle, and that we're not sort of working together, we're not sort of working in the right direction, that the other work unit doesn't respect our work or is either denying information or denying opportunities, or we can't get our work done because there's not a sharing, there's not a cooperation that's going on.” (Executive 7, EX-2, Male)

**Facilitators of Stewardship.** Executives recognized many facilitators that contributed to a context of stewardship. The concept mapping diagram used to categorize facilitators of stewardship can be found in Appendix H.

**Empowering Work Practices.** Participants believed the main driver of stewardship involved organizational practices that empowered them, helping them to take more ownership over their work and directly contribute to organizational outcomes. As organizational leaders themselves, several participants discussed ways in which they enabled open dialogue and participative decision-making within their work environment. Many participants agreed that providing their employees with more feedback and opportunities to develop and improve their skills helped boost the morale in their work unit and further stewardship behaviours. Participants also felt it was important for all employees to understand how they added value to the organization and the common good. Empowerment was generated through several different mechanisms at the interpersonal level: providing employees with clear objectives, clear significance and clear roles and accountabilities, transformational leadership and recognition.
Clear objectives. Executives highlighted the importance of ensuring that work objectives were agreed upon by everyone involved and that the requirements to achieve these goals were clear and well understood to align visions with the public interest. As one participant mentioned, it is important to have “clear terms of reference and scope of work. Absolute clear clarity on that. And that's really your touchstone or your foundation” (Executive 2, EX-3-5, Female).

Participants provided various examples of ways in which executives can provide clearly defined objectives in the work environment. Participants stressed that executives should be “transparent and clear, and making sure people understand what is expected of them” (Executive 12, EX-3-5, Male). Furthermore, clear expectations should be provided by executives “at the outset” and that they should be “following up” with their employees to make sure they are understood (Executive 1, EX-1, Male).

Clear significance. Results also indicated that in order to align objectives in the work environment it was crucial for all employees to understand the meaning or “the why” behind the objectives. As one participant explained:

“Well, I think like any group that is working together, if you communicate the whys, you know, a lot of times, you know, the objectives are very different and maybe frustrating, but if we don’t understand why they have this objective and why they have these constraints, well, there's going to be frustration.” (Executive 11, EX-1, Female)

To facilitate a context of stewardship participants believed managers, especially those working at higher levels of government, should share information on why decisions are made and provide “solid rationale” when work is delegated to employees (Executive 1, EX-1, Male).
As one participant explained, being diligent with organizational resources, such as money, requires proper communication from higher levels of government: “so the systems have to be able to give you the information so that you can as a manager make good decisions” (Executive 8, EX-1, Female). Another executive stressed that transparency is important not only during the decision-making process, but also following the outcome:

“We have to make sure that we're constantly sort of communicating why decisions are made. I think in general, in the federal government, we do a great job of engagement to the point of a decision. . . . But when the decision ends up being contrary to necessarily where it was predicted to go, it's too easy to move on without sort of providing that feedback back to staff to say okay, we thought it was going to end up here but it actually ended up over here for a variety of reasons. And so, unless you close the loop, they end up very frustrated.” (Executive 7, EX-2, Male)

Participants valued a clear understanding of how they are contributing to the public good. This included clarifying and defining “what the agency meant in sort of the greater government”. (Executive 5, EX-3-5, Female) and “in the macro sense, do I understand what my organization is doing?” (Executive 7, EX-2, Male).

Executives believed that understanding how their efforts contribute to the public service mission provided them with a meaningful purpose in their work, and helped to keep them motivated and engaged. As one participant explained, certain work units or departments are removed from the day-to-day policy of the government, thus, a clear understanding of the significance of their work helped to keep employees engaged:
“So in these types of jobs, there's always sort of some overtime right at the end. The deadline is always stress, and there's a big crunch. And we always knew that the numbers we were providing were actually needed by the Bank of Canada, by the Department of Finance, by other economic analysts and international agencies, that people needed an accurate picture of the Canadian economy. And so that helped me.” (Executive 1, EX-1, Male)

Another executive recognized that communicating the mission to his employees was essential for stewardship:

“So basically, through a lot of discussion, working groups, trying to make them understand their true meaning and their contribution to the organization, I was able to bring them to where they are right now, where they feel they know and they contribute very positively to the organization.” (Executive 4, EX-1, Male)

Clear roles and accountabilities. Having exceptionally clear roles and accountabilities was stressed as a significant facilitator of stewardship.

“And so if there's the one thing that I really think we need to have in our – you call it stewardship; I'll call it governance – is clear accountabilities, clear responsibilities. And that helps with security I think. People know who the boss is, know who they're accountable to, and are comfortable knowing that my boss said this is the right way to do it, I can go and do it.” (Executive 6, EX-2, Male)

Another participant stressed that executives should “invest the time to really understand” organizations outside of government who they are accountable to. This participant explained that
having clearly defined work gets employees “aligned better” (Executive 12, EX-3-5, Male) to create a more collaborative work setting and decrease competition. One executive explained that another way to help employees grasp their role and responsibilities is to help them understand the roles and responsibilities of others:

“I’m purposefully assigning things to certain DGs that would not be normally their stuff. And I’m just doing it to break them out of the mould, just to say you need to have an impression. You need to have some sense of this other work. Frankly, it just starts with forcing the conversation.” (Executive 12, EX-3-5, Male)

As this participant further explained, assigning work to employees that is outside of their current role facilitated stewardship through helping “to make sure that people understand that they've got a greater vision of the whole than just what they contribute to the whole”.

*Transformational Leadership.* The majority of executives interviewed mentioned that leadership can play an important role in facilitating stewardship. The leadership traits described by participants were consistent with the process of transformational leadership, such as communicating the organizational vision and explaining how to attain this vision, leading by example, articulating each follower’s role in fulfilling the shared vision and supporting the development of followers (Bass, 1999). One participant described how senior workers can influence stewardship among their colleagues: “Good stewardship, for me, is really about having good process, being transparent and clear, and making sure people understand what's expected of them” (Executive 12, EX-3-5, Male). Several participants pointed out that the advancement of stewardship needs to start at the top – with the influence of senior managers, as one participant explained:
“It has to come from the top, to a degree. I think that it is necessary, but not sufficient for the senior leaders to show that attitude themselves. If they don't show that attitude then there's no way anybody else will either.” (Executive 10, EX-2, Male)

Senior managers could influence stewardship within their work unit by setting an example, being “prudent and proper” in how resources are dealt with and to “lead by doing, lead by example” (Executive 12, EX-3-5, Male). Another participant described how her superior influenced stewardship within her work environment: “So for me, she’s a leader who walks the talk, who’s supportive, who demonstrates, you know, in every aspect of her work and her leadership. And that’s hugely helpful, and then that cascades down.” (Executive 2, EX-3-5, Female)

Participants believed that stewardship needed to begin at the highest occupational level: “it's about communicating the visions, the mandate, the accountabilities, and then going to a very... bringing it down to the performance agreement with people.” (Executive 11, EX-1, Female). Moreover, leading stewardship was suggested at all levels of government, “starting from the Clerk and the senior deputy ministers” (Executive 14, EX-3-5, Male) with this influence effectively moving down the hierarchy. Another participant described stewardship exemplified by one of her superiors: “He wasn't a huge personality, but that was the force of his will and his personality that brought me around, but also all of my colleagues around, to understand we are, once and for all, in it together” (Executive 5, EX-3-5, Female).

Recognition. The majority of participants expressed dissatisfaction with the current reward system which they believed focused more on measurable outcomes rather than genuine efficiency, and hindered a context of stewardship. Executives felt that the rules and regulations
of the formal reward system hindered their sense of control, and they were often unable to reward employees who they felt deserved compensation for serving the public interest.

At the executive ranks, participants tended to agree that the most meaningful way to compensate and facilitate stewardship was through “recognition instead of rewards” (Executive 4, EX-1, Male). One participant explained that at the executive level, tangible rewards are less important and being recognized through collective efforts is more meaningful:

“We want the handshake. We want the feeling we're being trusted, and that our abilities, our knowledge, our skills are being valued. And you don't get that recognition by working by yourself.” (Executive 3, EX-1, Male)

Another participant explained that executives desired more informal rewards: “I don’t think more structure to the system is helpful. I think the real rewards are probably giving someone an afternoon off or spending time to talk to them about their contribution and so on” (Executive 9, EX-2, Female). Positive feedback and recognition helped to assure executives that they were contributing positively to the organization, and to the public good. As one participant explained:

“So to be told that you did a good job, I tend to work even harder in that situation. Because I’m happiest when I know I’m doing a public service basically. And having outside stakeholders report back to senior management that things were going well and you know, that sort of thing was really welcome, and you know, we had a lot of very favourable feedback from our stakeholders.” (Executive 8, EX-1, Female)
**Fostering Collaboration (organizational level).** At the organizational level, executives acknowledged that agreeing upon objectives and deliverables can be challenging with the partnership of different departments or units. Working with interdepartmental initiatives or committees can involve the engagement of organizations from different backgrounds and mandates; and while the overarching goal is the same, participants recognized that often there are variances in vision.

*Establishing common-ground.* According to participants, moving beyond simply cooperating towards the sharing of power and resources at the organizational level involved aligning visions and respecting one another’s objectives. Thus, all parties involved in a shared project need to be willing to “give a little” (Executive 9, EX-2, Female) which involves open communication between departments to identify “common elements”, “shared interests” (Executive 10, EX-2, Male) and “establish common ground” (Executive 3, EX-1, Male).

Participants explained the importance of recognizing that different organizations share similar issues for the community and a government-wide mission:

“If you take it at the bigger level, right, at the issue of innovation in Canada, working together and trying to put in place the best programs that can really improve the level of innovation in the country, so we have very common goals, so that's really helping.”

(Executive 14, EX-3-5, Male)

“So it's not easy in the public service because everyone has their own agenda. . . It's a huge machine. So to bring different stakeholders with different priorities, departments that basically their program is totally, completely different than yours, so try to make them
understand that there’s something for them into this venture, that was the most difficult part.

But once people understand, and once people sit at the table and that they are all in it and are working towards an implementation of a government-wide solution, then after that it’s a lot easier.” (Executive 4, EX-1, Male)

Being open to different perspectives. Participants believed that better cooperation and collaboration between sectors, departments or agencies can occur when all parties involved in a project or initiative feel they have “a voice at the table” (Executive 15, EX-3-5, Female). Participants acknowledged that when working on an interdepartmental initiative it is important that each department involved is perceived by others as “credible, important, and adding value” (Executive 5, EX-3-5, Female). Equally, all parties involved in a collaborative effort needed to be open and willing to listen to different angles on an issue, approaching joint initiatives with humility and adaptability. As one participant put it, it is not so much about compromising; departments need to be willing to challenge their own operations and be self-critical in order to arrive at the best possible outcome for the greater good:

“You're never 100 per cent right, so even if you're 99 per cent right, you have a 1 per cent chance of improvement. So that's what I keep telling my staff. So even though we knew we were right in this situation, we did take it as an opportunity to learn, and we did make some improvements to our methods, our practices. And I'm hoping that the other department will recognize that and meet us halfway or also turn the page and say okay, you guys aren't that bad. . . So you got to be re-evaluating, listening to the other sector or to the other department. The expectation is to compromise. . . And I'm open. If I'm wrong then I'd like to be pointed out. Let's improve. Let's correct it. I love correcting things if it's
wrong. But I do not believe in a compromise solution because it just, at best it's going to be 50 per cent right. That's an unacceptable level.” (Executive 6, EX-2, Male)

Executives recognized that applying input from other departments and agencies within one’s department is “imperative” not only for departmental success, “but for the Government of Canada afterward” (Executive 4, EX-1, Male). This comes with the realization that “problems have become so complex that you don't own the whole problem” (Executive 12, EX-3-5, Male).

“There's a new level of acceptance here in this research centre that we're not the only ones deciding what we should be working on actually. What we're working on has to be required or needed by the rest of government. That's quite novel.” (Executive 9, EX-2, Female)

Another participant emphasized how shared decision-making between different departments created a better solution for the overarching goal, to best serve the needs of the public. Through describing the collaboration of his department with five other departments he explained:

“collaboration is an interesting one because they all have their lenses that they bring to an issue. And so part of our job is to kind of find either a way to have those lenses all focused together, or to find one lens that allows everybody to kind of see their work through it.” (Executive 12, EX-3-5, Male)

**Fostering Collaboration (interpersonal level).** Results indicated that fostering collaboration through building strong networks and partnerships among employees was an essential to building a context of stewardship.
Integrating different perspectives and ideas. At the interpersonal level, participants stressed the importance of open dialogue, incorporating different perspectives and making sure all stakeholder standpoints were communicated when approaching the work in their unit. In describing stewardship one participant emphasized “encouraging open feedback and hearing people’s options and their ideas. . . Directing when they need to, but hearing the input, all the angles” (Executive 13, EX-2, Female). Executives discussed the value in integrating employees from different roles and skill sets to include “different sort of approaches” when making decisions (Executive 7, EX-2, Male). Another participant explained that the collaboration of different roles is beneficial when dealing with challenging issues: “So the worse the problem, the more I rely on the people around me because they're going to bring perspectives and ideas and solutions that I'm not going to think of” (Executive 12, EX-3-5, Male).

Encouraging formal networks. A particular method used to foster a collective orientation and encourage working relationships was coded as “cross-pollination”; this involved bringing employees from different disciplines or with diverse yet complimentary skills sets to work together. Sometimes the cross-pollination of employees was built into organizational training:

“So if you come in as a computer person then they say okay, well, for this six-week course you're going to be the subject matter person. So they put you in the different role, out of your comfort zone, because it’s not your area of expertise, and then you have to work together, and in six weeks, design, collect and produce a survey for plot, start to bottom, right? And that's a really neat way of getting people to work together because they're a little bit out of their comfort zone, they're working on something that's not their
area of expertise, but yet they have to work together to get this survey done.” (Executive 13, EX-2, Female)

According to participants, cross-pollination enabled collaboration between employees who would not typically work together (outside of their direct work unit), which created a more networked work environment with lasting benefits for the employees and the organization. Participants believed that combining knowledge and skills from different disciplines or backgrounds would allow them to influence each other and ultimately contribute to innovative ideas and better outcomes for the public interest. Rotating employees around to experience different working groups was encouraged, “not enough to be disruptive, but enough that a few key people get to see what’s going on elsewhere” (Executive 10, EX-2, Male). Accordingly, rotating senior managers to different work units within their department was considered beneficial for sustainability:

“Some people work really well in certain environments and they get very comfortable and then they’re almost too comfortable and they don’t see the opportunities to innovate or to influence and make good changes, so I think that is also a good thing to do, is – it works very well here – is to rotate people.” (Executive 13, EX-2, Female)

Building personal networks. Networking at the executive level, both within and outside of one’s department/agency, was believed to facilitate stewardship throughout the organization. This was considered essential to achieve current work objectives, but as a pre-emptive technique to develop relationships and mutual trust for future interdisciplinary endeavours. One participant explained that, as an executive, you may be called to various meetings which do not appear to align with your current objectives: “Your inclination is I'm too busy, I'm not going to go. We
make sure we go to things so that we become part of the broad government anybody is thinking of as initiatives move ahead” (Executive 5, EX-3-5, Female).

Executives believed that developing closer connections extended beyond formal work meeting and initiatives.

“I’d say most of the work gets done, if not completely through the personal networks, then certainly initiated through the personal networks. It’s very rare that somebody has to make a cold call. It’s almost always at least initiated through personal network, and then maybe it grows to other people that you didn’t know, but it almost always starts with the personal network.” (Executive 10, EX-2, Male)

Participants described the different ways in which relationships can be nurtured by allowing employees the time and space to connect, such as organized picnics, barbeques, seasonal parties and scheduled coffee breaks. One executive described the advantage of organizing an informal lunch once a month with ADM counterparts outside of his department, before even commencing a joint initiative:

“And I said we don’t need to bring files, we don’t need to talk about work. But if we want to talk about work, great. But let’s just break bread together and kind of get to know each other and build relationships. And I think for me, that’s the fundamental base of everything is build relationships. That’s the mechanism or that’s the tool that makes the work a whole lot easier.” (Executive 12, EX-3-5, Male)

According to participants, these informal relationships contributed to open communication: “I think when people are more comfortable with each other, they’re more willing to pick up the
phone or send a quick email for just a quick question that otherwise might feel intimidated” (Executive 10, EX-2, Male).

Participants were quick to point out that it is important to nurture and sustain personal networks in advance, before collaboration of other units or departments is imperative:

“It’s my responsibility to sort of make sure that they understand that I exist, why we may need to interact at some stage, such that if need to call them on an issue, hopefully I’m not calling them for the first time when there’s a really big problem.” (Executive 7, EX-2, Male)

Another participant added, “It’s very difficult to create a network when you personally need one and you haven’t fostered it and engendered it over the years” (Executive 2, EX-3-5, Female).

Building and nurturing social relationships within and across organizations was believed to be an important facilitator of a stewardship context, strengthening trust and allowing for the sharing of knowledge and resources across networks.

The barriers and facilitators of stewardship in the public service reported by participants are summarized in Table 11.
Table 11

*Reported Barriers and Facilitators to Stewardship in the Public Service*

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Discussion

The present research contributes to the limited understanding of the concept of organizational stewardship among a unique sample of public service executives. Participants provided rich and contextualized information grounded in their personal experience of stewardship, as well as factors of the work environment which act as either facilitators or barriers of this practice. These findings showed some consistency with previous literature on the concept of stewardship; however the results went beyond conceptualizations of individual behaviour and provided much more detail with regard to the organizational context surrounding stewardship. Moreover, results revealed that executives are generally familiar with the concept of stewardship and believe it is an important approach to manage demands and realities encountered in the public service context.

Executives’ Conceptualization of Stewardship

A better understanding of stewardship among public service executives was the first objective of this study. Many executives described stewardship as serving the Government of Canada beyond personal (self-interested) goals or even the deliverables of a particular unit or department. They described “stewards” (those who practice stewardship) as operating in service to the public and willing to put the public’s interest above their own, a description which is consistent with previous literature (Block, 1993; Hernandez, 2008). Participants explained that the practice of stewardship was an important element in fulfilling the larger government mission: serving the Canadian public.

Stewardship was commonly understood working towards a greater purpose, one that reaches beyond the current government mandate and benefits the public service for generations to come. Participants believed that stewardship involves a collective orientation marked by financial
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integrity and the appropriate care and utilization of government resources that have been entrusted to them. While the majority of participants referred to management of economic resources (e.g., allocated funds), some participants also mentioned organizational systems and procedures (e.g., programs and service standards) as well as more subtle resources like time and individual opportunities as factors that can be capitalized to achieve desired organizational outcomes and benefit Canadian society long-term. This belief is consistent with organizational literature in which stewardship is described as using entrusted resources wisely and appropriately to meet the needs of future generations (McCuddy, 2008).

Stewardship was described as a recursive yet essential approach in which the moral rules or beliefs of “service over self-interest” and “sustainability of the public service beyond one’s career” influence how resources are shared and managed which, in turn, can strengthen stewardship principles. That is, when participants perceived a strong sense of stewardship within their organization they engaged in more stewardship behaviours. Likewise, scholars of public administration have suggested that the presence of core public service values, such as high regard for the mission and concern for the welfare of others, may ensure an internal sense of responsibility and accountability in this line of work (Dicke & Ott, 2002). Given the complexity of social and political issues a sense of stewardship was considered vital for both short term objectives (e.g., meeting objectives within the current budget year) and broader organizational goals (e.g., better service to the public).
Barriers and Facilitators to Stewardship

The second objective of this study was to identify the barriers and facilitators of stewardship in the public service work environment. This study found that factors that hinder or facilitate stewardship in the work environment can occur at both the individual and organizational level.

**Barriers of stewardship.** Participants described barriers to stewardship as mainly systemic in nature, centring on disempowering work processes and practices and competing objectives at the organizational level. While rigid bureaucratic policies and procedures are designed to mitigate risk and regulate compliance on important matters, these types of processes led executives to feel devalued, not trusted, and a lack of ownership over their work. Participants described a lack of support from senior management for intelligent risk-taking and experimentation and a low tolerance for mistakes. Results also indicated the current promotion system allowed employees to be promoted based on performance but not based on standards that are inherently important for organizational stewardship. In addition, recent government downsizing affected the time and resources needed to work collaboratively and more efficiently. Finally, competition among individuals and organizations created a climate that was not conducive to the effective coordination and collaboration necessary for stewardship.

Davis, Shoorman & Donaldson (1997) found that greater organizational controls are used when the motivations of executives are assumed to be individualistic and self-serving and early management theorists maintained that assumptions about employee motivations can create self-fulfilling prophecies (e.g., Argyris, 1957; McGregor, 1960). It appears that rigid procedures and organizational controls are likely contributing to the “malaise” discussed by executives. In this
context, executives may feel they are not trusted and do not have ownership over their work. As a result, they may be less likely to engage in practices that benefit the organization.

It is possible that when executives feel they are not trusted by the organization their sense of community may decrease, causing them to act in self-serving ways. Research on trust suggests that strict institutional factors may limit the degree of interdependence that can develop between parties, and hinder the emergence of interpersonal trust (Rousseau, Sitkin, Burt, & Camerer, 1998). In other words, control-oriented systems used to mitigate risk and avoid self-serving behaviour among executives can in turn produce disengaged and self-serving executives, which can hinder stewardship throughout the organization. In addition, a lack of resources adds to this frustration, as executives are unable to maintain efficiency and serve the needs of the community. As one participant explained, when executives are deprived of responsibilities that relate to their mandate they feel disempowered and may become unmotivated to act in the organization’s best interest. This is consistent with the literature on stewardship which states that high-level employees working in “controlling, less trusting climates” may be hindered from behaving as stewards because of decreased self-worth and self-control (Davis et al., 1997).

Competition regarding goals, expertise and resources was considered a major problem by executives. Opposition between organizational leaders had a ripple effect throughout the organization, and executives noted that this impacted a sense of stewardship throughout the department. Competition at the individual and organizational level was a threat to a collective orientation. In some instances, it caused executives to lose time working on a task that could have been more efficiently addressed through joint effort. In addition, competition over limited
resources created a stressful work environment where information and resources were being withheld and executives were unable to deliver the best service the public.

The results of this research align with public service literature that calls for changes to current system, suggesting that government institutions move away from hierarchical mechanisms and a risk-averse culture towards a more decentralized and participatory organizational structure (Paquet, 2008; Wilson, 2013). Given that authority and accountability in public service organizations are traditionally arranged vertically and because it is difficult to transform an organization’s structure it is important to consider different avenues of strategic subversion. More specifically, the stewardship barriers discussed by participants can begin to be addressed through organizational processes and practices at the managerial level. Of course, more research is needed to determine the specific organizational practices that may hinder stewardship among executives in the public service and how these barriers may differ by department.

**Facilitators of stewardship.** Through emphasizing trust instead of control, facilitators of stewardship involve interpersonal and organizational factors that empower and develop employees while guiding work towards a collective orientation.

Executives believed it was important for organizations to adopt a more open and transparent culture to facilitate stewardship. According to the results, executives require organizational support to exercise their judgement, participate in important decisions, and take intelligent risks when necessary. By providing more opportunities for growth, achievement, affiliation and self-actualization, organizations can optimize executive knowledge, skills and abilities contributing to organizational efficiency and promoting stronger stewardship throughout the organization. For
instance, when participants were given quality and timely information about organizational matters from senior levels they felt more knowledgeable and better prepared in the face of challenges, more engaged in decision-making and joint operations, and more comfortable to discuss and learn from mistakes. Our findings also suggest that when executives feel more accountable for the work in their departments they develop a stronger sense of purpose which can motivate them to extend their focus beyond short-term goals and work towards the public good. This relates to research by Pierce (2001) which argues that employees are provided with increased opportunities for autonomy they can develop a greater sense of ownership over their work, resulting in more pro-organizational conduct. On the other hand, a lack of power or control over work responsibilities may cause executives to feel as though their work has no impact and they may lose sight of higher level values, such as stewardship. Thus, increasing psychological ownership among executives may lead to greater support for stewardship within public service organizations. These results are supported by previous research which found that organizational practices that allow for greater autonomy can generate goodwill, fostering a sense of stewardship and inspiring employees to give back to the organization (Segal, 2012).

Results also revealed that a sense of stewardship was cultivated through clear communication regarding organizational objectives. This involved ensuring that employees clearly understood their roles, the scope and significance of their work, as well as how their work contributed to objectives on a larger scale. Our findings highlighted the need for senior leaders to promote and communicate the organizational mission to their employees, making sure that employees understand long-term goals and the mechanisms to achieve them. Results revealed that merely sharing information was not enough; employees need to develop a shared understanding of the broader organizational mission and where it is heading. Increasing the awareness of how one’s
work contributes to the public good may foster a greater sense of meaning for executives, increasing their involvement and commitment to achieving organizational goals. The research findings indicated that executives need to understand how their work fits into the larger landscape of the public service to be able to commit to serving this mission. As explained by Hubbard & Paquet (2016), stewardship requires that employees understand the reasons behind why they do what they do. This type of communication and coordination around the mission fostered a sense of community where executives and employees felt aligned towards the same larger purpose. In addition, this helped them to better understand the rationale and motives behind organizational decisions, generating trust and helping them to feel more aligned with the organizational vision. As a result, executives felt a greater sense of ownership and they were in a better position to manage organization resources with mission-focused intentions.

The role of leadership and ways in which executives could use their mentorship/guidance to facilitate stewardship was a strong discussion point in this study. Results highlighted similarities between facilitators of stewardship and empowering management practices consistent with transformational leadership (Bass, 1985). According to the results, senior leaders play a crucial role in fostering stewardship through setting an example for the rest of the organization. For instance, when executives demonstrate a collective orientation and are open to working on issues horizontally, these principles and behaviours become embedded within the organization. Our findings suggest that management practices within the public service should be empowering and inclusive to help instil stewardship at all levels. Participants also valued management practices that were focused on interaction, for instance, nurturing a sense of community in the workplace and engaging often with employees. These results support Block’s (1993) philosophy that stewardship involves partnership through empowering others. These
results also suggest that executives who adopt stewardship principles and translate these principles to employees through consistent demonstration can actively nurture, encourage, recognize and socialize a strong sense of stewardship across the organization.

Our findings suggest that informal recognition, through verbal acknowledgement, respect and meaningful work is one of the most effective ways to facilitate stewardship within the microsystem. Participants conceptualized informal recognition as feedback through praise, which can be as simple as a thank you. In this way, the expression of sincere appreciation, in person by a superior, can help keep the meaningfulness of one’s work front and centre. This is consistent with early organizational theory which states that consistent and frequent recognition tactics can motivate employees to adopt the organization’s values and carry out its mission (Herzberg, 1966). Notably, executives appreciated knowing that their work is valued beyond the completion of the task, and how their work contributes to broader goals. Hubbard & Paquet (2016) have highlighted the importance of putting people’s experience in a larger context, and our results suggest that this principle applies when giving recognition. Future research should examine if the type of organization plays a role in the emergence of this facilitator. Private sector employees are commonly motivated and rewarded with monetary incentives such as bonuses and commissions based on performance goals; however performance and efforts in the public sector cannot be measured as easily. Research has also implied that intrinsic rewards may be more important for public sector employee (e.g., Buelens & Van den Broeck, 2007; Wright, 2007), as they tend to be more committed to governmental goals and values. Thus, recognition as an organizational facilitator of stewardship warrants further examination.
A collective orientation recognizes that challenges cannot be solved by a single department or individual and partnership must be embraced to ensure best practices. At the interpersonal level, participants acknowledged the need to incorporate various perspectives in the decision-making process. This meant being open and adaptable to the interests of different employees and stakeholders, sometimes from outside roles and organizations when making decisions or facing organizational challenges. Public service scholars have argued that sharing power and providing opportunities for employees to feel more engaged in public service issues can help shift the focus from output to higher level values (Denhardt & Denhardt, 2000), such as stewardship. As discussed by Hubbard & Paquet (2016), stewardship involves the notion that intelligence and innovation can be fostered through a collective learning process, not goal-seeking or control. Correspondingly, findings indicated that the integration of different perspectives did not simply mean that stakeholders and networked arrangements should compromise on shared issues. The type of collaboration necessary to foster a context of stewardship involves engaging in the process of learning as a collective unit. In this situation, employees, stakeholders, units and departments with differing perspectives on an issue can "lean in" to a shared issue together. This means approaching a shared issue with humility, engaging in dialogue, finding common ground while being open to new ideas and adapting to new methods. This is consistent with the notion that stewardship requires adaptive capacities to generate trust and effective collaboration (Hubbard & Paquet, 2016; Wilson, 2013).

Findings supported the notion that working towards a common good transcends the hierarchy of roles or disciplines, and building networks is critical to organizational growth, success and sustainability. Likewise, moving employees laterally outside of their comfort zone and into different roles of public service work was identified as a facilitator of stewardship. Cross-
pollination creates opportunities for employees to develop social networks outside of their usual role and may contribute to a more interconnected and interdependent work environment. Executives who practice stewardship acknowledged that employee cohesion, and the combination of different skills, capabilities and expertise is critical to organizational success and sustainability. In fact, theorists of modern public administration have argued that in order to navigate dynamic and multifaceted challenges public managers must be aware and connected to various sources of support and assistance, beyond those of their own agency (Denhardt & Denhardt, 2000). This type of work environment can be associated with collectivism, where the needs and goals of the group (or the organizational as a whole) are emphasized over individual needs (Brewer & Chen, 2007). Thus, experiencing how work is done in different departments and agencies can help employees to grasp the larger picture and organizational mission, expanding their identity beyond their immediate work unit.

These findings suggest that the nurturing of formal and informal relationships can facilitate stewardship by helping individuals and organizations to develop trust and a shared responsibility for the common good. According to Hernandez (2012), interactive social processes can help employees to identify with common principles and objectives, in which they derive value from contributing to this collective welfare. While previous literature on stewardship has highlighted the need to foster relationship-centred collaboration (Hernandez, 2012) and develop partnerships and networks (e.g., Block, 1993; McCuddy & Pirie, 2007), this strategy of cross-pollination has never been discussed in detail. Future research should further explore how personal and formal networks can contribute to stewardship in a public service context, especially the role of cross-pollination in this process.
In summary, these findings reveal that although executives can develop behaviours that support stewardship, it is the organization and the system as a whole that creates a context within which stewardship can be actualized. Our research has demonstrated that a public service environment facilitative of stewardship may not only contribute to service efficiency, but also to executive well-being. This deduction can be made based on the finding that facilitators of stewardship helped executives to feel empowered, committed and engaged, while barriers to stewardship left them frustrated and unmotivated. Furthermore, our research demonstrates that a context of stewardship will only become realized among public service executives if collective organizational efforts consistently apply stewardship practices and behaviours. At the organizational-level, management practices, training and socialization programs are important facilitators of stewardship, as are workplace policies and decision-making processes that may create consistency throughout the organization.

**Practical Implications**

The main message emerging from this study is that stewardship can be strongly influenced by organizational factors, calling for researchers, practitioners and policymakers to consider what is needed of the public service system to help executives engage and promote organizational stewardship. Renewal initiatives such as Blueprint 2020 have made great strides to modernize and improve the Canadian public service by making significant changes to how public servants work and pursue service excellence (Wouters, 2014). While these initiatives to transform the public service are advancing, the Canadian federal government is a bureaucracy that includes power and political interest, with established patterns of conducting its work. Thus, facilitative methods to help these organizations effectively navigate complex policy problems of
the future should be focused on a more practical level of implementation. Our findings suggest the need to invest in and foster stronger stewardship at the executive level. This can be achieved by incorporating stewardship criteria into organizational policies, programs and strategies within this hierarchical structure. Furthermore, ongoing leadership assessment and training should be an integral part of career development for all executives to foster stewardship.

The following recommendations highlight areas of consideration to help executives facilitate a context of stewardship:

1. **Executive training programs should incorporate stewardship values.**

   As direct organizational leaders, executives are instrumental in producing empowering and collaborative conditions vital for stewardship. Organizations should advance leadership development programs to build and strengthen stewardship capacity in the public service. In such programs executives are educated on how empowering work practices, transparency, leadership and collaboration are important facilitators of stewardship in the public service. For instance, executives could be educated on how the allocation of employee across networks and boundaries (i.e., cross-pollination) may help to achieve larger organizational goals. In addition, these programs could train executives on how to successfully cross-pollinate their employees with other departments and agencies. Once trained, executives can effectively implement the necessary principles and practices of stewardship within their work environment.

2. **Executives should empower employees through management practices that contribute to stewardship at the organizational level.** Executive training should focus on developing a more open and transparent organizational culture. For instance,
mechanisms through which to include a wide range of employees and stakeholders in the decision-making process. Executives can also provide employees with more access to information, support, resources and opportunities to help them learn and develop. While public service values and mandates for accountability can limit empowerment to a degree, executives can learn how to provide their employees with more power to make decisions while still acting appropriately with regard to organizational values. According to the results, practices aimed at increasing employee autonomy and control can foster trust and empowerment, catalysts to stewardship.

3. **Executives should ensure that they are communicating a clear vision and mission to their employees.** As the results indicated, stewardship can be fostered when the objectives of the work are clear and employees understand their role with regard to these objectives. An important facilitator of stewardship involved helping employees to understand the significance of their work and how it contributes to the bigger picture. Executives should motivate their employees by constantly communicating how their work relates to the mission, vision and purpose of the organization. Furthermore, executives should provide sufficient support to help employees understand their roles, objectives and the significance of their work by holding regular meetings and engaging often with their employees. At the organizational-level, mission statements should be assessed through the collaboration of senior staff and key stakeholders to ensure that they are relevant, impactful and well understood. If mission statements are poorly defined or outdated they should be revised to ensure employee buy-in.

4. **Executives should build a collaborative capacity within and outside of their organization.** Results of this study emphasized the importance of efficient and effective
collaboration to achieve organizational goals and sustainability of the public service. Executives should focus on building personal relationships that can lead to successful partnerships necessary for a context of stewardship. To ensure successful collaboration executives need to look beyond the specific objectives of their own department towards bigger goals related to their mission. In addition, executives should learn how to approach complex problems with humility, and recognize the importance of adaptability and flexibility in collective work. Executive training should focus on developing the capacity to work with system-wide issues and linkages between issues through highlighting the skills and competencies necessary for successful collaboration when dealing with complex issues. In addition, organizations should create more opportunities for executives to interact across units and organizational borders, fostering a more networked public service.

5. **Organizational policies and practices should aim to enhance executive ownership.**

The evidence reported here showed that when executives were given more control to influence their work they felt valued and capable of making decisions that benefitted the organization. Likewise, when executives were permitted to take intelligent risks, this not only increased their sense of ownership but innovation as well. Finding the right balance between ensuring absolute capability and blind trust in executives may involve extensive and structured training while leaving room to make mistakes and learn from them. Current accountability procedures and mechanisms to ensure compliance should be reviewed in terms of the extent to which executives feel they are being too closely monitored or micro-managed. This can be achieved by including executives in discussions about how their work is done and how important decisions are made.
6. Executives should be more involved in decision-making and problem solving processes at higher levels through playing a larger role in the support of elected officials. Results demonstrated that executives wished to see that their input was valued and incorporated into organizational decisions. Thus, strategies to increase communication between elected officials and senior executives are important. For instance, executives should be informed of impending changes that can impact their work. Moreover, they should be provided with opportunities to ask questions, challenge traditional ideas and provide input regarding these decisions. This will enhance executive “buy in”, as they will better understand the directives given by senior leaders. Increasing this level transparency may enhance institutional trust and decrease perceived tension with regard to political initiatives.

7. Finding a better balance between production and well-being. As stated in the interviews, executives felt that the current system emphasized efficiency and productivity over the well-being of employees. This was considered a barrier to stewardship, which emphasizes the fair and ethical use of public service resources. Moreover, results indicated that there was not enough time built into the current system to collaborate effectively and achieve greater outcomes. While the pursuit of production and performance should and will continue in the public service, as should the pursuit of employee well-being.

   a. This would involve a developing a new approach to performance management where results are considered while taking into account the time required to engage in collaborative efforts and the collective learning process to deal with complex problems.
b. Results also suggested the need to further develop policies for organizational well-being that focus on ways to help executives manage their workload. The National Standard on Psychological Health and Safety in the Workplace (led by the Canadian Mental Health Commission in partnership with the Canadian Standards Association and Bureau de normalisation du Québec), has made great strides in providing a systematic approach to developing and maintaining a psychologically healthy work environment. Building on this, organizations could integrate stewardship into current stress management practices and policies, focusing on prevention of stewardship barriers (e.g., competition for resources) and the strengthening of stewardship facilitators (e.g., recognition) to help executives stay connected to the organizational mission and motivated in the face of challenging work demands. Organizational processes should be put in place to intervene if executives are overwhelmed by their workload and unable to connect their work to the larger context.

c. On a broader level, a psychological demands assessment process could help organizations to monitor the well-being of executives to ensure that their output does not come as the expense of their mental or physical health. An annual executive survey concerning work demands is another mechanism that could feed into such an assessment. For example, organizations should solicit feedback regarding work demands especially if executives are lacking adequate resources to properly conduct the work. In this way, problematic or monotonous processes, such as the approval process, can be fixed or streamlined to decrease time and energy spent on executive responsibilities that cannot be delegated.
8. **The organization can revisit how executives are being promoted and how skills and abilities are being evaluated.**

   a. Executive efforts towards stewardship, such as building a collective orientation and focusing on long-term goals should be measured and acknowledged in a fair and timely manner. Results from this study indicated that executives desire personal recognition, which increases their sense of value and motivates them to engage in stewardship. For instance, praise from senior leaders and creating opportunities for career growth are ways in which executives could be recognized to increase their sense of purpose.

   b. Recruitment, training and promotion practices should aim for the highest level of interpersonal competencies at work. While current public service leadership competencies articulate stewardship, we don’t know if the organizational structure has changed to support it or if executives are properly trained to foster it. Executives should be promoted not only for their technical skills, but for their interaction and other soft skills that help them lead and build a context of stewardship. Although it is important for executives to have technical skills and produce results, it is just as important to have the intuitive capacity to make connections, demonstrate strong communications skills and the ability to collaborate. Training and promotion practices should also seek executives who demonstrate a strong sense of buy-in for the organization’s mission by being trustworthy and benevolent. If organizations want executives to think beyond the organization and seek the needs of the Canadian public we need to make sure we are promoting those who demonstrate these behaviours.
Limitations

Despite the important contribution this study makes to the literature on organizational stewardship, the present findings should be interpreted in light of some noteworthy limitations. First, due to limited sampling further research is needed to establish the generalizability of these findings across all public service departments. Because the sample in this study consisted of volunteers from a larger survey this renders it vulnerable to self-selection bias. This means there may be some individual characteristics which predisposed participants to volunteer for this particular research study. It is difficult to know whether executives willing to participate in this study where more likely to criticize their work environment or whether they were more eager to discuss the positive factors of their work environment. It should be noted that efforts were made to collect a wide range of personal experiences as participants varied in age, experience, occupational level and type of organization. Indeed, important insights may have been missed due to the fact that only executives at work were contacted to volunteer for this study, which excludes those on stress or sick leave. The study findings should be verified with a larger sample to increase generalizability. Although this qualitative method was appropriate for understanding socially constructed definitions of stewardship from senior executives, future research should also examine variations in stewardship perceptions from employees in more junior organizational levels.

Future Research

The results of the present study revealed knowledge of stewardship beyond previous literature and measurement. Findings from this study expand on our conceptualization of stewardship through revealing the nuances and different layers of this organizational variable in the public service setting. More specifically, interviews revealed two key dimensions based on
moral rules and beliefs and two key dimensions that are conduct based. Based on these insights, future research could refine the previous measure of organizational stewardship (Simpkins & Lemyre, 2013) and develop a new pool of items that specifically adhere to all four dimensions, creating a more comprehensive measurement tool.

As the results from this study imply, stewardship can be understood as contextual variable functioning beyond the individual level of personal traits and characteristics. A potential next step in this logic is to examine and analyze stewardship at the organizational level to determine its appropriate level of analysis. With regard to the public service specifically, it is possible that a different dimension of stewardship could be found within separate departments or agencies. As discussed earlier, stewardship appears to play a role in helping executives to navigate a networked work environment and deal with challenging issues, however, the role of stewardship may change depending on the particular organization. Thus, a multi-level analysis of this construct within the framework of stress and well-being may increase our understanding of how a context of stewardship can serve as an organizational resource.

Conclusion

Stewardship, which receives less research attention than executive leadership, brings to light particularly important notions for executive and organizational well-being in the Canadian public service. This study presents an attempt at understanding this phenomenon among senior executives by exploring how they conceptualize and practice stewardship in the public service work environment. Our findings suggest that organizational stewardship can be conceptualized based on four key elements: service over self-interest, sustainability of the public service beyond one’s career, working with a collective orientation and mission-focused management of
resources. The analytic results demonstrated ways in which factors of the work environment can either facilitate or act as barriers to stewardship. Barriers to stewardship included disempowering work processes and practices as well as a competitive work environment. Facilitators of stewardship included factors that focused on empowerment and efficient horizontal collaboration. These findings have important implications with respect to public service practices, policies and procedures. Specifically, the task for the executives is to provide employees with empowerment, clear communication and opportunities for partnerships and networks to generate trust and a shared responsibility for the public interest throughout the organization. Moreover, if researchers and practitioners fail to address the specific barriers identified in the results (e.g., organizational rigidity, lack of resources, competition) then a context of stewardship could be deterred, despite being considered as a core value in the Canadian public service. In addition, results suggested that strengthening a sense of stewardship may play a role in reducing the negative impact of stressors caused by re-organization and downsizing. These findings also have strong implications for stewardship research in that they support the need to expand views of stewardship beyond individual factors and towards the nature of the organizational context as a primary object of interest. Taken together, the findings of this study provide strong support for advancing a call to more actively develop and explore the concept of stewardship in public service organizations.
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Chapter 4

Study 3: Stewardship as a Contextual Moderator between Role Stressors and Psychological Distress among Public Service Executives: A Multi-Level Analysis

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Preamble

Since the results from Study 1 and Study 2 suggested system-level considerations regarding the concept of stewardship, the final study of this dissertation returned to the 2012 Work and Health Survey database to pursue a multi-level analysis of departmental stewardship on the relationships between executive stress and well-being.
Contribution of Co-Authors and Author Note

The work presented in this manuscript was conducted as part of the first author’s doctoral dissertation. The first author helped to develop the section of the questionnaire used for this paper, planned as well as carried out all analyses, and wrote the manuscript. Louise Lemyre was the Principal Investigator of the larger project for which this survey was conducted in collaboration with the Association of Professional Executives of the Public Service of Canada (APEX). She contributed to the design of the survey questionnaire in addition to providing feedback on the experimental design, planned analyses and early drafts of the manuscript. She has agreed to the use of this paper in the first author’s dissertation, and to its eventual publication consistent with any limitations set by publisher requirements. This project was supported financially by the Social Sciences and Humanities Research Council (SSHRC) of Canada with a grant to Louise Lemyre. The authors would also like to acknowledge the feedback given by Veronika Huta and Myriam Beaudry on the analyses and presentation of results as well as the contributions of the APEX 2012 Work and Health Survey research team which includes Wayne Corneil, Jacques Barrette, Nancy Beauregard, Martin Lauzier, Celine Pinsent and Gail Hepburn who all contributed to the development of the 2012 questionnaire. The collaboration and support of APEX as a research partner in this larger study must also be acknowledged.
Abstract

For decades much attention has been focused on the issue of workplace stress and its implications, and more recently researchers have recognized the important role of contextual factors in this process. Using data from the APEX 2012 Work and Health survey this study investigates whether departmental stewardship moderates the relationship between role stressors and psychological distress. Multi-level analysis performed on a cross-sectional sample of N=1996 executives working in 59 departments and agencies within the Canadian federal public service showed that departmental stewardship (organizational-level aggregated score) emerged as a protective factor for executive psychological distress, controlling for gender and occupational level. Moreover, departmental stewardship significantly moderated the relationship between role ambiguity and psychological distress among executives, above and beyond the contribution of gender and occupational level. Our model suggests that a context of stewardship is pivotal in the relationship between role stressors and distress among high level executives. This represents an important contribution to the definition and integration of stewardship in organizations as well as the examination of contextual variables with regard to organizational well-being. Moreover, these findings are important for organizational researchers who wish to expand on stewardship theory and empirically test this concept in the public service work environment. Our findings are also important for practitioners dedicated to preventative stress management among the executive cadre.

Keywords: Stewardship, role conflict, role ambiguity, psychological distress, executives, multi-level analysis
Stewardship as a Contextual Moderator between Role Stressors and Psychological Distress among Public Service Executives: A Multi-Level Analysis

In the past few decades, major evolutions in globalization, technology and social collaboration have transformed the nature of work in all sectors. As work becomes increasingly complex and interdependent, employees are expected to take on many new roles and responsibilities. According to Kahn et al. (1964) it is quite common for employees in complex organizations to experience stress regarding their role, which can lead to negative individual and organizational outcomes. Recently, the field of occupational health has recognized that psychosocial factors inherent in the work environment can have considerable influence on the physical and mental well-being of employees, and studies have begun to model contextual moderators in the process of organizational stress (e.g., Bliese & Britt, 2001; Bliese & Jex, 1999; González-Morales, Peiró, Rodríguez, & Bliese, 2012; Li et al., 2013). In this article we introduce organizational stewardship as a contextual factor that may build employee resilience to role demands and protect against adverse symptoms of mental health. Previous research has conceptualized stewardship as an organizational approach in which communication, collaboration and adaptability between organizational actors and stakeholders is used to generate trust, a shared understanding and a sense of purpose (Hubbard & Paquet, 2016). A recent qualitative study investigating the concept of stewardship among public service executives proposed stewardship as a contextual factor that may play a role in the relationship between role stress and well-being (Simpkins & Lemyre, 2015). In this paper, stewardship is conceptualized as an organization-based resource that can help to guide stressed employees through the burden of their work demands. Using multi-level analysis, this study investigates whether departmental
stewardship moderates the relationship between role stressors and psychological distress among public service executives.

**Role Stress and Mental Health**

This shift to a more knowledge-based society has resulted in many changes to the design, organization and management of factors within the work environment. As workplaces become more complex and multifaceted, employees are expected to take on multiple roles and responsibilities, and thus, it has become more important than ever to examine the impact of role stressors on employee well-being (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Schmidt, Roesler, Kusserow, & Rau, 2014).

Role demands occur when employees confront challenges related to performing their role in the organization. Role conflict refers to the occurrence of divergent expectations or when role requirements are incompatible with an employee’s value system, making it difficult to perform their work (Katz & Kahn, 1978). Role ambiguity refers to a lack of information or unclear information regarding employee’s roles, such that they are unsure as to what is expected of them (Katz & Kahn, 1978). According to Cavanaugh, Boswell, Roehling and Boudreau (2000) role demands are considered hindrance stressors, meaning they are viewed as obstacles to personal growth or demands that can hinder an employee’s ability to achieve work goals. Unlike challenge stressors (e.g., time pressure, workload) which can sometimes be seen as an opportunity for mastery, hindrance stressors often prevent employees from dealing with stressful demands. As a result, the presence of these stressors can prompt negative emotions (e.g., anxiety or fear) and a passive or emotional coping method (e.g., withdrawing from the work) (Crawford, LePine & Rich, 2010). In other words, because role demands are perceived as uncontrollable and
threatening to one’s work they are unlikely to be met with increased effort, instead employees may emotionally and cognitively withdraw from their work (Lepine et al., 2014).

While the process of organizational stress has been implicated in a wide range of physical health ailments, mental health disorders are considered to be the most common outcomes (Quick, Macik-Frey, & Cooper, 2007). Stress-related mental health disorders like anxiety and depression place a heavy financial burden on organizations (Dewa & Lin, 2000; Stephens & Joubert, 2001) and it has been reported that employee disability claims for such disorders have been steadily increasing (Dewa, Lesage, Georing, & Caveen, 2004). In Canada, mental illness is estimated to account for up to a third of all employee disability claims (Sroujian, 2003).

Numerous studies have documented the relationship between role stressors and mental health disorders, such as depression (see Schmidt, Roesler, Kusserow, & Rau, 2014 for a review) and anxiety (Örtqvist & Wincent, 2006). A recent meta-analysis by Schmidt et al., (2014) documented the link between role ambiguity/role conflict and depression across a variety of work settings. These authors acknowledged that it is important to examine mental health as a continuous construct since even minor symptoms can lead to impaired health and organizational outcomes. Further, organizational studies are usually limited to the study of functional employees who are on site to work, and usually not those who meet the clinical diagnosis for mental disorders.

In light of this, psychological distress is an important concept to measure in the context of employee well-being, since it can capture a lower threshold of mental health problems and may be a crucial to reducing illness or disability caused by work stress (Korkeila et al., 2003). Distress refers to “a set of psychophysiological and behavioural symptoms that are not specific to a given pathology” (e.g., anxious or depressive responses, irritability, trouble sleeping,
absenteeism) that can cause impairment in day-to-day functions and one’s ability to carry out normal tasks (Marchand, Demers, & Durand, 2005, p. 2). Psychological distress symptoms typically occur following strain, and distress is a well-known indicator of more serious and debilitating mental health issues such as depression (Dohrenwend, Shrout, Egri & Mendelsohn, 1980; Korkeila et al., 2003). With time, psychological distress can also lead to irreversible health issues such as suicide or cardiovascular disease (Marchand et al., 2005). Finally, a recent analysis of the APEX Work and Health survey conducted among public service executives across Canada revealed that self-reported distress had increased over the past decade (Lemyre, Corneil, Simpkins & Pinsent, 2013).

Meta-analysis studies providing extensive insight into the consequences of role conflict and role ambiguity have suggested that prospective research should identify variables that moderate these relationships (Fisher & Gitelson, 1983; Tubre & Collins, 2000). In addition, a meta-analysis by Jackson & Schuler (1985) explored the consequences of role conflict/ambiguity and suggested that future studies examine potential moderators for the relationship between role stressors and symptoms of distress (i.e., tension/anxiety). In this study, organizational stewardship is positioned as a potential moderator in the relationship between role stressors and psychological distress.

**Stewardship**

Historically, stewardship is the concept of managing or taking care of something that is entrusted to you. It is not a new notion per se but is finding renewed resonance in current organizational literature. Peter Block, an organizational scholar and early proponent of this concept, described stewardship as an alternative approach to governance models of mandate and force (Block, 1993). Early literature on this concept depicts stewardship as a willingness to be
accountable for the well-being of the larger organization where power and responsibility are balanced and not centralized to those in higher levels.

Organizational scholars maintain that stewardship can be shaped by a combination of organizational conditions (i.e., control and rewards systems) and the motivations and behaviours of individuals (Davis et al., 1997; Hernandez, 2012). In other words, the work conditions and leadership behaviours encompassed by a stewardship approach to governance can influence individual perceptions, motivations and conduct that serve long-term objectives contributing to organizational sustainability (Hernandez, 2008; Mccuddy, 2008).

While the idea that stewardship can contribute to positive organizational outcomes is well established, empirical evidence supporting this relationship remains quite limited. Recently, a study by Waters et al. (2013) examined whether employees who perceived their organization to display more stewardship had more positive organizational outcomes. Stewardship was measured according to four dimensions outlined by Kelly (2001): (1) reciprocity (the organization demonstrates gratitude for employee involvement); (2) responsibility (the organization acts in a socially responsible manner towards its employees); (3) reporting (the organization keeps employees informed); and (4) relationships nurturing (the organization builds and maintains ongoing relationships with employees). This study found that perceived organizational stewardship was associated with higher levels of trust, commitment and work satisfaction among employees. A qualitative case study of the Edmonton Public School (EPS) system by Segal (2012) asked employees to describe organizational processes inherent in the control and reward systems. This study concluded that an organizational culture associated with
stewardship theory helped to instil integrity among employees, contributing to organizational efficiency.

While there is considerable support for stewardship as an effective organizational approach, much of this literature focuses on the role of management behaviours and individual characteristics of “stewards” (e.g., Davis et al., 1997; Hernandez, 2007; Martin & Butler, 2017). According to Hernandez (2012), research concerning the contextual nature of stewardship, and in particular, how organizational-level factors can contribute to stewardship behaviours and organizational functioning is uncommon.

**Stewardship in the Public Service**

Recently, the concept of stewardship has been reframed as an organizational approach that emphasizes a sense of purpose through the sharing of power, resources and information across networks to serve the public interest. In the public service specifically, where work is adaptive and requires the buy-in and enactments from employees at all levels, stewardship may be especially relevant (Armstrong, 1997; Wilson, 2013). According to Hubbard & Paquet (2016) stewardship is believed to foster a sense of community through building partnerships and networks, and generate the trust and dialogue necessary to work through complex issues.

Furthermore, they argue that stewardship practices connect employees to the larger purpose of their work, fostering their sense of meaning. An empirical study among public service executives by Simpkins and Lemyre (2013) proposed stewardship as a latent construct that can be measured through observed organizational practices. In a follow-up qualitative study stewardship was defined as working towards a greater purpose through a collective orientation and the appropriate care and utilization of government resources in a long-term context (Simpkins and Lemyre,
This study revealed that elements of stewardship helped executives to manage their work demands (e.g., workload, role stressors) and navigate within a system that is considered both bureaucratic and political. In addition, stewardship was found to be facilitated through organizational practices that encourage clear communication and coordination around the organizational mission and processes that foster trust and respect across networks to work through shared issues. The findings from this qualitative study suggested that a more context-sensitive approach to stewardship may provide additional insights on the role it can play in the relationship between stressors and well-being among executives. The present study will build on this research within a public service framework, positioning stewardship as a contextual resource that extends beyond social support and job control at the individual and interpersonal level of analysis. Based on the literature and past research, stewardship is believed to impact how employees perceive and manage stress in the workplace. While the implied organizational benefits of stewardship are indeed interesting from a business perspective, the examination of stewardship within a workplace stress framework will broaden our understanding of this concept and may have important implications for individuals, organizations and society. Within this framework stewardship can be operationalized as an organization level resource contributing to employee well-being examined through the Job-Demands-Resources (JD-R) model (Demerouti, Nachreiner, Bakker, & Schaufeli, 2001).

**The Job Demands-Resources Model**

According to the JD-R model, employee health and well-being can result from a balance between psychosocial work factors categorized as either job demands or job resources. Physical, social or organizational job characteristics that require sustained effort are labeled as *job demands* (Schaufeli & Bakker, 2004). Job characteristics that contribute to meeting
organizational objectives, reduce job demands and their accompanying physiological and psychological costs, or that stimulate employee growth and learning are labeled as *job resources* (Schaufeli & Taris, 2014). Demands and resources are linked to health and well-being outcomes through two underlying psychological processes. An excess in job demands coupled with a lack of resources can deplete an employee’s energy resources in the *health impairment process*, while job resources can contribute to positive organizational outcomes through the *motivational process* (Schaufeli & Bakker, 2004).

The JD-R model assumes that job resources can buffer the impact of various demands on stress outcomes. This idea is consistent with the Job Demands Control (JDC; Karasek, 1979; Karasek & Theorell, 1990) model and Siegrist’s (1996) Effort Reward Imbalance (ERI) model but it extends beyond these models by stating that particular job resources may interact with different types of job demands, and this depends on the given context (Bakker, Demerouti, & Euwema, 2005). Empirical support for the moderating effect of job resources was demonstrated in a study of health care workers by Bakker, Demerouti, Taris et al. (2003) which found that the impact of job demands on psychological strain (i.e., emotional exhaustion) was exasperated when employees possessed fewer resources. A more recent study of health care workers found that social support moderated the relationship between demands and emotional exhaustion (de Jonge, Le Blanc, Peeters, & Noordam, 2008). Moreover, a longitudinal study by van Vegchel et al., (2004) found that job control moderated the relationship between emotional demands and emotional exhaustion.

While the JD-R model tells us what kinds of job factors lead to particular psychological states and outcomes, it fails to explain why this may occur. As a result, it is suggested that
additional explanatory theoretical frameworks be used to explain why particular demands interact with particular resources (Schaufeli & Taris, 2014). Moreover, studies using the JD-R model have focused largely on work characteristics such as job control and social support. While these individual-level resources have been valuable components in stress research, Demerouti & Bakker (2011) have suggested an expansion of the JD-R model to include multi-level constructs in order to capture the different structural, functional or hierarchical levels of organizational research.

While research testing the JD-R framework with the use of multi-level constructs is limited, studies have provided interesting insights into the important role organizational-level variables can have on employee well-being. For instance, a longitudinal study of primary and secondary school teachers by González-Morales and colleagues (2012) found that collective burnout (at the group level) was a significant predictor of individual burnout after six months when controlling for the effect of individual burnout, job demands and job resources. This study demonstrated that a climate of burnout was a stronger predictor of individual burnout than indicators of job demands or resources. A large cross-sectional study by Li et al. (2012) found that the dynamics within a nurses’ work environment are associated with burnout at the individual level. More specifically, they found that perceived collegial relations between physicians and nurses at the work unit level was related to less emotional exhaustion and depersonalization among nurses. Thus, more research is needed to investigate other potential resources at the organizational level that may be especially relevant in this framework.
Taking a Multi-Level Approach

Based on past theory and research, the concept of stewardship is considered to be a theoretically relevant contextual construct calling for a socio-ecological approach to organizational stress research. Building on Bronfenbrenner’s (1979, 1999) systems theory framework an ecological approach expands upon the immediate job-worker interaction and takes into consideration how different layers and facets of the system may influence employee well-being, emphasizing the importance of incorporating contextual variables into models of work stress and employee strain.

A major benefit of a multi-level approach is that it allows researchers to reliably detect relationships at the organizational level that might not be possible to detect using only the individual-level data (Bliese & Jex, 1999). Contextual variables are typically measured using group averages of individual members’ perceptions; this is believed to reliably account for non-independence among employees exposed to similar environmental factors, which can influence how they perceive or respond to stress in the workplace (Bliese & Jex, 1999). As a result, researchers can more accurately examine how organizational level processes affect individual-level processes and outcomes. For instance, a qualitative study by Lansisalmi, Peiro & Kivimaki (2000) suggested that stress responses can be collectively learned and the organizational environment can function as a “general medicine”, providing properties that seem to be crucial for coping with high demands. Moreover, modelling group-level moderators of stress is particularly important, given its implications for prevention. From a practical perspective, a multi-level approach to stress may result in more effective interventions, as organizations may wish to employ different strategies at each level (Demerouti & Bakker, 2011). Moreover, stress interventions based on group-level moderators can be much easier to implement over individual-
based interventions (Bliese & Jex, 1999). Thus, identifying contextual factors that can mitigate the stress process, and understanding how they influence this relationship, can contribute to more systemic approach to organizational stress research.

In conclusion, by examining organizational stewardship as a moderator in the relationship between job demands and employee well-being, the present study attempts to address two key challenges within the JD-R framework: 1) examining a work resource, distinct from social support and job control, that may be especially relevant in the public service context, and 2) examining this work resource as a multi-level variable.

**Stewardship as a Moderator of Work Stressors**

As reviewed above, job resources can buffer the negative effects of work demands on perceived job strain through different mechanisms. While stewardship is not anticipated to reduce work demands themselves, the work conditions provided through a context of stewardship may alter employee perceptions and cognitions evoked by work stressors, and moderate the responses that follow. This can potentially reduce the health-damaging consequences of stress.

As described in the literature, a mission-focused stewardship approach is believed to help employees put their work in a larger context, providing them with a sense of purpose. The alignment between employee demands and the organizational mission may contribute to a sense of coherence among employees, where they perceive their demands as understandable, manageable and meaningful (Antonovsky, 1987), a strong determinant of successful coping. In addition, stewardship is believed to generate trust and a shared understanding within and between organizations to work collectively on complex issues (Hubbard & Paquet, 2016). This
collective orientation may boost motivation as employees recognize how their individual efforts impact their networks. Formal relationships nurtured through stewardship can help employees view their work demands in a new perspective, shifting the focus from one’s immediate work demands to their role in the broader organization. In this way, a sense of community promoted through stewardship keeps employees connected to the overarching goal, helping them to stay motivated and engaged in the face of stressful demands. This is consistent with research on the social dimension of work, which highlights how a sense of community in the workplace can contribute to indicators of employee well-being (Boverie & Kroth, 2001). More specifically, these authors argue that a nurturing environment and a sense of community can help to employees to feel passionate and energized by their work. Providing this type of social context is especially important as individuals are turning to their workplace as a primary source of community and a place to be connected (Conger, 1994).

In addition, a collective orientation can refocus stressful situations into problems to be solved. Through fostering effective collaboration, stewardship may play an “extrinsic motivational role” (Bakker & Demerouti, 2007) by increasing the likelihood that a task will get completed successfully. Collaborative work can foster interdependence and trust among employees; as a result, employees may be more likely to seek instrumental help from their network in the face of challenging work demands, thereby increasing their chances of getting their work done on time. Moreover, stewardship practices can prompt greater cooperation among employees. For instance, the sharing of information, power and resources can help to develop a common frame of reference, facilitating communication and reducing misunderstandings with regard to work tasks. In this way, stewardship organizations, through the collaboration and the instrumental support of other organizations, may be more resilient to increasingly complex work
demands. Thus, a context of stewardship may temper the negative influence of work stressors by repositioning work demands as challenges that can be accomplished collectively, and task completion may seem more achievable in this setting.

Theoretically, stewardship practices may mitigate the negative effects of work stressors by providing employees with a clear vision of the organizational mission and empowering them to serve this mission as a collective entity, helping to guide employees through their workload even when demands are perceived as stressful. Moreover, proposed outcomes of stewardship (e.g., trust, sense of community) may help employees feel more connected with and supported by other members of the organization when experiencing stressors.

The Specific Case of Public Service Executives

Senior executives represent a specific type of work group who encounter particular job demands and resources unique to their position. Role demands may be especially relevant to this population, as employees in more complex roles (e.g., organizational leaders) must rely on directions and directives from superiors, policies and other situational variables in order to perform their duties (Daft & Noe, 2001). In addition, organizational leaders are required to make important decisions within complex environments that may be constantly changing due to external factors (e.g., political, economic, social), which may lead to simultaneous, inconsistent or unclear expectations. Correspondingly, a qualitative study by Simpkins and Lemyre (2015) found that executives within the public service identified role challenges as particularly demanding when carrying out their duties.

While the number of studies using the JD-R model have been steadily increasing (Schaufeli & Taris, 2014), research using this model among high level employees is limited. In
fact, with the exception of the Whitehall Studies of the UK Civil Service (Marmot et al., 1991) and recent studies by the Association of Professional Executives of the Public Service of Canada (APEX) in collaboration with researchers at the University of Ottawa (Lemyre et al., 2002; 2007, 2012), there are few studies with access to a population of senior executives in public administration. Because their workload involves high levels of responsibility, problem-solving and decision-making, executives are given considerable control (i.e., autonomy and decision latitude) to fulfill their roles in the organization. Thus, it is important to look beyond traditional resources and identify factors of the work environment that can help executives to be more resilient to their demands.

In summary, there is strong theoretical and empirical basis to consider and formally test organizational stewardship as a potential moderator in the relationship between role stressors and psychological distress among executives. To our knowledge, stewardship has never been tested as a contextual variable using multi-level analysis. This raises the research question: Does a context of stewardship moderate the relationship between role stressors and psychological distress among public service executives?

**Study Model**

This study will build on the overall model of executive work and health, which was based on the core elements from a synthesis of the scientific literature by Lemyre et al., (2001). The main input for this model is the organizational environment of executives. As demonstrated in Figure 9, departmental stewardship represents a resource conceptualized at the organizational-level that may moderate the relationship between various work conditions and outcomes of perceived stress, including various individual and organizational health indicators.
This study proposes that a context of stewardship reflects the degree to which a department engages in effective collaboration across networks, generating trust and a shared sense of responsibility. Our current model is not testing all pathways depicted in Figure 9; however this study is an important contribution to the literature on stewardship in organizations. As such, this study will only examine four key variables of interest (darkly shaded boxes in Figure 9): role conflict, role ambiguity, departmental stewardship and distress. Based on previous empirical research by Simpkins & Lemyre (2013, 2015), we posit that a context of stewardship can help executives manage their perceived role stressors such that when a high
degree of stewardship is perceived within one’s department, executives are more likely to experience their work as meaningful, interesting and something to which they wish to devote effort, regardless of stressful demands. In this way, departmental stewardship may help to alleviate the effects of stressors before they become damaging (i.e., psychological distress). Thus, we propose that department-level stewardship moderates the relationship between role stressors (i.e., role conflict and role ambiguity) and distress symptoms.

Figure 10. Multi-level model of departmental stewardship, role stressors and psychological distress.

Goal and Objectives

The aim in the present study is to investigate the association between departmental stewardship, role stressors and distress among executives. Stewardship has not been examined as a multi-level construct nor has it been examined empirically with regard to mental health
outcomes. The research goal is to test that there is variance in these relationships that relates to the organizational level above and beyond the idiosyncratic individual perspective.

Based on stewardship literature and past research, this study proposes that organizations that engage in stewardship practices may provide important psychological and social resources to empower individual members (through mechanisms such as trust and autonomy) and connect them to a larger purpose and community. As a result, a context of stewardship may offset the aversive stimuli (stressors), and hinder the development of psychological distress. This leads us to hypothesize that department-level stewardship may buffer the relationship between executive role stressors and psychological distress.

Prerequisite Testing

*Condition 1:* Executives who report higher role stressors will also report higher distress.

*Condition 2 (ecological multi-level effect):* Departments with high levels of aggregated stewardship will have a negative relationship with reported distress.

Main Hypothesis (Cross-Level Interaction)

*Moderation effect of the multi-level construct:* The relationship between role stressors and distress is moderated by departmental stewardship such that the relationship between role stressors and distress is stronger for departments with low aggregated stewardship, and this relationship is buffered in departments with high aggregated stewardship.

Level of Operationalization

Based on previous qualitative research conducted on this concept (Segal, 2011; Simpkins & Lemyre, 2015), stewardship can be conceptualized as an emergent process. Kozlowski &
Klein (2000, p. 55) state that a process is emergent when “it originates in the cognition, affect, behaviors, or other characteristics of individuals, is amplified by their interactions, and manifests as a higher-level collective phenomenon”. In this regard, our measurement of stewardship may represent an individual’s perception of the stewardship practices within their department as well as their personal choices or behaviors regarding the practice of stewardship. However, an aggregated score of stewardship better captures the actual practice of stewardship within that department, which may be amplified by stewardship interactions between employees and between organizational units. In this way, we posit that the aggregated stewardship construct conveys a different meaning than individual perceptions of stewardship. Therefore, this study aggregates individual perceptions of organizational stewardship and studies it across departments. This accumulation technique can be used when direct ecological level indicators do not exist (Steel, Tranmer, & Holt, 2003).

When an organizational-level variable, such as stewardship, is tested as a moderator between individual work stressors and stress-related outcomes this represents a cross-level model (Klein & Kozlowski, 2000). This model suggests that that the relationship between two lower-level constructs (role stressors and distress) is moderated by a characteristic of the higher-level entity (stewardship) in which they are both embedded (the organization) (Klein & Kozlowski, 2000). Thus, this paper argues that the moderating effect of organizational stewardship represents a “cross-level” process in which a contextual factor (organizational stewardship) influences individual-level relationships between role stressors and distress.
Method

Participants and Procedure

Data used for this study comes from the pan-Canadian national survey on Work and Health conducted in 2012 (Lemyre et al., 2013) in partnership with the Association of Professional Executives of the Public Service of Canada (APEX). This survey represents the fourth cycle of a multi-phase research project examining the health status of executives, from Director (EX-1) to Deputy Minister (EX-5), in the federal Public Service of Canada. A total of 6688 self-administered anonymous questionnaires were distributed via e-mail to senior-management executives in the Canadian federal public service. Over two thousand respondents returned the questionnaires (N=2314), representing a response rate of 35%.

After removing missing data and performing data screening for multi-level analysis the final data set included responses from 1996 executives nested within 59 departments/agencies. Departments, on average, had 34 respondents (range, 2 to 177). The sample comprised 51% male and 49% female executives and maintained fully proportional representation of the actual distribution of executives by gender, executive level, region and age. The majority of participants indicated that their work was located in the National Capital Region, Ottawa (72%), and their average age was M=50.2 years. The majority of participants had either a post-grad education (52%) or university education (39%). Participants had been working at the executive level for 7.3 years, on average. While just over half (56%) of executives in this sample worked at the EX-1 level, 24% worked at the EX-2 level, and 20% at the EX-3, EX-4 or EX-5 level.
Analytic Strategy

This study used multi-level statistical techniques to investigate the nature of the contextual effect of departmental stewardship on an individual indicator of psychological distress. We began our analyses by iterating a variance component model with no explanatory factor to single out the part of the variance specific to departments’ and executives’ variability in outcomes (Null Model). Then, covariates were introduced into the model (Model 1). The contribution of role conflict and role ambiguity was evaluated once adjusted for covariates (Model 2). The Level 1 covariates and predictors were all grand mean centered, so that the effect of the Level 2 predictor would control for the effects at Level 1 and to avoid multicollinearity (Enders & Tofighi, 2007). A separate model was estimated for the adjusted contribution of departmental stewardship, also grand mean centered (Model 3). In the final model we examined if departmental stewardship moderated the relationship between both role stressors and distress (after adjusting for the covariates) (Model 4). Because the residual variances of all slopes in Models 3 and 4 were non-significant, these slopes were fixed to be non-randomly varying. Restricted Maximum Likelihood (RML) was used for parameter estimation due to the modest number of departments sampled. Multi-level regression parameters were estimated with HLM 7 software (Raudenbush, Bryk, Cheong, & Congdon, R. T., 2004). Descriptive statistics were obtained with SPSS 24.0 and are reported in Table 12.
Measures

*Independent variables (Level 1).*

*Role conflict.* This variable was assessed using the Generic Job Stress Questionnaire’s (Hurrell & McLaney, 1988) five-item scale which measures the degree to which an individual is confronted with conflicting roles or by tasks that are not a part of their job. Items were rated using a 7-point response scale ranging from 1 (*very inaccurate*) to 7 (*very accurate*) (Cronbach’s $\alpha=.76$). Example item: “I receive an assignment without the help I need to complete it”

*Role ambiguity.* This variable was assessed using the Generic Job Stress Questionnaire’s (Hurrell & McLaney, 1988) four-item scale which measures the degree to which an individual does not have a clear sense of their work objectives, expectations or the scope and responsibilities of their job. Items were rated using a 7-point response scale ranging from 1 (*very inaccurate*) to 7 (*very accurate*) (Cronbach’s $\alpha=.88$). Example item: “I know exactly what is expected of me”. Items were reverse coded such that higher scores reflected higher levels of role ambiguity.

*Control Variables (Level 1).* Accounting for other potential influences on the perception of individual distress, we controlled for gender and occupational level. We coded gender 1 (*female*) and -1 (*male*). We coded occupational level by executive cadre 1 (*EX1*), 2 (*EX2*) and 3 (*EX3-5*).

*Dependent Variable (Level 1).* The General Health Questionnaire (GHQ) was used to measure psychological distress. While several valid and reliable methods exist for assessing symptoms of distress (Korkeila et al., 2003), the GHQ was developed over 30 years ago as a screening tool for those likely to have or be at risk of developing psychiatric disorders and is considered to be the most common assessment of mental well-being (Jackson, 2007). This 20
item scale assesses psychiatric disturbances over the past month at the lowest level of mental illness suitable to use in general populations. Answers are scored on a 4-point response scale ranging from 0 (*less than usual*) to 3 (*much more than usual*) (Cronbach’s $\alpha=.95$). Scores are summed and this total score provides a basis for screening for the probability of being diagnosed as a psychiatric case. Thus, an increased score on the General Health Questionnaire represents an increase in minor psychiatric morbidity. The scores have been interpreted as indicative of the severity of psychological disturbances on a continuum from 0-60. Example item: “Have you recently over the past month been feeling unhappy and depressed?”.

**Moderating Variable (Level 2).**

*Departmental stewardship.* Simpkins & Lemyre’s (2013) five item organizational stewardship scale was used to assess stewardship. Executives rated their department or agency’s stewardship on a 5-point scale ranging from 1 (*never*) to 5 (*always*) (Cronbach’s $\alpha=.87$). Example of one item for organizational stewardship was “In my department/agency, we are committed to the achievements of the overall federal government before the achievements of our own department/agency”. Departmental stewardship (at level 2) was created by averaging across department/agency member’s individual ratings of stewardship and using that mean as the level 2 value of organizational stewardship for each department (see below).

**Data Analysis**

*Data aggregation.* A referent-shift composition model for aggregation (Chan, 1998) was used since all items were worded so that the department and not the individual was the target of the evaluation. To assess whether stewardship could be aggregated as a valid and reliable department-level construct we assessed the extent to which this variable showed departmental level effects. This was achieved by assessing sufficient between-department variance using the
intra-class coefficient, ICC(1); we also tested homogeneity of the within-department variance estimated using the mean r(WG)(j) agreement index (James, Demaree, & Wolf, 1984). The formula proposed by Bliese & Halverson (1998) was used to estimate ICC(1) adjusting for unequal number of executives in each department. The ICC(1) of departmental stewardship was .03, indicating that around 3% of the variability in an executive’s rating of stewardship can be explained by group membership (Bliese, 2000). Although this ICC value is low, the one-way random effects analysis of variance (ANOVA) on which the ICC(1) value was based showed significant between-department variance in stewardship, F (58, 1675)=2.16, p<.001. The mean r(WG)(j) agreement index was .82 (≥.70 cut-off) representing sufficient within-department agreement of stewardship (Bliese, 2000). According to Castro (2002), a combination of r(WG)(j) and the use of HLM is adequate for the evaluation of intragroup agreement. Thus, the strong within-group agreement (rWG(j) = .82) and a significant F test result in combination with the within-group consistency (ICC(1)=.03 of organizational stewardship provides justification for investigating stewardship as a contextual variable.

**Hypothesis testing.** The hypotheses are examined by evaluating unstandardized beta-coefficients in a multi-level regression equation, by means of the T-value (Bryk & Raudenbush, 1992). With the exception of the null model, all models include two control variables: gender and occupational level.

**Results**

**Descriptive Statistics**

Table 12 includes percentage and frequency distribution of study participants.
Table 12

*Descriptive Statistics of Control Variables (N=1996)*

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<thead>
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<th>%</th>
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<tr>
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<tr>
<td>Female</td>
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<tr>
<td><strong>Occupational level</strong></td>
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<td></td>
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<td>EX-1</td>
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<tr>
<td>EX-2</td>
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<tr>
<td>EX-3,4,5</td>
<td>19.8</td>
<td>381</td>
</tr>
</tbody>
</table>

Table 13 includes means and standard deviations for independent and dependent variables included in this study.
Table 13

Descriptive Statistics of Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Stressors</strong></td>
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<td>Role Conflict</td>
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<td>1.39</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>2.53</td>
<td>1.32</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Distress</td>
<td>21.08</td>
<td>10.68</td>
</tr>
<tr>
<td><strong>Organizational Process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental Stewardship</td>
<td>3.63</td>
<td>.38</td>
</tr>
</tbody>
</table>

Table 14

Correlations for Role Stressors, Distress and Departmental Stewardship

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Departmental Stewardship</td>
<td>-1.4 **</td>
<td>-0.08</td>
<td>-0.09 *</td>
<td></td>
</tr>
<tr>
<td>2. Role Conflict</td>
<td>.37***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Role Ambiguity</td>
<td></td>
<td>.38***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Psychological Distress</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note. *p<.05  **p<.01  ***p<.001

Results of the Multi-level Regression Analysis

As a preliminary analysis before testing our hypotheses, we observed results from the null model in HLM (regression with no Level 1 or 2 predictor variables). The variance
component model estimated that 1.0% of the variance in psychological distress existed between departments. The chi-square test revealed that the between-group variance was marginally significant (p=.06); that is, the intercept varied across groups. Although this between-department variance can be considered small, even a marginally significant variance often suggests sufficient variability, given that the chi-squared test is underpowered when the coefficient’s reliability is below .80. In this case, the reliability estimate of the intercept was .20, which reduced the power of the chi-squared test of the coefficient’s variance, but which is sufficient in HLM for reliably determining the aggregate coefficients and their standard errors across departments. Moreover, given the context of organizational stress and the serious consequences of psychological distress, this departmental effect, although small, is an important issue to further investigate. In sum, the preliminary analyses revealed that perceptions of distress showed some variability across departments, suggesting a justification for using HLM for further investigation of Level 2 variables explaining this variation.

Summarized results from our multi-level regression models predicting distress are presented in Table 15. Inclusion of control variables (Model 1) demonstrated that occupational level (but not gender) was significantly associated with distress, with those in lower level echelons reporting higher distress (Model 1).

Further inclusion of role stressors (Model 2) showed a significant relationship between role conflict and distress and role ambiguity and distress while controlling for gender and occupational level. Psychological distress was higher when perceived role stressors were higher. Thus, hypothesis 1 was supported. The results of this model indicated that after the inclusion of role conflict and role ambiguity, remaining between-department variance in the Level 1 intercept
did not reach significance $[\chi^2(57) = 61.85, P = .28]$. Thus, while we proceeded to add stewardship as a predictor of the intercept in Model 3 on theoretical grounds, this reduced the probability that the effect would be significant. The between-department variance for the effect of role ambiguity on distress was significant $[\chi^2(57) = 75.49, P = .04]$, providing statistical justification for adding stewardship as a moderator of this slope in Model 4. The between-department variance for the effect of role conflict on distress was non-significant $[\chi^2(57) = 43.55, P>.05]$. Thus, while we proceeded to add stewardship as a predictor of the role conflict slope in Model 4 on theoretical grounds, the effect was unlikely to be significant.

After adjusting for covariates, the independent contribution of departmental stewardship was negatively associated with distress. Distress was lower in departments with higher stewardship (relative to those who had lower stewardship), supporting hypothesis 2 (Model 3). Although the between-departmental variance in distress was modest, as noted above, departmental stewardship explained $R^2=.41$ of this variance.

The final model was a preliminary test of the cross-level interaction of departmental stewardship and the two variables of role stressors (after adjusting for the covariates) in predicting distress (Model 4). The results revealed that after controlling for gender and occupational level, the cross-level departmental stewardship*role conflict interaction in predicting distress was not significant. Departmental stewardship did not moderate the relationship between role conflict and distress. However, the cross-level departmental stewardship*role ambiguity interaction in predicting distress was significant ($p=.03$). Departmental stewardship explained $R^2=.33$ of the variability in the slope of role ambiguity on distress. Although these results are preliminary and require replication, they suggest that
departmental stewardship may moderate the relationship between role ambiguity and distress, providing partial support for hypothesis 3. With regard to level, it is interesting to note that the coefficient for the departmental stewardship*level interaction term is positive and significant (p=.03). As departmental stewardship increased, the relationship between occupational level and distress became weaker. Departmental stewardship explained R²=.10 of the variability in the slope of occupational level on distress.
Table 15
Hierarchical Linear Modeling Results for Models Testing the Relationship between Executives’ Role Stressors and Distress and the Moderating Effect of Departmental Stewardship.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.39</td>
<td>0.27</td>
<td>0.50*</td>
<td>0.22</td>
</tr>
<tr>
<td>Occupational Level</td>
<td>-1.13***</td>
<td>0.31</td>
<td>-0.75*</td>
<td>0.28</td>
</tr>
<tr>
<td>% within-department variance in distress explained</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Individual-level independent variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>2.55***</td>
<td>0.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within-department variance in distress explained</td>
<td>23%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department-level independent variable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental Stewardship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% between-department variance in distress explained</td>
<td>41%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental Stewardship x Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% between-department variance in gender slope explained</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental Stewardship x Occupational Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% between-department variance in occupational level slope explained</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental Stewardship x Role Conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% between-department variance in role conflict slope explained</td>
<td>&lt;1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental Stewardship x Role Ambiguity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% between-department variance in role ambiguity slope explained</td>
<td>33%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. SE = standard error.

*p<.05 **p<.01 ***p<.001.
Discussion

The research presented in this paper helps to enhance our understanding of the concept of stewardship and provides empirical support for how it may play a role in the relationship between work stressors and outcomes of psychological strain. The analyses examined two notable work stressors, role conflict and role ambiguity, and their relationship with psychological distress, a key indicator of employee well-being. Results showed that role stressors were associated with poor psychological health among executives. We hypothesized that the relationship between role demands and distress would be moderated by departmental stewardship. Results from this multi-level analysis demonstrated that contexts of higher perceived stewardship were associated with lower distress among executives. The slope for role conflict and distress did not significantly differ across departments, and accordingly, this study failed to find a moderating effect of departmental stewardship on this relationship. On the other hand, departmental stewardship did act as a contextual moderator of the relationship between role ambiguity and psychological distress. In work contexts of higher perceived stewardship, the relationship between role ambiguity and distress was weaker. These findings are consistent with the theory that organizational stewardship practices establish a context in which employees are supported, motivated and engaged in the face of work stressors.

Results also demonstrated that departmental stewardship moderated the relationship between occupational level and distress; in contexts of higher stewardship the relationship between low occupational levels and distress was not as strong. Although these results are preliminary and require further investigation, they provide stimulating empirical support for positioning stewardship as a contextual factor in organizations and the important role stewardship may play in resilience to common workplace stressors. From a practical perspective,
these results provide a useful starting point for identifying systemic factors that can be targeted for organizational policies and stress interventions.

This paper builds and improves on previous work by Simpkins & Lemyre (2013, 2015) with the use of multi-level analysis that is more congruent with the level of theory concerning work stressors, stewardship and organizational well-being. The decision to analyze stewardship as a contextual variable was based on theoretical grounds and previous research, not on the ratio of between- and within-group variance associated with this particular sample. Nonetheless, the organizational-level properties of our particular research sample were supported by examining patterns of variance, providing further validation to study stewardship at the organizational level. This study emphasizes the value of taking a systems-level approach to organizational stress research through providing evidence that there are commonalities in how members of particular departments respond to their work environment despite individual differences. Other studies have underscored the importance of examining contextual factors in stress research (e.g., Bliese & Britt, 2001; Bliese & Jex, 1999; González-Morales et al., 2012; Li et al., 2013); since it is not always practical or possible to eliminate work demands, especially at the executive level, organizations should focus on factors of the work context that can help executives better respond to stress. Thus, the results of this research support the use of multi-level techniques in the study of workplace stress and provide an opportunity to focus on organizational practices and procedures to optimize executive well-being.

**Departmental Stewardship and Psychological Distress: ecological multi-level effect**

Our results suggest that executives working in departments with a strong sense of stewardship tend to have lower scores of psychological distress. The combination of stewardship literature and the results of this study propose that high stewardship departments may employ
practices and processes that contribute to an empowered and networked work environment, providing a means for stress management. For example, such departmental practices may foster resilience to stressful work conditions through a more transparent sense of purpose and a sense of community. This is consistent with qualitative research by Simpkins & Lemyre (2015) which found that organizational stewardship was facilitated through organizational practices that nurture relationships across networks and help employees stay connected to the overarching significance of their work. Of course, the possibility cannot be ruled out that increased distress may have a negative impact on executive perceptions of departmental stewardship. As prior research has demonstrated, psychological strain may cause employees to disengage from their work and become cynical and negative towards their environment (e.g., Bakker, Schaufeli, & Verbeke, 2004; Demerouti, Bakker, Nachreiner, & Ebbinghaus, 2002). In other words, the effects of stress may cause executives to lose sight of their social worth or view their department as unsupportive and their mission unclear, leading them to rate organizational stewardship as low.

**Departmental Stewardship as a Moderator of the Relationship between Role Ambiguity and Psychological Distress**

While departmental stewardship did not significantly moderate the relationship between role conflict and distress, it did significantly moderate the relationship between role ambiguity and distress. In other words, the link between role ambiguity and distress tended to be stronger in departments with lower stewardship scores compared to departments with higher stewardship scores. These results indicate that departments with a strong sense of stewardship may indeed help employees to cope more effectively with role ambiguity, thereby buffering negative psychological outcomes.
As discussed in the literature, stewardship is believed to connect employees to the broader organizational mission, empowering them to protect the interests of the organization and engage in collective, prosocial behaviours. It appears that despite confusion regarding work expectations (i.e., role ambiguity), executives in high stewardship departments may still be able to experience their work as meaningful, interesting and something to which they wish to devote effort. For example, when employees are experiencing uncertainty with regard to their current objectives, working in a department with a strong sense of stewardship may enable them to take a hypothetical “step back” and re-connect to the central purpose. In other words, a shared responsibility for the public interest fostered through stewardship may help executives feel more connected to the larger purpose of their work, offsetting aversive stimuli (i.e., stressors), and possibly avoiding the development of further psychological distress.

Furthermore, stewardship practices that provide employees with more autonomy and control over their work may influence a context in which employees feel trusted and more capable to confront their work stressors. This also aligns with psychological contract theory, which suggests that having a reciprocal employment relationship (where employees feel valued by their employer) helps employees function despite having incomplete information about organizational expectations (Rousseau, 2004). Indeed, research has demonstrated that work factors such as job control have the potential to buffer the effects of stressors on well-being. Thus, if organizational stewardship promotes self-efficacy through a collective orientation (e.g., sharing power and information) it can be assumed that such a context may enable an employee to overcome uncertainty regarding their roles and perform their work effectively. This coincides with research demonstrating that self-efficacy beliefs can moderate the stressor-strain relationship (Jex, Bliese, Buzzell, & Primeau, 2001; Jex & Bliese, 1999). According to Jex et al., (2001) individuals with
high self-efficacy may be more likely to believe they can maintain acceptable levels of job performance despite the presence of role stressors.

Finally, based on stewardship literature and the current research it can be suggested that the sense of community provided through stewardship may help to build psychological resilience through instrumental, informational and emotional support. First, the formal and informal networks fostered through stewardship may help employees to feel more capable in spite of challenges. Specifically, working with a collective orientation provides employees with more opportunities to collaborate and share information with others, especially when they are uncertain about the expectations of their role. Thus, executives working “within a community” may become more resilient to stressors through actively seeking role-related information or focusing on the larger task at hand. In this way, stewardship may function as resource, helping to relieve some of the pressure caused by role ambiguity, increasing performance and reducing employee distress. Secondly, emotion-focused mechanisms provided through a sense of community can also mitigate psychological consequences of role ambiguity. This is consistent with organizational stress research that positions emotional support as protective factor to stressful events (e.g., Cohen & Wills, 1985; Katz & Kahn, 1978). Thus, it seems that departments high in stewardship cultivate a stronger sense of community, in which employees may be more likely to rely on their networks to cope with their demands, as opposed to drawing heavily on their personal reserves to do so.

Departmental Stewardship as a Moderator of the Relationship between Role Conflict and Psychological Distress

It can be argued that departmental stewardship may be more likely to interact with executive reactions to role ambiguity compared to executive reactions to role conflict. Indeed,
organizational research has pointed out that these concepts, although strongly related, should be regarded as separate constructs since they can provoke different reactions from employees (Jackson & Schuler, 1985; Keller, 1975). Both role conflict and ambiguity can be considered environmental stressors representing information deficiency, although it has been suggested that conflict may represent a more concrete, observable role stressor, and the operationalization of this concept may require less interpretation on the part of the employee compared to role ambiguity (Beehr, 1995). This distinction may explain why departmental stewardship does not moderate the relationship between role conflict and distress in this study. The measure of role conflict used in this study appears to be more closely tied with tangible demands, a burden which may be unlikely to change for executives; thus, despite working in a high stewardship context, executives may still feel just as distressed by their conflicting roles. On the other hand, stewardship practices may be a particularly useful resource in helping executives to cope with the stress caused by role ambiguity. These findings are in accordance with the literature on role stressors which suggests that ambiguity may be an easier concept to modify through organizational practices than conflict (Fisher & Gitelson, 1983), possibly due to the fact that role ambiguity is more strongly related to management practices (House & Rizzo, 1972).

In addition, it should be noted that the measure for role conflict used in this study demonstrated a fairly low alpha (< .80) which could suggest that this scale is not unidimensional, and perhaps there are different types role conflict experienced by this population of workers. Thus, it is possible that the measure of role conflict used in this study is not as robust as the measure used for role ambiguity, and this may have influenced the cross-level results in this study.
Departmental Stewardship as a Moderator of the Relationship between Occupational Level on Psychological Distress

Finally, results demonstrated that executives in lower occupational levels report higher distress. This is consistent with the Job-Demand-Control model (Karasek, 1979) suggesting that work-related mental strain can result from combinations of, and interaction between factors of low job control (e.g., limited input to decision-making and lack of skill discretion) which are often associated with lower employment grades. Further, organizational stress research has demonstrated that indeed, participants in lower employment grades tend to report lower job control, and higher rates of stress-related illness (Marmot et al., 1991; Stansfeld, Fuhrer, Head, Ferrie, & Shipley, 1997). Interestingly, the cross-level interaction term revealed that a context of stewardship may have an “equalizing” influence on the relationship between occupational level and distress. In other words, as departmental stewardship scores increased, the negative relationship between occupational level and distress began to even out. Because we expect that executives working in departments with high stewardship are more likely to share power, resources and information in pursuit of the public interest, it is possible that these departments operate with a flatter power structure. In theory, stewardship may cultivate a more open and transparent work environment where roles and responsibilities are more widely distributed, perhaps reducing perceived layers of hierarchy and creating a more level playing field within the department. Moreover, a stronger sense of community can improve coordination and communication among executives, where they may feel less of a divide across occupational levels. Thus, a stronger sense of community instilled through stewardship practices may encourage different occupational levels to perceive and cope with their demands similarly. These results align with literature in the family business domain which states that a stewardship as a
collective phenomenon involves a “low power distance” in which “processes and interactions are egalitarian, inequalities are discouraged, and members are treated equally” (Neubaum et al., 2017, p. 41). Likewise, Hernandez (2012) describes leadership within a stewardship context as a shared and dynamic process that does not rely on hierarchy. Although this finding is preliminary and requires further investigation it provides an interesting area for future research.

In sum, our results suggest that when executives experience stressors related to their work conditions, such as role ambiguity, those working in departments with a strong sense of stewardship may perceive more collective and supportive organizational practices and behaviours to rely on. Stewardship practices may help executives to re-establish their place in the organization, reinforcing their value and helping them to stay connected to the bigger purpose of their work; and in this context, uncertainty within their immediate role may be less distressing. As a result, organizational stewardship can be understood as an important resource for the management of work stressors, thereby attenuating the development of distress.

Limitations

While the findings of this study provide support for a context of stewardship as an organizational resource for executives, there are several important limitations to keep in mind when interpreting these results. First, while scores for stewardship did significantly vary across departments, the ICC(1) value was quite low (.03). This low variation could be explained by the fact that stewardship as a contextual variable was measured through self-reports, which generates an added obstacle to finding organizational-level effects. Given the fact that stewardship has traditionally been studied at the individual level of analysis, observing a significant, albeit small, variation across organizations remains a meaningful contribution to the literature as it expands on the paradigm of stewardship as a meso-level construct. Attempts should be made to replicate
these analyses using an improved measure of departmental stewardship as an alternative to aggregated individual responses (e.g., through organizational data).

Second, due to the cross-sectional nature of this study causal inferences cannot be made. All data analyzed in this study was collected by means of self-report measures, which could impact results through common method bias or be circumstantial to timing. However, given the complexity of the hypothesized relationships (i.e., cross-level moderation) it can be argued that common method variance is unlikely to account for the significant effects observed (Evans, 1985). Moreover, the present study was conducted among a population of executives who were at work and not on sick leave, which may yield an underestimation of highly distressed executives and may have attenuated the significance of results.

In addition, the current study referred to public sector executives in Canada. We are therefore not able to generalize the results to other organizations such as those in the private sector. Data on organizations from other industries may yield different relationships and insights. Nonetheless, this study does provide useful information concerning the work context of Canadian public sector executives and the role of stewardship as it relates to role stressors and distress.

**Directions for Future Research**

This study provides some interesting points of departure for future research as well as several theoretical and practical implications. Stewardship is proposed as an organizational resource that interacts with perceived stressors to alleviate the effects of strain before harmful outcomes (i.e., distress) are produced. Thus, future studies should explore this hypothesis using a
measure of the somatic, cognitive-affective and behavioural aspects of an employee’s perception of stress, such as the PSM-9 (Lemyre & Tessier, 1988, 2003), as a Level 1 predictor.

In light of the different results found with each type of role stressor, future research should continue to assess how stewardship may interact with various organization stressors and attempt to identify the different contexts in which stewardship practices may be more useful, for instance, following organizational change/restructuring. The moderating effects of stewardship may vary if studied with other types of work stressors. Moreover, future studies can examine stewardship as a moderator of the relationship between perceived stress and other established indicators of organizational well-being such as absenteeism and intent to leave.

It would also be interesting for future research to investigate how stewardship manifests in different organization types. For instance, future studies could examine how different types of organizations (e.g., operations-based, service-based, science-based) employ practices to achieve a culture of stewardship.

It is important to note that the instrument used to measure stewardship for this study was developed for the purpose of this research. Although this measure is useful for providing important information on perceived organizational stewardship, future research should consider ways in which this measure can be improved to properly assess stewardship as an organizational-level phenomenon. For example, while items from this scale covered shared responsibility and collaboration, other stewardship elements (e.g., open communication) were not represented. In addition, the weak correlations found between departmental stewardship and the individual-level study variables are indicators that this instrument may need to be improved to better capture group characteristics. These weak linear relationships are likely the result of the loss of
individual information (and variance in answers) resulting from the composition of mean scores per department. When data is aggregated, groups of observations get replaced with summary score, hence the range decreases (Marvasti, 2011). This results in low variability among aggregated stewardship scores, which can lead to weak correlation coefficients.

Future research could consider assessments of more objective features of stewardship conducted concurrently with the perceptual measure to further test convergent validity. One promising direction would be to link large-scale survey data with other available data sources such as government data. This may contribute to a more comprehensive understanding of stewardship and organizational well-being and would provide important information on the correspondence between perceptions of stewardship and more objective elements. For example, future studies could analyze each department’s mission statement for indicators of stewardship.

Researchers could also reconsider the appropriate unit at which to measure stewardship or consider recruiting a larger pool of participants within each department to further ensure the reliability of this concept. Participants in this study were asked to refer to their entire department when rating organizational stewardship. However, it is possible that stewardship values and practices are easier for individuals to observe at a more proximal level, within departmental units or work teams. In other words, because some departments in the public service can be quite large and multifaceted, it may be difficult for participants to provide responses that refer to the larger department in general. Based on past research (Simpkins & Lemyre, 2015), stewardship can be achieved through both formal means (e.g., departmental mission) and informal processes (e.g., communication and shared decision-making) and can be observed at different levels within an organization. For instance, stewardship can be assessed at the individual-level, through the behaviours of leaders, at the unit-level (through coding team behaviours in an experimental
study) or at the organizational level, through surveys and objective assessments, such as coding organizational mission statements for indications of stewardship. While measuring executive perceptions of departmental-level stewardship adheres to the importance of using formally designated units for specification in multi-level design, Klein & Kozlowski (2000) raise the notion that organizations are social systems in which individuals can define their own informal social entities, which may not correspond with formal unit boundaries. Moreover, research has demonstrated that greater perceptual agreement can be found within the work-unit, which results in greater variations at the work-unit level compared to organization-level for ratings of organizational phenomena (Forbes & Taunton, 1994).

Thus, it would be interesting to assess employee perceptions of stewardship within their work unit (and how their work unit engages in collaboration across boundaries) to assess if there is more perceptual agreement within work groups, and more variability in stewardship across units. Moreover, improved measures could also incorporate the perceptions of employees at different hierarchical levels (e.g., entry-level, mid-level, managers, directors) to ensure a more comprehensive assessment of stewardship. In sum, this pilot scale can be used as a catalyst for scholars who which to expand on the operationalization of organizational stewardship.

Finally, future studies should attempt to include longitudinal data or employ an experimental design that would consider how a context of stewardship can impact the relationship between work stressors and psychological outcomes. Also, future research should attempt to interpret the causal effects of stewardship practices on the perception of organizational stress and strain. It is our hope that other scholars will attempt to uncover more ways in which organizational stewardship can positively contribute to individual and organizational well-being.
The present research expands on stewardship literature by introducing a context of stewardship, a relatively new approach in workplace stress research. These results demonstrate the importance of moving from the conceptualization of stewardship as a trait or competency of the individual towards the operationalization of this concept at the organizational level. For example, while past research has measured stewardship based on the cognitions of employees (e.g., Neubaum et al., 2017), this study provides support for conceptualizing and measuring stewardship as more observable department-level practices. More specifically, this research describes how a context of stewardship may influence organizational well-being.

Highlighting the important role of stewardship reflects the increased attention concerning how factors of the organizational environment can protect employees from psychosocial hazards. Results provide further support for integrating the socio-economic model into organizational stress research and emphasize the importance of including contextual variables such as stewardship into current models of work stress. In general, these findings suggest that organizational stewardship is indeed an important contextual variable to consider in the study of organizational health. As this study proposes, stewardship functions as an organization-based resource that, over and above personal and job resources, can be harnessed to help stressed employees cope with the social and emotional demands of role stressors.

Practical Implications

This study is the first to examine how a context of stewardship can mitigate the effects of workplace stress among executives. Firstly, the multi-level framework provided in this paper can help organizational leaders develop a more comprehensive understanding of the broader environmental factors that influence work stress and strain outcomes. Rather than focusing on a
reduction in workload or workplace demands, which may be unrealistic in certain contexts, results suggest that organizational well-being strategies may benefit from changing their focus towards strengthening collective stewardship. Thus, the results of this study can have important practical implications for public service practices, policies and procedures.

While further conceptual work and refinement to stewardship development are needed, this research provides a starting point for organizational priority setting to prevent psychological health problems resulting from stress. The findings in this study have indicated that the development and implementation of work policies and processes that facilitate stewardship in the public service context may help reduce the negative effects of work stressors, such as role ambiguity, among executives. Accordingly, when making decisions about work design, public service departments and agencies should consider investing in policies, practices and procedures that facilitate collective stewardship. For instance, the integration of procedures that facilitate information dissemination and help executives stay connected to the organizational vision and purpose. As revealed in a qualitative study on the facilitators and barriers of stewardship (Simpkins & Lemyre, 2015), other examples of this would be providing employees with opportunities for more collaborative work and informal social events that nurtures a collective orientation at the departmental level. Departments seeking to achieve greater stewardship should foster organizational values and practices that provide employees with a clear vision, developmental opportunities, psychological ownership and a sense of community. As a result, employees may be more empowered and engaged in the face of high demands and less likely to develop strain outcomes.

While annual employee surveys are conducted to monitor the public service work environment on a variety of factors, it would also be beneficial for departments to consider
monitoring perceptions of stewardship internally. In this way, department leaders could determine if stewardship practices consistent with their mandate are being valued and realized by employees. Because different departments likely embody different organization types, they may have different uses for stewardship specific to their collective unit. For instance, stewardship values in a service-based department likely differ from stewardship values within an operations-based department. In this way, organizations can audit important underlying facets of their specific work environment that may be missed by more general surveys or management accountability assessments. Furthermore, it would be interesting to explore the specific stewardship practices more strongly linked to specific department types.

It is important to note that stewardship practices should be strengthened as a preventative approach and not as an intervention strategy for distressed employees. Rather than eliminating stressors, stewardship is believed to mitigate distress by cultivating a work environment perceived as supportive, motivating and purposeful. Stewardship practices can help employees to manage their work effectively, perhaps through helping them to re-establish their place and value in the organization in which they remain connected to the greater purpose of their work. In other words, fostering a sense of stewardship at the department level can be an important element of secondary level stress mediation, helping executives build resilience to their work stressors and potentially preventing the development of mental illness symptoms, such as distress. Moreover, the case for building collective stewardship as a resource for stress in the public service is timely given that mental health management has been recently made a priority in the Canadian federal public service (May, 2016). The present research may help persuade public service officials to pay more attention to contextual factors when addressing stress prevention, as they may be more influential than formal policies or practices. Furthermore, the use of our framework can help
practitioners capitalize on the multi-level nature of work environments, which can help to improve organizational interventions for stress management in the public service. Our findings support the idea that stress interventions strategies should adopt a broader systems level approach, and that examining factors at the organizational-level may be more effective and efficient than individual-focused strategies (Cox et al., 2007).

**Conclusion**

This research theorizes and provides empirical support for the positive moderating effect of stewardship on the relationship between executive’s role ambiguity and their reported psychological distress. Major strengths of this study include a large sample of high-level public servants, an exclusive and challenging population to examine empirically in academic research. Second, the use of multi-level statistics allows for a more reliable examination of how a context of stewardship may play a role in executive stress and well-being. Finally, the results of this study respond to the call for a more systemic approach to workplace well-being, situating stewardship as an important organizational resource that may help to build resilience to common workplace stressors. While stewardship has been proposed as an essential and effective organizational approach in present-day organizations the empirical research has not investigated how this concept may be significant for organizational stress and well-being. While these findings have important implications with respect to public service practices, policies and procedures, additional research is needed to further refine the role and implementation of organizational stewardship in executive well-being. The findings of this study provide strong support for advancing a call to more actively develop and explore the concept of stewardship in public service organizations.
ORGANIZATIONAL STRESS, WELL-BEING AND STEWARDSHIP

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Chapter 5: General Discussion
Borrowing from the literature on stewardship (e.g., Block, 1993; Davis et al., 1997; Hernandez, 2012; Hernandez, 2008; Hubbard & Paquet, 2016; Hubbard et al., 2012) and working in conjunction with the JD-R and Executive Work and Health models, the purpose of the present thesis was to explore the concept of stewardship and its association with organizational stress and indicators of well-being. Stewardship was proposed as an organizational approach that can be observed through practices that emphasize the sharing of knowledge, power and resources across networks to generate trust and a shared responsibility for the public interest in a long-term context. It was theorized that organizational stewardship would be an important factor in the mitigation of executive stress and contribute to individual and organizational well-being outcomes. This model was tested using a multi-method approach reported in three different studies.

The aim of Study 1 was to develop a questionnaire measure of organizational stewardship and explore this concept within the framework of executive stress and well-being using the opportunity of a national survey. This study was based on a cross-sectional sample of executives in the Canadian public service who participated in the fourth phase of the APEX survey on Work and Health (data collected in 2012). In the first part of this study a measure of stewardship was developed and its psychometric properties were assessed. In the second part a hypothetico-deductive method was used to test this measure within the framework of organizational stress and well-being. Results indicated that stewardship as an organizational approach was a relevant concept for the study of organizational health and deserved further exploration.

Using qualitative interviews, Study 2 pursued the construct of organizational stewardship among senior executives in order to develop a better comprehension of the meaning of “organizational stewardship” and to identify its barriers and facilitators. Based on these findings
organizational stewardship was conceptualized based on four key elements: service over self-interest, sustainability of the public service beyond one’s career, working with a collective orientation and mission-focused management of resources. Results supported the need to expand views of stewardship beyond the individual factors and towards the nature of the organizational context as a primary object of interest.

Finally, Study 3 contributed further to the field by exploring stewardship as a contextual moderator in the relationship between work demands and individual well-being. Using multi-level analysis this study investigated whether departmental stewardship moderated the relationship between role demands and psychological distress among executives.

**Summary of Findings**

With respect to the main research question, stewardship appeared to be a relevant and promising construct in the context of organizational stress and well-being outcomes. First, results from Study 1 demonstrated good reliability and content validity for a five-item stewardship scale. That is, this newly developed measure advanced as a construct and justified further examination.

This measure of stewardship was negatively related to work demands (role stressors and interpersonal stressors), perceived stress, distress and cynicism, and was positively related to work resources (job control, social support) and work engagement. This is consistent with prior research demonstrating that stewardship is related to favourable organizational outcomes such as trust, commitment and work satisfaction (e.g., Segal, 2012; Waters et al., 2013). We suggest that stewardship as an organizational approach provides employees with a stronger sense of purpose
and community, helping them to manage stressful work demands and be more resilient to stress-related illness.

Surprisingly, results also showed that stewardship did not add substantial variance to psychological stress when controlling for gender and various work demands (e.g., workload, role stressors, interpersonal stressors). This indicated that stewardship may not intervene within the work demand-appraisal process. However, stewardship did account for significant incremental variance in well-being outcomes over the variance explained by psychological stress. This suggests that stewardship as an organizational resource is especially useful under conditions of cumulative appraised stress. In other words, while particular job demands may cause psychological stress, it is when multiple problems accumulate (from within and outside of the work environment) that executives may feel the most threatened with regard to their work achievements and personal well-being. Under these stressful circumstances, employees who disconnect from the true meaning of their work or lack necessary resources to problem solve may lose their motivation to sustain effort, which has the potential for more serious conditions to occur. The process by which appraised stress transitions into feelings of helplessness (cynicism, distress) may be buffered by a sense of stewardship. Further, stewardship, which generates a shared responsibility for the public interest, may help employees focus on the collective end goal and connect to the true meaning of their work, keeping them motivated and engaged, despite appraised stress. The results from this study also implied that stewardship may be a stronger predictor of clinical, well-being outcomes (e.g., symptoms of distress and burnout) rather than reported levels of perceived stress. This means that a context of stewardship may play a more important role in how employees react to their stressful work (e.g., if they remain motivated despite stressors), and does not necessarily affect whether they are stressed or not. Given that this
research is the first to examine stewardship within the framework of stress and well-being, future research is warranted to clarify these findings.

Results from Study 1 also revealed that while stewardship was significantly correlated with measures of job control, supervisor support and colleague support, it was conceptually distinct from these traditional job resources. In line with our model, we suggest that stewardship is a multifaceted concept, functioning beyond the interpersonal level of traditional work resources. These results provided further evidence to examine stewardship as a higher level phenomenon, in which the individual is not the main agent. This is consistent with Hernandez’ (2012) theoretical framework associating stewardship with various structural factors (e.g., policies and systems) and research that has labelled stewardship as higher-level phenomenon (Hubbard & Paquet, 2016; Neubaum et al., 2017). Accordingly, Study 1 concluded that more research on stewardship was needed to identify other important elements that account for this variance in stewardship, and this inquiry was pursued through a qualitative approach in Study 2.

Results from qualitative interviews with executives (Study 2) revealed that stewardship was an important and valued concept in public service work. Stewardship was described as a recursive yet essential approach in which the moral rules or beliefs of “service over self-interest” and “sustainability of the public service” influenced how employees conducted their work and how resources were managed which, in turn, strengthened stewardship principles. That is, when participants perceived a strong context of stewardship they engaged in more stewardship behaviours and reported greater efficiency. The idea that stewardship relies on the dynamic relationship between the employee and their environment provides further support for taking an ecological and systemic approach to understanding this process.
Participants described barriers and facilitators of stewardship as mainly systemic in nature, relating to organizational structure, policies and practices at the organizational level. For instance, rigid bureaucratic policies and procedures designed to mitigate risk, pressure from senior levels and competition between departmental objectives were cited as barriers of stewardship among executives. Participants explained that these factors left them feeling disempowered and unmotivated to act in the organization’s best interest. This is consistent with stewardship literature which states that controlling governance mechanisms can cause employees to feel they are not trusted, hindering stewardship behaviours (Davis et al., 1997; Hernandez, 2008). Participants also referenced poor management as impeding stewardship, but this deficiency was mainly attributed to the promotion system (i.e., promoting employees for the wrong reasons), an organizational-level issue.

Regarding facilitators of stewardship, participants described empowering work practices that allowed them more ownership over their work and made them feel supported and valued by the organization. Their own stewardship behaviours were nurtured when they were given opportunities to exercise their judgment, participate in important decisions and take intelligent risks when necessary. Moreover, management practices built interpersonal trust and open communication and facilitated stewardship. These findings are consistent with research on psychological ownership by Dyne & Pierce (2004), which found that an enhanced sense of responsibility can inspire employees to invest their time and energy to benefit organizational goals. This is also consistent with the literature on stewardship which suggests that expanding job responsibilities and opportunities for self-efficacy establishes trust and helps employees to identify with the organization and commit to achieving organizational goals (Davis et al., 1997; Hernandez, 2008). This sense of empowerment can be cultivated through organizational-level
practices and procedures (e.g., organizational structures and systems) and at the interpersonal level (e.g., leadership). Participants recognized that an important component of public service stewardship was inspiring employees to serve the “common good”, the organization, its stakeholders, and all Canadian citizens. At the interpersonal level, it was also revealed that transparency from organizational leaders about organizational matters was an important facilitator of stewardship. Participants believed this type of open communication helped to instil trust and competency among employees and foster a sense of meaning. In addition, organizational practices and procedures that nurtured interpersonal relationships and familiarized employees with other branches and roles within the organization were regarded as extremely important to cultivate a sense of community and increase collaboration. This idea is in line with the literature on stewardship, which states that the encouragement of relationship-centred collaboration helps employees to feel more connected and trusting of each other and perhaps more compelled to further the collective interest (Davis et al., 1997; Hernandez, 2008). In addition, Hubbard and Paquet (2016) believe stewardship requires the development, maintenance and nourishing of relationships within and between organizations. Finally, results revealed that stewardship was facilitated through intrinsic incentives, such as value, meaning, challenge and opportunity. Participants emphasized the importance of feeling valued through verbal recognition as opposed to external rewards. Accordingly, stewardship literature focuses on intrinsic rewards such as opportunities for growth, achievement, affiliation and self-actualization (Davis et al., 1997). These findings reinforce our theory that stewardship should be studied through an ecological and systemic perspective, paying close attention to environmental factors as antecedents of this process.
Findings from Study 2 greatly expanded on our understanding of stewardship and how it functions within the public service. Although stewardship is a product of both the individual and their social system, little attention has been paid to the broader system. Results revealed that although executives can develop their own stewardship behaviours, it is the organization and the system as a whole that creates a context within which stewardship can be actualized. At the organizational-level, processes for training and development and socialization events are important facilitators of stewardship, as are formal policies and practices that create consistency throughout the organization, such as human resource functions. While the contextual nature of stewardship had been addressed in prior research (e.g., Hernandez, 2012), the present thesis aimed to pursue this theory empirically.

In the final piece of this research (Study 3), results from a multi-level analysis demonstrated that contexts of higher perceived stewardship were associated with lower distress among executives. This study proposed that a context of stewardship reflects the degree to which a department engages in effective collaboration across networks, generating trust and a shared sense of responsibility which may help executives to be more resilient to stressful work conditions. For example, the collective orientation of these departments may provide senior-level employees with more information about how their work contributes to long-term goals, more ownership or more adequate resources to complete their work, helping to foster a reciprocal mental model of the employment relationship. This conforms to research on the “psychological contract” (Rousseau, 2004), which maintains that when employees and the organization commit to meeting the needs of the other and have an open-ended commitment to the future of the organization this can contribute to positive job-related attitudes and better performance. Having
this relational agreement may help executives to stay motivated and work more efficiently, despite organizational setbacks.

Unexpectedly, a context of stewardship did not moderate the relationship between role conflict and distress. While we expected that this cross-level interaction would be significant given our conceptual model, it can be argued that role conflict represents a distinct type of role stressor to which elements of stewardship may not be as resourceful. Of course, because this study is the first of its kind, this finding should be regarded as preliminary and more research is needed to further investigate this relationship. On the other hand, departmental stewardship did significantly moderate the relationship between role ambiguity and distress among this sample. Based on principles evident in stewardship literature and previous research findings, we suggest that executives working in high stewardship departments may be more likely to experience their work as meaningful and something they wish to devote effort to, despite confusion regarding their work expectations. This also aligns with psychological contract theory, which suggests that having a reciprocal employment relationship helps employees function despite having incomplete information about organizational expectations (Rousseau, 2004). Moreover, working in an environment where one feels trusted and capable can help to build resilience to stress-related illness, such as distress. This coincides with research demonstrating that self-efficacy beliefs can moderate the stressor-strain relationship (Jex, Bliese, Buzzell, & Primeau, 2001; Jex & Bliese, 1999). Moreover, we suggest that a collective orientation provided through stewardship may help to build psychological resilience through instrumental, informational and emotional support. For instance, a sense of community may serve as emotional support when an executive is experiencing ambiguity with regard to their role. A context that aligns employees around a shared responsibility may help them to feel more connected to the larger purpose of
their work, offsetting aversive stimuli (i.e., stressors), and possibly avoiding the development of further psychological distress. These findings are consistent with the theory that stewardship practices establish a context in which employees are supported, motivated and engaged in the face of work stress.

An interesting finding was that departmental stewardship moderated the relationship between occupational level and distress. This result suggests that stewardship cultivates a more open and transparent work environment where roles and responsibilities are more widely distributed, perhaps reducing perceived layers of hierarchy and creating a more level playing field within the department. A stronger sense of community instilled through stewardship practices may encourage employees at different hierarchical levels to perceive and cope with their demands similarly. These results are consistent with stewardship literature which states that stewardship can be associated with shared leadership practices composed of lateral influence exchanges among employees or team members (Hernandez, 2012). These findings further support our conceptual model positioning stewardship as a resource at the organizational-level that can help executives build resilience to stressful working conditions and hinder the development of stress-related illness.

Altogether, the results from the present thesis contribute to a growing body of literature on the concept of organizational stewardship. While the organizational benefits of this construct have been increasingly discussed by scholars, empirical support is limited.

Recently, research by Neubaum, Thomas and Dibrell (2017) in the family business domain acknowledged a lack of a valid or reliable measure of stewardship in organizational research. To address this gap, they developed a Stewardship Climate Scale based on six dimensions consistent
with Davis, Schoorman and Donaldson’s conceptualization of stewardship (1997). Their research provides further support for the relevance of stewardship as an organizational concept as well as the need to develop a reliable instrument. However, the Stewardship Climate Scale (Neubaum et al., 2017) is founded on previous stewardship research that lacks precision and refers mainly to practices of managers and supervisors within the microsystem. In contrast, the five-item stewardship scale developed for this thesis reflects mechanisms that take place at higher levels, beyond the behaviors of supervisors and subordinates within respective units or work teams. The research conducted in this dissertation supports a reconceptualization of stewardship, specifically as an organizational approach that captures the reality of the current public service work environment. This perspective may represent the next step in the natural development of the construct from a more individual to a broader orientation. Moreover, this thesis depicts stewardship in a way that may be more closely aligned to the work of public service organizations.

First, stewardship represents a complex process extending beyond individual traits and behaviours where employees are part of a system of mutual influence; moreover, a stewardship approach is amplified by interactions between employees and their environment and manifests as a higher-level phenomenon. Scholars of public administration maintain that the responsibility for stewardship should be shared by both the employer and employee, and that shifting towards this approach requires continuous learning through interactions (Hubbard & Paquet, 2016). A context of stewardship is believed to provide employees with a sense of purpose and a sense of community. Moreover, until now research has not examined this construct within the process of organizational stress and well-being. The research presented in this thesis can serve as an initial conceptual framework for understanding the role of stewardship in the context of organizational
health and provides empirical support from which other researchers can build on. The findings from this thesis suggest that the context created through a stewardship approach may help executives to feel supported and better equipped to deal with everyday work stressors, such as role demands. While results from Study 1 implied that stewardship may play a stronger role in the relationship between perceived stress and well-being, findings from Study 3 demonstrated that stewardship was a significant moderator of the relationship between a specific work demand (i.e., role ambiguity) and well-being (i.e., distress). These results support our initial theory that stewardship can play a role at two different points in the causal chain linking stress to well-being, attenuating a stress appraisal response and/or influencing indicators of well-being.

Although the findings from this thesis are preliminary and require further validation, they make several important contributions to the literature and provide a strong starting point for researchers and practitioners who wish to develop this model and practically apply these insights in organizational settings.

Limitations

Findings obtained in this thesis should be interpreted in light of some limitations which offer valuable directions for future research.

First, data collected for Study 1 and 3 was self-reported by employees using an online questionnaire. This cross-sectional study design does not allow for conclusions about causality. Additionally, because our dependent and independent variables were measured within the same survey our findings may be influenced by common method bias. By conducting a confirmatory factor analysis we were able to partially address concerns about common method bias. To reduce social desirability participants were ensured that responses were completely anonymous and confidential. Nonetheless, future studies should consider a longitudinal design or experimental
studies in which stewardship is manipulated in order to reduce common method variance and resolve issues of causality.

Because scale development is a continuous process, additional research is necessary to further assess discriminant, convergent, and predictive validity of the organizational stewardship measure with a wider range of samples and contexts. Future research should consider administering this scale in a new sample of participants, separate from a larger scale study. Such research should include contextual variables in the same nomological network as stewardship (e.g., Perceived Organizational Support) to ensure there is no conceptual overlap.

To further our understanding of this construct, future studies should consider alternatives to survey-based data. That is, future studies should develop other methods to assess stewardship, such as content coding of departmental mission statements to complement the results produced using survey measures.

Although our theory suggested additional variables (e.g., psychological ownership, sense of meaning, sense of community) as potentially mediating relationships between stewardship and indicators of well-being, we did not directly measure these mechanisms. To better support our theory, future research should focus on the underlying mechanisms of stewardship rather than strictly focusing on its relationship to well-being. Empirical research can also serve to model and assess the processes underlying these observed relationships.

It is important to note that this research was conducted among a population of executives who were at work (i.e., not on sick leave). Thus, the results concerning mental health outcomes among this population reflect the mental health of functional employees, yielding an
underestimation of actual negative outcomes (e.g., cynicism and distress). The assessment of clinical outcomes calls for a different study design beyond the scope of this research.

Finally, data used in this thesis was based on public service executives in Canada. We are therefore not able to generalize the results to other organizations such as those in the private sector. As a result, it is possible that data from different contexts may yield different relationships and insights.

Contributions to the Research

Despite these limitations, there are several important strengths of the current research. First, this research expands on the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) by giving greater emphasis to the role of work conditions (i.e., properties of the context and organizational system) in this process. This focus on the social context of work contributes to the idea that organizational research would gain greatly from identifying conditions of work that affect employee well-being, “rather than more fully attending to intra-individual processes” (Brief & George, 1995, p. 16). Relatedly, this research addresses numerous calls for a broader approach to workplace health (Cooper et al., 2013; Day & Kelloway, 2005) through positioning stewardship as a contextual factor that can contribute to a healthy workplace. An ecological approach to stewardship, as an interaction between employees and the environment expands on previous conceptualizations of stewardship at the individual level. Moreover, this is the first series of studies that has investigated stewardship within the framework of organizational stress and well-being, positioning stewardship as a resource to stressful work conditions. Developing a better understanding of stewardship dynamics within this framework opens an extremely fruitful area of research. Moreover, this thesis provides
future researchers with a conceptual model through which stewardship can be tested in relation to job stressors, perceived stress, and indicators of individual and organizational well-being.

This research also introduces a new measure of stewardship which was found to be a significant determinant of individual and organizational well-being outcomes. On the basis of these findings, this research offers a theory-driven contextual measure of stewardship that has initial evidence to support its reliability and validity, consequently providing future researchers with a new method for assessing this concept in other organizational settings. Our results also suggest that it is possible to discriminate this measure of stewardship from other traditional work resources (e.g., job control and social support).

Another major strength of this research is the use of a large sample of high-level public servants, a unique and historically difficult population to examine empirically in academic research. This thesis offers valuable insights into the nature of executive work, as well as their occupation-specific stressors and resources. The large sample of participants used in Study 1 and 3 allowed for statistical analysis that incorporated multiple variables (i.e., hierarchical regression). This research also answers calls for more multi-level investigations of organizational phenomena (e.g., Klein & Kozlowski, 2000), allowing us to observe the influence of organizational-level stewardship and helping us to understand the importance of analyzing individual and organizational level characteristics. The results of this research support the use of multi-level techniques in the study of workplace stress and provide an opportunity to focus on organizational practices and procedures to optimize executive well-being.

The use of qualitative inquiry complemented the large-scale quantitative data, allowing for a deeper understanding of the organizational context. Differing data collection and analysis
techniques employed through a mixed method approach allows for a greater depth and breadth in overall results, in which credibility is increased and more accurate inferences can be made (Jogulu, 2011).

**Practical Implications**

In addition to its contribution to organizational theory and research, this conceptual model of stewardship has great potential in the application of knowledge to practice.

The role of researchers and practitioners. Given sweeping concerns about the complexities and intricacies of the new kind of work required by the public service and new approaches that are needed (Hubbard & Paquet, 2016; Wilson, 2013), findings from this thesis may be especially timely and relevant to researchers and practitioners. Representing the link between the development and application of new knowledge, researchers and practitioners in the field of organizational health can play a purposeful role in transferring the principles of our model to employees and the organization. One general recommendation is that there needs to be better communication between the academic and managerial communities so that research findings, such as these, can have a greater influence on organizational practices. This is especially important in cases where the research examines a specific population of interest, such as public service executives.

The conceptual model and measure used in this thesis can serve as a practical means through which organizations seeking to provide stewardship development training can begin to design programs and interventions. First, it is important that stewardship principles are effectively communicated and understood by various members involved in maintaining the health and wellness of the organization (e.g., organizational leaders, health and quality
improvement professionals). The measure of organizational stewardship can eventually be used as an evaluation tool for intervention, offering organizational human resource professionals a reliable and valid instrument for identifying potential systemic issues. For instance, differences in responses to questions like “…we have mutual trust and respect between our department/agency and other departments/agencies” may uncover underlying tension between organizations. Such data could be used as a basis for more closely monitoring organizational practices and processes within a given department and addressing issues related to inter-organizational trust, respect and collaboration. Moreover, findings from the qualitative interviews provide practitioners with specific areas of focus concerning organizational facilitators and barriers of stewardship. As a result, specific tailored interventions can be introduced rather than those that are broadly focused.

More generally, the conceptual model offers some critical content for stress management programs to build resilience and improve well-being among executives. This model supports continuing efforts to identify and address contextual factors that can contribute to personal and organizational well-being outcomes. For instance, leadership development programs should include opportunities to build and strengthen stewardship capacity in the public service. Thus, it is important to develop a clearer understanding of stewardship within the public service and begin to develop ways in which this construct can be applied to organizational initiatives.

**The role of organizational leaders.** As reviewed in the literature, organizational leaders have a significant influence and perceived responsibility for the functioning of their workplace, through personal example and active encouragement (Campbell et al., 2000). Executives are accountable for setting the right tone for organizational behaviours and results from this research indicated that organizational leaders are a key driving force in the promotion and advancement of
organizational stewardship. First, our results could help organizational leaders (e.g., managers, senior executives) to better understand how stewardship practices contribute to individual and organizational well-being outcomes. Increasing the awareness of organizational leaders concerning this approach allows them to take notice of their own stewardship behaviours and prepares them to make steps towards improvements at the organizational-level.

The next step for organizational leaders is movement towards actual changes; this involves efforts to reduce stress-related outcomes through providing work conditions that are conducive to stewardship. For instance, our findings highlight the value of leaders who are engaged and empowering, such as those who are open to discuss new ideas and perspectives. Because organizational leaders can have a significant impact on organizational climate and behavior, executives should practice non-defensive listening and humility. Executives can help to foster a collective orientation where ideas are welcomed and not criticized and shared issues are approached with an open mind. Through encouraging open dialogue and collaboration organizational leaders can build a sense of community and help strengthen inter-organizational ties. This can include making a conscious and disciplined effort to bring people together and developing strong relationships across branches and departments. Executives can also increase employee autonomy and ownership through the use of self-directed work teams. With this approach, executives can provide their team with clear objectives, but allow the team to decide how to achieve these objectives. This method of work can also allow employees to engage in a collective learning process, where they can combine different skills and perspectives to achieve a common goal.

Finally, because leaders are responsible for communicating the vision and values of the organization they can provide sufficient support to help employees understand their roles,
objectives and the significance of their work. Superiors can foster stewardship by constantly communicating to employees how their work relates to the mission, vision and purpose of the organization. For instance, executives can develop new ways to convey how the work being done in their department or unit has a direct impact on the safety, health and economic progress of communities and the individuals within them (e.g., through presentations or off-site work activities). Collectively, these actions represent important mechanisms toward helping organizational leaders model and foster a context of stewardship; in this way, individuals are instrumental to fostering stewardship at the meso-level. These behaviors might be more innate or natural to some executives; they can also be learnt and acquired as skills. Hence, elements of our research could feed the development of competency assessment and training modules on stewardship practices.

**The role of organizations.** As the ecological model of stewardship implies, the organizational setting plays an important role in the development of stewardship. Thus, changes need to be made to organizational practices, structures, organizational assessments and reward systems that affect how the work is conducted.

Stewardship at the organizational level is reflected in decision-making that reminds explicitly of the mission, in management committee discussions that links different people and resources to common objectives, that fosters shared ownership and responsibility that allow time for open discussion and that plans for stakeholder consultations before decisions.

Organizations can redesign their evaluation structure to enhance stewardship practices in the work environment. While individual performance evaluations are useful for highlighting expectations and offering feedback on areas of employee development, these assessments remain
focused on individual improvements and outcomes. As team-based work continues to grow, organizations can incorporate more project-based evaluations, which will help to evaluate if organizations are effectively contributing to their mission. A shift to more project-based evaluations may encourage employees and organizations to share information, knowledge and resources to accomplish a shared goal and hinder the desire to protect one’s expertise or resources for individual gain.

With regard to leadership assessment, behaviours that facilitate a stewardship approach should be measured, developed and rewarded. For example, executive developmental and accountability programs should emphasize practices that facilitate stewardship such as the clear communication of organizational values, objectives and the significance of the work. Moreover, organizational assessments could help departments identify executives who value openness to input over formal mechanisms and who may be better leaders for collaborative projects.

In addition, strategies to improve reward systems should consider including elements of stewardship. For instance, collective efforts should be recognized over individual performance and more attention should be given to non-monetary incentives. While output and short-term successes are easier to measure, efforts related to advancing the public interest and ensuring a strong future for Canadian citizens should be strongly encouraged through incentive systems.

Best practices for organizational stress prevention could include facilitators of stewardship that break down barriers to enhance communication, collaboration and overall well-being. For example, new procedures around “cross-pollination” could be implemented, where employees are mobilized to different jobs within or outside of their current unit or department; this may foster better inter/intra-departmental communication, collaboration and resilience to stress. In addition, executive training programs can highlight and focus on the attributes of contextual
factors of the work environment and the potential for improving health and positive well-being in executives and the organization as a whole.

Because the social issues faced by government organizations are too comprehensive for any one agency or organization to address alone, a stewardship approach can be applied to inter-organizational strategies to ensure that various perspectives are incorporated in the decision-making process. For instance, organizations and agencies with different priorities should aim for a more open structure at collaborative meetings. An open structure allows for the inclusion of key stakeholders and other organizations that have a stake can participate in shaping the overarching agenda. In some situations organizations with aims that are relevant to the collaborative agenda may wish to be included in side discussions even if they are not formally participating. Moreover, because a stewardship approach promotes social responsibility to the public interest, the input of internal and external stakeholders is required for effective collaboration. Explicit time for discussion should also be incorporated into the meeting agenda so that all parties are able to fully engage. In this way, joint initiatives can be addressed from all angles and include combined resources, which may lead to more successful outcomes in the long-term.

**The role of policy.** Further research on stewardship is needed to continue to develop this body of knowledge, which in turn is crucial for more meaningful and effective policy recommendations. The most fundamental implication of this research for policymaking is that stewardship, as an organizational approach, can have a significant influence on executive well-being. Given the attention being paid to the Canadian public service renewal and reform through various documents and initiatives (e.g., Blueprint 2020), scholars recognize that there is a need for major transformation in government systems and processes. Findings from this thesis can
assist with general recommendation suggestions for improvements made at the policy level in support of employee well-being. For instance, the legislative framework for human resources management should focus on providing more empowering work practices, such as shared decision-making, and more opportunities for collaborative work. These work conditions could also be achieved through the coordination of internal committees. Ensuring that organizational members at all levels are able to participate in these committees will foster a culture of transparency and shared-decision-making. Policies should also reflect an increase in transparency, in this way, employees are trusted to take more ownership over their work and are more engaged in government decisions.

With regard to organizational stress specifically, our conceptual model and findings can be used to examine key issues relevant to the management of psychosocial factors at work, and these include the review of organizational policies for stress prevention and intervention. Government policies should endorse more upstream approaches to workplace stress through providing departments/agencies with new incentives to promote positive and psychologically healthy organizations. For instance, departments/agencies can be recognized for developing policies and practices that promote stewardship practices and improve employee well-being. Moreover, departments should be able to choose what types of policies and programs work best given their immediate needs instead of a government-wide approach. The results from this thesis provide an initial platform for policy development that takes into account the working conditions of this specific population.

**Future Research**

The purpose of this research was to explore the idea and concepts that have been published thus far on the notion of stewardship as well as push these ideas forward through
empirical analysis. This thesis represents a first step in a quest to better understand organizational stewardship and how it plays a role in the organizational stress and well-being framework. Based on our discussion, we believe there is a need for further research to refine a measure of stewardship and test the relationships depicted.

The qualitative study conducted as part of this thesis provided rich data regarding how stewardship functions and how it can be assessed at a higher level of analysis. While brief scales can be helpful in conducting organizational research, the concise nature of such instruments comes with a loss in precision. Thus, future research should seek to expand on the survey measure of stewardship used in this thesis to develop a new psychometrically robust measure that captures the multidimensional nature of this construct.

The improvement of this survey measure will be informed by the dimensions of stewardship reported in Study 2 (e.g., service over self-interest, sustainability of the public service beyond one’s career, working with a collective orientation and mission-focused management of resources) as well as the various facilitators of stewardship which can be used to develop a new pool of indicators. For instance, a new indicator of collective orientation could ask about the degree to which an organization will incorporate new approaches/perspectives and ideas when working on a joint issue and a new indicator of service over self-interest could ask about the degree to which an organization recognizes serving the public interest before the departmental agenda.

Of course, future studies could also incorporate alternatives to survey-based data to assess stewardship in the public service. This can include qualitative, administrative and organizational data. The findings from this research provide a more detailed conceptualization of
what stewardship is and how it functions within the public service which can contribute to a better assessment of this meso-level phenomenon.

Once an improved measure of organizational stewardship is developed, another potentially promising avenue or research is to focus on extreme case comparison methodologies based on departmental scores of stewardship. A qualitative comparison of these extreme cases characterized by corresponding high scores could lead to key insights about what factors distinguish high stewardship departments from low stewardship departments in the public service. Furthermore, studies should be carried out in different organisational settings, for instance, in the private sector to examine if the role of stewardship may change depending on the organization type or culture.

As discussed in the literature review, there appears to be some conceptual overlap between stewardship and other constructs in the workplace literature such as organizational citizenship behaviours (OCBs), and relationship-centred approaches to leadership such as servant leadership, transformational leadership, participative leadership and Leader-Member-Exchange (LMX). Positioning stewardship at the meso-level presents a new challenge of distinguishing this concept from other organizational-level variables (e.g., collective efficacy, psychological safety climate). Thus, future empirical research on stewardship should test the associations between these organizational variables and provide empirical evidence of their discriminant validity.

While many inferences were made based on the findings of this research concerning pathways and underlying mechanisms through which stewardship plays a role in the organizational stress and well-being framework, many of these hypotheses remain to be explored. For instance, this research did not thoroughly examine the relationship between
stewardship, trust, a sense of purpose and collaboration. Since the scope of this dissertation was to better understand the concept of stewardship and how it plays a role in the relationship between stress and well-being, future research concerning the underlying mechanisms by which stewardship acts as an organizational resource would be of value to both practice and theory. The conceptual model proposed in this thesis offers further insights into how this area of research could be approached.

**Conclusion**

This research presents a construction of a theory of stewardship as contextual resource within the framework of organizational stress and well-being. Rather than focusing on individual-level characteristics and behaviours, this thesis demonstrates the value of organizational-level stewardship, especially as it pertains to well-being outcomes. Findings from the present thesis provide empirical support for the role of organizational stewardship as a protective factor in the relationship between executive stress and indicators of individual and organizational well-being. Moreover, these findings offer valuable contributions to the stewardship and organizational stress literatures. Examining variables beyond the immediate workplace environment is paramount to improve stress management in the workplace, and it is hoped that the results obtained will inspire researchers to incorporate variables relating to broader organization context into models of organizational stress. As scholars become more aware of the challenges faced by present-day organizations and seek solutions for better approaches to organizational well-being, the results of thesis may be especially relevant and timely. Results from this project may foster discussion concerning the evolving capacity of public organizations to re-examine contemporary structures of governance that reflect empowering and collaborative approaches. It is our hope
that the findings from this thesis encourage further research in the area of stewardship, organizational stress and well-being.
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ORGANIZATIONAL STRESS, WELL-BEING AND STEWARDSHIP


ORGANIZATIONAL STRESS, WELL-BEING AND STEWARDSHIP


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ORGANIZATIONAL STRESS, WELL-BEING AND STEWARDSHIP


Organizational Stress, Well-being and Stewardship


ORGANIZATIONAL STRESS, WELL-BEING AND STEWARDSHIP

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Retrieved from


APPENDIX A: NOTICE OF ETHICAL APPROVAL

Ethical approval was renewed during the duration of the thesis studies.

<table>
<thead>
<tr>
<th>Principal Investigator / Supervisor / Co-investigator(s) / Student(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Name</strong></td>
</tr>
<tr>
<td>Louise</td>
</tr>
</tbody>
</table>

**File Number:** 08-07-24C  
**University of Ottawa**  
Office of Research Ethics and Integrity

**Ethics Approval Notice**  
Social Science and Humanities REB

**File Number:** 08-07-24C  
**Type of Project:** Professor  
**Title:** APEX Study on Work and Health

**Approval Date (mm/dd/yyyy):** 05/14/2012  
**Expiry Date (mm/dd/yyyy):** 05/15/2013  
**Approval Type:** Is

**(Is: Approval, Ie: Approval for initial stage only)**

**Special Conditions / Comments:** N/A
This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement and other applicable laws and regulations in Ontario, has examined and approved the application for ethical approval for the above named research project as of the Ethics Approval Date indicated for the period above and subject to the conditions listed in the section above entitled "Special Conditions / Comments".

During the course of the study the protocol may not be modified without prior written approval from the REB except when necessary to remove subjects from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the study (e.g. change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, information/consent documentation, and/or recruitment documentation, should be submitted to this office for approval using the "Modification to research project" form available at: http://www.rges.uottawa.ca/ethics/application_dwn.asp

Please submit an annual status report to the Protocol Officer 4 weeks before the above-referenced expiry date to either close the file or request a renewal of ethics approval. This document can be found at: http://www.rges.uottawa.ca/ethics/application_dwn.asp

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5841 or by e-mail at: ethics@uottawa.ca.

Signature:

Catherine Paquet
Director
For Barbara Graves, Chair of the Social Sciences and Humanities REB
Certificat d’approbation déontologique

CER Sciences sociales et humanités

Chercheur principal / Superviseur / Co-chercheur(s) / Étudiant(s)

Prénom       Nom de famille       Affiliation       Rôle
Louise        Lemire             Sciences sociales / Psychologie       Chercheur principal

Numéro du dossier: 06-10-31

Type du projet: Professeur

Titre: Risk Management and Governance: Understanding Problem Solving and Decision Making

Date de renouvellement (mm/jj/aaaa)       Date d’expiration (mm/jj/aaaa)       Approbation
09/14/2012       09/13/2013       la

(Le: Approbation complète, Dr: Autorisation provisoire de libération de fonds de recherche)

Conditions Spéciales / Commentaires:
N/A
La présente confirme que le Comité d'éthique de la recherche (CER) de l'Université d'Ottawa a été formé conformément à l'Enoncé de politique des Trois conseils et toutes autres lois et tous règlements applicables de l'Ontario, et a examiné et approuvé la demande d'approbation déontologique du projet de recherche ci-dessus. L'approbation est valable pour la durée indiquée plus haut et est sujette aux conditions énumérées dans la section intitulée "Conditions Spéciales / Commentaires".

Lors de l'étude, le protocole ne peut être modifié sans approbation préalable écrite du CER sauf si le sujet doit être retiré en raison d'un danger immédiat ou si il s'agit d'un changement ayant trait à des éléments administratifs ou logistiques de l'étude comme par exemple un changement de numéro de téléphone. Les chercheurs doivent avis des CER dans les plus brefs délais de tout changement pouvant augmenter le niveau de risque aux participants ou affecter considérablement le devenir du projet. Ils devront aussi rapporter tout événement imprévu et / ou dommageable et devront soumettre toutes les nouvelles informations pouvant nuire à la conduite du projet et à la sécurité des participants. Toutes modifications apportées au projet, aux lettres d'information / formulaires de consentement ainsi qu'aux documents de recrutement doivent être soumises pour approbation à ce Service en utilisant le document intitulé "Modification au projet de recherche" au:


Veuillez soumettre un rapport annuel au Responsable de la déontologie en recherche, quatre semaines avant la date d'échéance indiquée afin de fermer le dossier ou demander un renouvellement de l'approbation déontologique. Le document nécessaire est disponible en ligne au:


Pour toutes questions, vous pouvez communiquer avec le bureau de déontologie en composant le poste 5387 ou en nous contactant par courriel à deontologie@uOttawa.ca.

Signature:

Riana Marcotte
Responsable de la déontologie en recherche
Pour Barbara Graves, Présidente du CER en Sciences sociales et humanités
APPENDIX B: APEX 2012 WORK AND HEALTH SURVEY

Only scales used for Study 1 and Study 3 of this thesis are included in this section with the exception of the Maslach Burnout Inventory (MBI) which was used to measure cynicism. This scale is protected by copyright and distributed through a commercial publisher.

2012 Work and Health Survey

The invitation to complete this questionnaire has been sent to you by Dr. Louise Lemyre of the Institute for Population Health at the University of Ottawa. APEX is undertaking this study – the 2012 Work and Health Survey – as a follow-up to its 1997, 2002, and 2007 studies on executive health. APEX believes it is important to understand current Federal Public Service working conditions and their relationship to the health of executives. That is why we want to know about your work environment and how it affects you. Since this information is not available anywhere else, getting your answers to the questions in this survey is extremely important.

The new information we gather will be compared to results from the previous three studies. This will help to determine if there are important trends in the relationship between the work environment and the health of the executive community. It will add to the scientific understanding of work stress and provide source material for academic publications. APEX will also communicate group results to the central agencies of government and recommend appropriate action.

We need your participation to make this work. The survey can only provide a full and complete picture of the working conditions and health of Public Service executives if everyone who receives an invitation responds.

Please print the attached PDF file and complete the survey by hand. Once you have completed the survey, you can either mail it to Dr. Lemyre, Institute of Population Health (FSS 5052), 120 University, Ottawa, ON K1N 6N5; or scan and email to louise.lemyre@uottawa.ca.

The questionnaire will take approximately 30-40 minutes to complete. Using a multiple choice format, you will be asked to describe your work load, work climate, work relationships, social support or harassment, and your health status over the last year. There are no right or wrong answers. Try to answer ALL the questions. Each contributes significantly to the overall picture.

The questionnaire is anonymous. While aggregate results of the study will be published and discussed within APEX and at research conferences, no individual responses will be shared. All data will be tabulated and maintained by the researchers in accordance with medical research confidentiality standards.

Participation is completely voluntary, confidential, and anonymous. You are free to withdraw at any time and may refuse to participate or to answer certain questions. There is no direct individual benefit from answering the questionnaire. There are no expected harms or risks except the possible negative feelings sometimes associated with reflecting on one’s own health and environment. In the unlikely event of distress or discomfort, you may wish to contact your personal physician, your Employee Assistance Program, or a local Helpline.

For other questions about the study, you may contact the Principal Investigator, Dr. Louise Lemyre at the University of Ottawa (613.562.5000 extension 1196, louise.lemyre@uottawa.ca).

For ethical concerns, contact the Protocol Officer for Ethics in Research Board, University of Ottawa (613.562.3841, ethics@uottawa.ca). Completed questionnaires will be considered informed consent.

***Thank you for your assistance with this important study***

© Lemyre et al., 2012.
**A2: How accurate is each of the following statements in describing your job?**

<table>
<thead>
<tr>
<th></th>
<th>Very Inaccurate</th>
<th>Uncertain</th>
<th>Accurate</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
<tr>
<td>b)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
<tr>
<td>c)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
<tr>
<td>d)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
<tr>
<td>e)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
<tr>
<td>f)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
<tr>
<td>g)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
<tr>
<td>h)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
<tr>
<td>i)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
</tr>
</tbody>
</table>

**A4: Based on the last 12 months, how often:**

<table>
<thead>
<tr>
<th></th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Sometimes</th>
<th>Fairly Often</th>
<th>Very Often</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
<td>○5</td>
<td>○6</td>
</tr>
<tr>
<td>b)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
<td>○5</td>
<td>○6</td>
</tr>
<tr>
<td>c)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
<td>○5</td>
<td>○6</td>
</tr>
<tr>
<td>d)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
<td>○5</td>
<td>○6</td>
</tr>
<tr>
<td>e)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
<td>○5</td>
<td>○6</td>
</tr>
<tr>
<td>f)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
<td>○5</td>
<td>○6</td>
</tr>
<tr>
<td>g)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
<td>○5</td>
<td>○6</td>
</tr>
<tr>
<td>h)</td>
<td>○1</td>
<td>○2</td>
<td>○3</td>
<td>○4</td>
<td>○5</td>
<td>○6</td>
</tr>
</tbody>
</table>
A5: Please answer the following questions about your work situation. Note: "unit" refers to the work group for which you are responsible.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Agree</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
</tr>
<tr>
<td>b)</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
</tr>
<tr>
<td>c)</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
</tr>
<tr>
<td>d)</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
</tr>
<tr>
<td>e)</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
</tr>
<tr>
<td>f)</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
</tr>
<tr>
<td>g)</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
</tr>
</tbody>
</table>

Please indicate the level of influence you currently have in each of the 14 areas below. By “influence”, we mean the degree to which you control what is done by others at work and the latitude to determine what you do yourself at work.

A8: How much influence do you have over the:

<table>
<thead>
<tr>
<th></th>
<th>Very Little</th>
<th>Little</th>
<th>A Moderate Amount</th>
<th>Much</th>
<th>Very Much</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Availability of supplies and equipment you need to do your work?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>b) Order in which you perform tasks at work?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>c) Amount of work you do?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>d) Pace of your work, that is how fast or slowly you work?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>e) Decisions concerning which individuals in your work unit do which tasks?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>f) Hours or schedule that you work?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>g) Decisions as to when things will be done in your work unit?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>h) Availability of the human resources you need to do your job?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>i) Training of other workers in your unit?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>j) Policies and procedures in your work unit?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
</tbody>
</table>

© Lampe et al., 2012
## 2012 Work and Health Survey

### A11: Please indicate:

<table>
<thead>
<tr>
<th></th>
<th>Very Much</th>
<th>Somewhat</th>
<th>A Little</th>
<th>Not at all</th>
<th>N/A</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) How much does your immediate supervisor go out of his or her way to do things to make your work life easier for you?</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
</tr>
<tr>
<td>b) How much can your immediate supervisor be relied on when things get tough at work?</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
</tr>
<tr>
<td>c) How easy is it to talk with colleagues at work?</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
</tr>
<tr>
<td>d) How much can colleagues at work be relied on when things get tough at work?</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
</tr>
<tr>
<td>e) How much are colleagues at work willing to listen to your personal problems?</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
</tr>
</tbody>
</table>

### A12: Please indicate how satisfied you are with:

<table>
<thead>
<tr>
<th></th>
<th>Very Dissatisfied</th>
<th>Neutral</th>
<th>Very Satisfied</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Your job in general.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
<tr>
<td>b) The amount of pay you get.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
<tr>
<td>c) The number of hours you work.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
<tr>
<td>d) The schedule of your work hours.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
<tr>
<td>e) The sorts of things you do on the job.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
<tr>
<td>f) Your current work load.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
<tr>
<td>g) The training/development opportunities offered by your department/agency.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
<tr>
<td>h) The possibilities to meet career goals and aspirations.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
<tr>
<td>i) The amount of job security you have.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
</tr>
</tbody>
</table>

### B2: The following are some statements about how you might perceive your work. Please indicate the response that most applies to you.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Almost Never</th>
<th>From Time to Time</th>
<th>Regularly</th>
<th>Often</th>
<th>Very Often</th>
<th>Always</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) At work, I feel bursting with energy.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
<tr>
<td>b) At work, I feel strong and vigorous.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
<tr>
<td>c) I am enthusiastic about my work.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
<tr>
<td>d) My work inspires me.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
<tr>
<td>e) When I get up in the morning, I feel like going to work.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
<tr>
<td>f) I feel happy when I am working intensely.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
<tr>
<td>g) I am proud of the work I do.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
<tr>
<td>h) I am immersed in my job.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
<tr>
<td>i) I get carried away when I am working.</td>
<td>Q₁</td>
<td>Q₂</td>
<td>Q₃</td>
<td>Q₄</td>
<td>Q₅</td>
<td>Q₆</td>
<td>Q₇</td>
<td>Q₈</td>
</tr>
</tbody>
</table>
### B15: In my department/agency, we:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Usually</th>
<th>Always</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Work and collaborate well inter-departmentally when making decisions.</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>b) Consider our immediate outcomes as well as the horizontal outcomes (across the public service) to be a shared responsibility among all departments/agencies.</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>c) Work and collaborate with agencies at the provincial and local level when making decisions.</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>d) Work and collaborate with the private or voluntary sectors when making decisions.</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>e) Are committed to the achievements of the overall federal government before the achievements of our own department/agency.</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>f) Have mutual trust and respect between our department/agency and other departments/agencies.</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
<tr>
<td>g) Share effort with other departments/agencies to achieve a better outcome.</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O₅</td>
<td>O</td>
</tr>
</tbody>
</table>

### C2: Have you over the past month:

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>No More Than usual</th>
<th>Rather More Than usual</th>
<th>Much More Than usual</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Been feeling in need of some medicine to pick you up?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>b) Been feeling run-down and out of sorts?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>c) Felt that you are ill?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>d) Been getting any pains in your head?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>e) Been getting a feeling of tightness or pressure in your head?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>f) Been having hot or cold spells?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>g) Lost much sleep over worry?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>h) Had difficulty staying asleep?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>i) Felt constantly under strain?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>j) Felt you couldn’t overcome your difficulties?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>k) Been taking things hard?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>l) Been getting edgy and bad tempered?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>m) Been getting scared or panicky for no good reason?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>n) Found everything getting too much for you?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>o) Been feeling unhappy and depressed?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>p) Been losing confidence in yourself?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>q) Been thinking of yourself as a worthless person?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>r) Been feeling nervous and uptight (or hung up) all the time?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>s) Found at times you could not do anything because your nerves were so bad?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
</tbody>
</table>

### C3: Have you over the past month:

<table>
<thead>
<tr>
<th></th>
<th>Better Than Usual</th>
<th>Same As Usual</th>
<th>Worse Than Usual</th>
<th>Much Worse Than Usual</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Been feeling mentally alert and wide awake?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>b) Been managing to keep yourself busy and occupied?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>c) Been getting out of the house as much as usual?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>d) Felt on the whole you were doing things well?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>e) Felt that you are playing a useful part in things?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>f) Felt capable of making decisions?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>g) Been able to enjoy your normal day-to-day activities?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>h) Been able to face up to your problems?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
<tr>
<td>i) Been feeling reasonably happy, all things considered?</td>
<td>O₁</td>
<td>O₂</td>
<td>O₃</td>
<td>O₄</td>
<td>O</td>
</tr>
</tbody>
</table>
C14: Mark the number that best indicates the degree to which each statement applies to you recently, that is in the last 4-5 days:

<table>
<thead>
<tr>
<th></th>
<th>Not At All (1)</th>
<th>Not Really (2)</th>
<th>Very Little (3)</th>
<th>A Bit (4)</th>
<th>Somewhat (5)</th>
<th>Quite a Bit (6)</th>
<th>Very Much (7)</th>
<th>Extremely (8)</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>○₁</td>
<td>○₂</td>
<td>○₃</td>
<td>○₄</td>
<td>○₅</td>
<td>○₆</td>
<td>○₇</td>
<td>○₈</td>
<td>○</td>
</tr>
<tr>
<td>b)</td>
<td>○₈</td>
<td>○₇</td>
<td>○₆</td>
<td>○₅</td>
<td>○₄</td>
<td>○₃</td>
<td>○₂</td>
<td>○₁</td>
<td>○</td>
</tr>
<tr>
<td>c)</td>
<td>○₈</td>
<td>○₇</td>
<td>○₆</td>
<td>○₅</td>
<td>○₄</td>
<td>○₃</td>
<td>○₂</td>
<td>○₁</td>
<td>○</td>
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<tr>
<td>d)</td>
<td>○₈</td>
<td>○₇</td>
<td>○₆</td>
<td>○₅</td>
<td>○₄</td>
<td>○₃</td>
<td>○₂</td>
<td>○₁</td>
<td>○</td>
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<tr>
<td>e)</td>
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<td>○₇</td>
<td>○₆</td>
<td>○₅</td>
<td>○₄</td>
<td>○₃</td>
<td>○₂</td>
<td>○₁</td>
<td>○</td>
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<tr>
<td>f)</td>
<td>○₈</td>
<td>○₇</td>
<td>○₆</td>
<td>○₅</td>
<td>○₄</td>
<td>○₃</td>
<td>○₂</td>
<td>○₁</td>
<td>○</td>
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<tr>
<td>g)</td>
<td>○₈</td>
<td>○₇</td>
<td>○₆</td>
<td>○₅</td>
<td>○₄</td>
<td>○₃</td>
<td>○₂</td>
<td>○₁</td>
<td>○</td>
</tr>
<tr>
<td>h)</td>
<td>○₈</td>
<td>○₇</td>
<td>○₆</td>
<td>○₅</td>
<td>○₄</td>
<td>○₃</td>
<td>○₂</td>
<td>○₁</td>
<td>○</td>
</tr>
<tr>
<td>i)</td>
<td>○₈</td>
<td>○₇</td>
<td>○₆</td>
<td>○₅</td>
<td>○₄</td>
<td>○₃</td>
<td>○₂</td>
<td>○₁</td>
<td>○</td>
</tr>
</tbody>
</table>

SECTION D: YOUR BACKGROUND

This section asks general information about you, your personal circumstances and your employment history. We need this information about you to help interpret the questionnaire. Please indicate the answer that best describes you. Be assured that your responses will be held in strict confidence.

D1: Gender: ○₁ Male  ○₂ Female  ○ No answer

D2: Year of birth: 19 ___  ○ No answer

D3: Current marital status:

○₁ Married  ○₂ Single (Never married)  ○₃ Widowed  ○₄ No answer

○₂ Separated  ○₃ Live Common Law  ○₄ Divorced
D16: Please indicate the highest level of education you have ever completed:
- Some secondary / high school
- Completed secondary / high school
- Some college / university
- College diploma
- University degree
- Post graduate degree (e.g., Masters, PhD)

D9: What department / agency are you with? ____________________________
What branch are you with? ____________________________

D10: What is your substantive occupational group and level? (e.g., EX-1, LA-03, etc.) ____________________________

D11: How many years have you been an Executive? _____ years

D12: How many years have you been in the federal public service? _____ years

D13: How many years have you been in your present position? _____ years

D14: What language(s) do you normally work in?
- English
- French
- Both

D15: Where do you work geographically? (If you work in more than one place, select the one where you work most of the time)
- NCR Ontario
- NCR Quebec
- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- New Brunswick
- Nova Scotia
- Prince Edward Island
- Newfoundland and Labrador
- Nunavut
- Northwest Territories
- Yukon
- Outside Canada

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Thank you for participating in this study!

*****

Mail to: Dr. Louise Lemyre,
Institute of Population Health (FSS-5052),
120 University Pr., Ottawa, ON K1N 6N5;

Or scan and email to: louise.lemyre@uottawa.ca

*****

The research team directed by Dr. Louise Lemyre at the Institute of Population Health, University of Ottawa, is engaged in various studies on understanding the associations between work and health. If you would like to be contacted and provided with more information on how you might participate in these other studies, please provide your contact information below. This information will be stored separately from your responses to this survey. Your survey responses will remain anonymous.

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Email:</td>
<td></td>
</tr>
<tr>
<td>Phone:</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C: SEMI-STRUCTURE INTERVIEW GRID

INTERVIEW GRID

PART 1: We seek to know the interviewee. We want to know the professional experience and background of the participant regarding their position in the Canadian public service.

1. How long have you worked in your department? (Confirm EX-level)
2. How many years have you been in the federal public service and how many years have you been an Executive?
3. Did you begin your career in the public service or have you worked outside of government (i.e., private, voluntary and not-for-profit sectors)?
4. With regard to your position as an executive, what do the next few years look like for you?
5. Can you briefly describe your training to become an executive? For instance, any degrees or certificates you have acquired?

PART 2: The Work Unit

Note: The term “work unit” refers to the workgroup for which you are responsible. This includes your branch/directorate/sector.

Work Climate

A work climate is how employees perceive their work environment, such as how they typically interact with one another.

6. How would you describe the work climate in your work unit? For instance, if I were to spend the day shadowing those in your work unit, what would I see? How do people in your unit interact with each other and how do they work?

Leadership

7. I am interested in your experience with those whom you directly report to. Let’s say it has been requested that your department, and more specifically, your branch, take the lead on a report. There are executives who tend to prefer more structure and those who prefer more flexibility. Personally, do you prefer:
   a. To have the responsibilities and expectations passed down from your direct report with clear instructions, expectations (and timelines) so that you are able to delegate appropriately to your senior staff?
   b. To be given less clarity but more flexibility and advised to manage accordingly and appropriately?
8. Can you recall a recent task/scenario you faced at work that was exceptionally challenging or stressful? Explain what mechanisms you used to problem-solve and manage these challenges.

9. Even without a specific challenging incident, the executive workload is demanding. What factors of your work environment do you feel are most important for you to feel less stressed in the face of high work demands? (e.g., social support from colleagues, scheduling more frequent meetings, etc...).

**Collaboration in the Work Unit**

10. Your work unit is given a new file to manage. How important is it that the employees in your work unit are engaged together and working collaboratively? Is it expected? Why?
   a. How do you, as an EX, ensure an open and collaborative working environment for your staff? Through what mechanisms do you harness the full potential of each of your employees? How do you measure success in this regard?
   b. [If importance is related as low]: Why do you feel this is not important? Do other factors outweigh engagement (such as getting the work done in a timely fashion)?
   c. Are there any mechanisms that you are aware of that best facilitate a positive collaborative working environment within your work unit?

**Conflict in the Work Unit**

11. No work group is immune to interpersonal conflict. Are there ways in which you can assess risk of conflict and avoid escalation? What are the main indicators that conflict may arise in your work unit?
   a. What are the kinds of things you do to help maneuver around interpersonal conflict within your work unit?

**PART 3: Interdepartmental Relations**

In large organizations (like the Canadian Federal Public Service), meeting organizational goals often requires collaboration and networking with other departments/agencies and stakeholders.

**Collaboration Outside of the Work Unit**

12. Can you describe to me how your work unit collaborates, whether it is collaboration within your department, across departments, or outside of government?
   a. How essential/important is each type of collaboration for your department to get things done? In what aspects?
b. Are there instances where intra/intergovernmental collaboration may hinder the ability to work efficiently or effectively? Can you think of a specific example?

13. Although it often depends on the project of the initiative, in general do you view your relationships with other departments/agencies as competition, added value or a mix of both? Can you describe these relationships to explain your answer (e.g., what value are you adding)?

14. While collaboration is often vital to get things done, having a similar mission (delivering services to Canadians) does not always mean that all parties involved in certain projects share a common purpose. In many cases there are different departments or branches, with conflicting visions, working together for an overarching goal. Have you ever experienced this type of situation?

   a. If yes: How were you able to overcome these differences in vision to accomplish your work?
   b. (If they did not touch on this yet): If you were to sense there was competition or conflict between departments or agencies with which you were working, what do you think could be done to improve the situation?

15. Taking the entire public service organization into consideration, what mechanisms do you feel facilitate the effective and efficient sharing of information, power, resources and personnel in order to achieve a collective, whole-of-government approach? What mechanisms act as barriers?

**PART 4: Introduction to Stewardship**

Stewardship

16. Have you ever heard of the term stewardship in an organizational context?

I am going to read a definition from the literature that I feel best describes this concept and then ask you a few questions on how it may apply to your organization. First, I will try to situate this concept in context for you.

“Stewardship is the idea of governing by networks. When we think of leadership we are often narrowly focused on the character traits of individuals in formal leadership positions. Stewardship represents the planning and management of resources, but is an expansion from leadership (at an individual level) to multiple levels. The aim of Stewardship is to foster a collaborative working environment where knowledge is commonly shared and thus not dependent on one person or one department. This notion of governance assumes that there is no one person (or department) who has all the knowledge, resources or power to achieve the goal independent of others. “

17. Would you say that these Stewardship principles (that I just described) are valued and employed in your current work environment? How?

   a. If you were asked to implement this type of climate and make it a priority in your work unit, would you be on board with this initiative? Why?
b. What essential tools would you need to do so?
c. What challenges do you foresee with attempting to implement this type of climate?

18. Can you describe a work climate that is not conducive to stewardship? For instance, can you give me an example of a situation where stewardship was lacking? Elaborate on how this situation represents a lack of stewardship.

19. Can you think of someone you work with who exemplifies stewardship? Can you think of anyone who is the opposite of this? Explain why and what kind of effect you think they have on the work environment.

**Reward System**

The concept of rewards refers not only to tangible rewards such as remuneration, but also to recognition and respect for one’s contribution (e.g., receiving respect from superiors and colleagues, receiving adequate salary/income for efforts and achievements).

20. Are there rewards or incentives currently in place within your establishment that you feel encourage or hinder stewardship?
   a. Do you have any suggestions for how the rewards and incentives in the public service could be improved to motivate employees to be more engaged in their work and work collaboratively?
APPENDIX D: LETTER OF CONSENT FOR SEMI-STRUCTURED INTERVIEWS

Project 1b - INFORMED CONSENT FOR INTERVIEW PARTICIPANTS

2012 Work and Health Survey – Individual Interviews

You are invited, on behalf of APEX, by Dr. Louise Lemyre of the Institute for Population Health at the University of Ottawa to participate in an interview Leadership and Collaboration in the Public Service.

The goal is to better understand the organizational climate of the Canadian Public Service as well as the opportunities, challenges and experiences of executives working in a collaborative environment.

**Your opinion is important to us.** You will be asked to participate in an interview and to answer questions directed by a trained interviewer. At your discretion, a voice recorder will be used to tape the session. All of the discussion will be transcribed and entered in a computer file for analysis of content. The data will be conserved for a maximum of 10 years in a locked cabinet in the Gap-Santé office at the University of Ottawa and will be shredded at the end of storage. Your identity will not appear on any of the transcripts. The analysis of results will look at common themes and ideas among executives. This will help to better understand the important factors influencing the inter/intra-organizational collaboration in the Canadian Public Service. It will also serve to develop and evaluate the working conditions and health of Public Service executives.

**The interview** will last approximately 60 minutes. Questions of the following type will be asking in relation to their perception of how they manage a collaborative work environment: “In order for your work unit to work efficiently and effectively, how important is intra-collaboration (collaboration with your department/agency)?” There is no right or wrong answers. We only want to know your experience.

**Your participation is anonymous.** Do not use your full name. Confidentiality and anonymity will be maintained by the research team. While interview results of the study will be published and discussed within the research team, and at research conferences, no one individual’s responses to the questions will be shared. All of the data will be tabulated and maintained by the researchers in accordance with research confidentiality standards.

Participation is completely voluntary and anonymous. You are free to withdraw at any time and may refuse to participate or to answer certain questions. There is no direct individual benefit
from answering the questions. There is no expected hard or risk except the possible negative feelings sometime associated with self-reflecting on one’s own health and environment. In the unlikely event of distress or discomfort, you may wish to contact your personal physician or the Employee Assistance Program at 1-800-268-7708. For other questions about the study, you may also contact the Principal Investigator, Dr Louise Lemyre at the University of Ottawa (613-562-5800 extension 1196) llemyre@uottawa.ca. If you have any ethical concerns about the study you may contact the Protocol Officer for Ethics in Research Board, University of Ottawa at 613-562-5387 (ethics@uottawa.ca).

Presence at the interview session and signing a copy of this form will be considered informed consent.

**There are two copies of this form, one for you, one for the research team.**

Louise Lemyre, Ph.D., FRSC  
Participant, date  
Witness, date

Principal Investigator  
Professor University of Ottawa
### APPENDIX E: REVISED CODING SCHEME

#### Coding Scheme

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Sub-category</th>
<th>Definition</th>
<th>Codes</th>
<th>Operational Definition</th>
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</table>
| **Formal Organizational Structure**   | Refers to the organizational system/design that encompasses the processes to help achieve the organizational goal. Typically these factors are fixed or not easily modifiable, such as the type of department (financial, health) and the formal systems and networks within the department (hierarchy). | Organizational change | Recent changes to the organization such as downsizing or mergers. | Change as beneficial | For instance, mergers of departments have created better opportunities for collaboration  
Change as detrimental | For instance, employees are resistant to new changes, creates conflict or uncertainty in the work environment |
<p>| <strong>Physical structure</strong>                | The physical layout of the work space                                      | Office layout      | For instance, the layout of the department separates units and hinders collaboration |
| <strong>Public Service Processes</strong>          | Refers to a mode of conducting government proceedings in an effort to keep the organization functioning well. For example, approval processes, filling out forms and mandatory meetings. | Focus on process over well-being | When an organization places workload over the health and well-being of employees. For example, when an employee feels as though their organization cares more about securing extra funding than whether their employees are engaged, satisfied or motivated |
| <strong>Inefficient processes</strong>             | Processes that create inefficiency, makes it difficult to get the work done such as constantly re-applying for approval |
| <strong>Unrealistic time pressure</strong>         | When there is not enough time built in to the system to be innovative, collaborate and |</p>
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<tr>
<th>Category</th>
<th>Definition</th>
<th>Sub-category</th>
<th>Definition</th>
<th>Codes</th>
<th>Operational Definition</th>
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<tbody>
<tr>
<td>Management of employees</td>
<td>Skills and behaviour of those who manage employees, such as planning and the development of team member.</td>
<td>Coordination</td>
<td>The organization of the different elements of a complex body or activity so as to enable them to work together effectively.</td>
<td>Codes</td>
<td>produce quality results. Instead there are tight deadlines in which things need to be produced as quickly as possible.</td>
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<td>Human resources processes Refers to the formal human resource process such as whether staff is rotational or the promotion process.</td>
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<td>Politics Refers to the Canadian political system such as influence of this system on the public service bureaucracy</td>
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<td></td>
<td>Political influence When political behaviour is perceived to influence/shape or control the behaviours, processes or outcomes of the public service bureaucracy</td>
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<tr>
<td></td>
<td>Management of employees</td>
<td>Coordination</td>
<td>The act of organizing different employees or teams to work together. The unification, integration, synchronization of the efforts of group members so as to provide unit of action in the pursuit of common goals. Superior is aware of the individual needs of his/her employees. For example, being aware of which employees will work best together on a given project, or identify employees that may lack the interpersonal skills to work with others.</td>
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<td>Flexibility with Coordination The level of freedom/flexibility executives feel they are given</td>
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<td>to manage their employees and resources</td>
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<td>Proactivity</td>
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<td>When one is proactive with management decisions and attends to issues right away. For instance, having a plan in place as well as a back-up plan should the need arise</td>
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<td>Professional development of team members</td>
<td>Organizational learning and development opportunities facilitated by one’s manager.</td>
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<td>Cross-pollination of employees (will be further divided into Voluntary or Involuntary)</td>
<td>When employees are exposed to different roles, units, departments, organizations. When people from different roles and diverse skill sets come together, allowing knowledge and skills to influence each other. 1) Voluntary: Gaining experience outside of one’s area of expertise 2) Involuntary: Leader purposefully assigning employees to different roles/areas</td>
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<td>Encouraging participation</td>
<td>When a superior encourages their employees to participate in a given task or project, (whether it be collaborating with others, sharing information, taking initiative). While coordination is the actual bringing together of employees, this code refers to the social act of providing encouragement</td>
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<td>Leading by</td>
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<td>When an employee with</td>
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<td>Organizational</td>
<td>The degree to which the organization provides support for employees through</td>
<td>Superior support</td>
<td>When a superior makes their employees feel supported and trusted to do their work (gives autonomy), employees feel comfortable interacting with their superior</td>
<td></td>
<td>example influence on others (such as a superior) sets a positive example for others to follow. For instance, a superior who shares information openly in an effort to get others to do the same.</td>
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<td>Support</td>
<td>either providing instrumental/practical support or emotional support</td>
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<td>Efficiency Superior is efficient with work demands, for example, will only ask for what is needed if there is time pressure.</td>
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<td>Inefficiency Superior is inefficient with work demands, for example, will ask for things to be done that aren’t necessary.</td>
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<td>Supportive of risk-</td>
<td>Superior allows flexibility for innovation and is supportive when mistakes are made. Superior trusts employees to be accountable for their work.</td>
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<td>taking/autonomy</td>
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<td></td>
<td>Unsupportive of risk-</td>
<td>Superior does not allow flexibility for innovation and is unsupportive when mistakes are made.</td>
<td></td>
<td>taking/autonomy</td>
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<td></td>
<td>Good relationship with</td>
<td>Employees feel comfortable approaching their superior, superior is engaged with employees and there is mutual trust.</td>
<td></td>
<td>superior</td>
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<td></td>
<td>Negative relationship with</td>
<td>Employees do not feel comfortable approaching their superior, there is a lack of trust and disrespect.</td>
<td></td>
<td>superior</td>
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<td>Co-worker support</td>
<td>When employees feel supported by their co-workers, there is a lack of trust and disrespect.</td>
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<td>Co-workers trust and respect each other, they engage with</td>
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<td>Good relationship co-</td>
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<td>workers, feel comfortable talking to each other</td>
<td>workers</td>
<td>each other often, feel socially supported.</td>
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<tr>
<td>Instrumental/practical support</td>
<td>Access to resources</td>
<td>Employees have access to the proper resources to complete their work</td>
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<td></td>
<td>Lack of resources</td>
<td>Employees perceive a lack of resources such as time or funding to complete their work</td>
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<tr>
<td>Communication</td>
<td>A flow or exchange of information between individuals within a department, but can also include exchange of information across departments or organizations.</td>
<td>Transparent Leadership</td>
<td>When a leader is transparent with their employees regarding organizational information</td>
<td>Communicate the mission</td>
<td>Communicating the organizational mission to others to empower them and to help them recognize their contribution to this mission</td>
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<td></td>
<td>Forthcoming</td>
<td>Honest about anticipated challenges or changes so that they are better prepared to deal with them</td>
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<td></td>
<td>Decision-making is explained</td>
<td>Openness in how decisions are made</td>
<td></td>
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<td></td>
<td>Lack of transparency</td>
<td>A leader is not transparent with team, does not share information openly</td>
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<td></td>
<td>Clear objectives</td>
<td>Work objectives are clearly communicated to employees (such as specific directions for a</td>
<td>The why</td>
<td>Employees clearly understand why this work is to be done</td>
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<td>The what</td>
<td>Employees clearly understand what is needed to be done or</td>
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<tr>
<td>Clear roles/accountabilities</td>
<td>Employees clearly understand their role in the organization (and what it entails) and the roles of others in the organization. Employees clearly understand who is responsible for what and to whom. When roles are clear employees are more aware of their purpose in the organization and this makes their work meaningful.</td>
<td></td>
<td></td>
<td></td>
<td>what is expected of them</td>
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<tr>
<td>Unclear objectives</td>
<td>Work objectives are not clearly communicated to employees (such as specific directions for a task)</td>
<td></td>
<td></td>
<td></td>
<td>Employees do not clearly understand why this work is to be done</td>
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<td></td>
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<td></td>
<td>The why</td>
<td></td>
<td>Employees do not clearly understand what is needed to be done or what is expected of them</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>The what</td>
<td></td>
<td>Employees do not clearly understand their role in the organization (and what it entails) or the roles of others in the organization. Employees do not clearly understand who is responsible for what or to whom. This can make them feel as though they don’t belong in the organization.</td>
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<td></td>
<td>Unclear roles/accountabilities</td>
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<tr>
<td>Sharing information</td>
<td>Information is shared between employees/units/depencies in an organization</td>
<td></td>
<td></td>
<td></td>
<td>Departments sharing information with each other to get the work done</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Between departments/ agencies</td>
<td></td>
<td>Method used to share information such as meetings, e-mails, etc</td>
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<tr>
<td>Withholding</td>
<td>Purposely withholding information from another employee, unit, branch or department</td>
<td>Within unit</td>
<td>Within unit</td>
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<td>Between unit</td>
<td>Between unit</td>
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<td>Between department</td>
<td>Between department</td>
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<tr>
<td>Organizational</td>
<td>Factors that inspire employees to perform well or achieve organizational goals.</td>
<td>Organizational goal</td>
<td>A desired organizational result that a team or department plans to achieve; the long-term</td>
<td>Organizational goal</td>
<td>Employees are working towards the broader organizational goal (serving the public).</td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td>Organizational mission</td>
<td>best interest of the organization and not personal goals that serve an individual.</td>
<td></td>
<td>Department/unit mission: Employees are working towards the goal of the unit or department.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Malaise</td>
<td>There is a malaise in the system where employees have lost sight of the overall goal of the</td>
<td></td>
<td>Malaise: There is a malaise in the system where employees have lost sight of the overall goal of the public service</td>
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<td></td>
<td>Individual advancement</td>
<td>When employees are motivated by individual goals such as gaining power or control over others</td>
<td></td>
<td>Individual advancement: When employees are motivated by individual goals such as gaining power or control over others or advancing one’s career</td>
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<td>Power/control</td>
<td>Employees are motivated by power and control, for instance, they are motivated by being at the</td>
<td></td>
<td>Power/control: Employees are motivated by power and control, for instance, they are motivated by being at the top</td>
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<td></td>
<td>Careerist</td>
<td>Employees are motivated by their own career advancement or promotion</td>
<td></td>
<td>Careerist: Employees are motivated by their own career advancement or promotion</td>
</tr>
<tr>
<td>Rewards</td>
<td>Employees are motivated to perform by incentives such as rewards or recognition</td>
<td>Monetary rewards</td>
<td>Employees are rewarded for performance through money (bonuses, cash awards)</td>
<td></td>
<td>Monetary rewards: Employees are rewarded for performance through money (bonuses, cash awards)</td>
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<td></td>
<td></td>
<td>Non-monetary rewards</td>
<td>Employees are rewarded for performance through perks and opportunities (flexible work hours, training opportunities)</td>
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<td>Non-monetary rewards: Employees are rewarded for performance through perks and opportunities (flexible work hours, training opportunities)</td>
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<td>Recognition</td>
<td>Being acknowledged by one’s leader or organization through positive comments, e-mail, newsletter mention, etc...</td>
<td></td>
<td>Recognition: Being acknowledged by one’s leader or organization through positive comments, e-mail, newsletter mention, etc...</td>
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<tr>
<td>Interdepartmental collaboration</td>
<td>When departments must work together to accomplish a multi-department task.</td>
<td>Inter-dependency</td>
<td>Departments/branches reply on each other to accomplish their work.</td>
<td>Between departments/agenencies</td>
<td>When two or more departments must work on a shared project</td>
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<td>Between branches/units</td>
<td>When different branches or units are involved on a shared project</td>
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<tr>
<td>Competition between departments</td>
<td></td>
<td></td>
<td>Conflict or tension between departments working together on a shared initiative</td>
<td>Territorial over work</td>
<td>When departments have conflict due to one department being territorial over the collaborative work</td>
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<td>Tensions between departments</td>
<td>When departments have a difficult time working together due to factors such as lack of trust</td>
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<td>Conflict of goals/objectives</td>
<td>When there is conflict between departmental goals while working on a shared responsibility</td>
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<tr>
<td>Shared decision-making</td>
<td>Departments/agencies partake in shared decision-making</td>
<td>Establish common-ground</td>
<td>Identifying common elements to align visions. When departments have different goals for a shared initiative but find a way to work in harmony through aligning their visions into one (making their unique goals compatible with one another for a desired outcome).</td>
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<td>Combining resources</td>
<td>When departments combine their resources to accomplish a task</td>
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<td>Open to different viewpoints on a joint issue</td>
<td>When different departments working together are open to differing angles and perspectives</td>
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<tr>
<td>Employee collaboration (teamwork)</td>
<td>When employees work together to accomplish a common goal.</td>
<td>Accountability</td>
<td>The obligation of an individual or collective to account for its activities and objectives and to accept responsibility for them.</td>
<td>Teamwork</td>
<td>Collaboration between individuals to accomplish a goal.</td>
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<td>Taking ownership</td>
<td>When one takes responsibility for their work, feels as though a project is “theirs” and are therefore more highly engaged in the work and committed to the outcome</td>
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<td>Shared responsibility</td>
<td>When employees perceive that responsibility for a project or demand is collective and not dependent on one person. Power/authority is spread out. For instance, a superior allows his/her employees to make decisions without his/her approval</td>
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<td>Reliance on one individual</td>
<td>When individuals are dependent on one particular employee (such as their leader) with the power or expertise to execute a task</td>
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<td></td>
<td>Working in silos</td>
<td>A specific mention of employees working independently (or in separate silos) to complete their work</td>
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<tr>
<td>Collaborative decision-making</td>
<td>The decision-making process includes many different perspectives (including as many meaningful stakeholders as possible) and decisions serve the interests of stakeholders over personal interests</td>
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<td></td>
<td>Across levels</td>
<td>Decision making process involves participants from different levels of the organization (low levels, directors, ADMs)</td>
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<td>Across roles</td>
<td>Decision making process involves participants from different sectors of the organization (for example,</td>
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<tr>
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<tr>
<td>Non-collaborative decision-making</td>
<td>Decision making excludes others who may have a significant perspective</td>
<td>Decisions made from the top</td>
<td>Decisions made from the top</td>
<td>Decisions are made without the involvement of different levels or perspectives. These decisions often serve the personal interest of someone in a high level of the organization</td>
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<tr>
<td>Competition between employees</td>
<td>Conflict or tension between employees working together on a shared initiative</td>
<td>Territorial over expertise</td>
<td>When employees become territorial over their work or expertise and refuse to share resources or information to achieve a shared outcome</td>
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<tr>
<td>Interpersonal relationships</td>
<td>An association between employees working together in the same organization.</td>
<td>Networking</td>
<td>Business relationships formed by employees with other employees outside of their unit, branch or department to accomplish their work</td>
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<td></td>
<td></td>
<td>Building social relationships</td>
<td>Getting to know the people you are working with on a personal level. Employees connecting outside of work obligations (activities in the workplace that are not work-related or social events such as BBQs)</td>
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<td></td>
<td>Lack of interpersonal</td>
<td>Employees lack the interpersonal skills to help</td>
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<tr>
<td>Category</td>
<td>Definition</td>
<td>Sub-category</td>
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<td></td>
<td>Interpersonal conflict: When an employee or group of employees frustrates or interferes with another person's efforts at achieving a work related goal.</td>
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<td></td>
<td>Trust</td>
<td>Trust is the reliance on the integrity, strength and ability of other employees. It involves interdependence, transparency and the willingness to be vulnerable in the context of a relationship based upon positive expectations of the intentions or behaviour of another.</td>
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</tr>
<tr>
<td>Stewardship</td>
<td>Refers to any direct mention of stewardship – when the term stewardship is explicitly mentioned.</td>
<td>Definition</td>
<td>Personal definition given by participants regarding stewardship</td>
<td>Service over self-interest</td>
<td>Motives align with the goals and objectives of the higher purpose of the organization as opposed to personal gain. Exercise of power is guided by shared values and ethics</td>
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<td>Sustainability: The willingness to be accountable for a greater good for future generations</td>
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<td>Working with a collective orientation: The propensity to work in a collective manner where knowledge, resources and power are shared across boundaries of departments and disciplines to connect individuals and create opportunity for the organization</td>
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<td>Mission-focused: The planning and management</td>
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</tbody>
</table>
### Facilitators/Barriers
- **Facilitators**: Factors of the work environment that facilitate stewardship.
- **Barriers**: Factors of the work environment that act as barriers of stewardship.

### Work Stress
- **Definition**: A feeling of strain or pressure to perform at work.
- **Negative stress**: Refers to the tension experienced by employees when they feel they do not have the proper resources/control to meet work demands.
- **Organizational triggers of negative stress**: Organizational triggers of work-related stress such as high work demands, lack of control, lack of resources, role stress, uncertainty, etc.

### Management of workplace stress
- **Definition**: How employees manage their workplace stress.
- **Organizational factors**: Organizational factors such as organizational support (having proper resources).
- **Individual factors**: Individual factors such as organization skills or a positive outlook.

### Organizational health indicators
- **Indicators of well-being of individuals and performance of the organization**
- **Individual health outcomes**: Health outcomes of the individual such as mental or physical health conditions.
- **Organizational health outcomes**: Organizational outcomes that can affect the productivity of the organization.
- **Mental health conditions**: Health conditions such as depression or anxiety.
- **Physical health conditions**: Health conditions such as back pain or cardiovascular illness.
- **Work satisfaction**: An employee’s sense of satisfaction with their current job, employee morale.
- **Commitment**: An employee’s emotional attachment to the organization through loyalty, a sense of belonging, and pride.
- **Turnover**: Intent to leave or the act of leaving one’s organization.
- **Lack of**: The lack of producing outputs.
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<th>Category</th>
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<th>Sub-category</th>
<th>Definition</th>
<th>Codes</th>
<th>Operational Definition</th>
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<td>productivity</td>
<td>or profit for the organization, not delivering on work obligations</td>
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APPENDIX F. SUPPORTING QUOTES FOR KEY ELEMENTS TO DEFINE STEWARDSHIP IN THE PUBLIC SERVICE

1) Service over self-interest

<table>
<thead>
<tr>
<th>Participant</th>
<th>Supporting Quote</th>
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<tbody>
<tr>
<td>Executive 1, EX-1, Male</td>
<td>“Stewardship. For me personally, I would interpret that word as meaning providing Canadian citizens with value for money.”</td>
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<tr>
<td></td>
<td>“Yes, he wasn't trying to score points. He just... Yes, exactly, he wanted to just get the work done.”</td>
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<tr>
<td>Executive 2, EX-3-5, Female</td>
<td>“And so many times to accomplish an immediate task or goal, people only think about that goal. You know, I need to get this project underway, I need to hire this consultant fast, I need to do this, I need to do this. And so what we see now is some of the tension between us wanting to support the client, to do client service, to deliver what the client wants. But sometimes that uncomfortable role of having to say this may be helpful for you short term, but it's not beneficial to the government of Canada. And so be seen then as a monopoly where people have no other choice but to come here for procurement or for their real estate, and then only to find that for the broader good and stewardship towards the government of Canada there are going to be delays.”</td>
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<td></td>
<td>“So those are some conversations that are a long way away from the stewardship piece, but it all funnels back to we're doing a job, which is part of what we need to deliver, which is part of a greater good. And that's what you accept when you join the public service.”</td>
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<tr>
<td>Executive 9, EX-2, Female</td>
<td>“But some have started realizing that they are part of a bigger whole.”</td>
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<tr>
<td>Executive 10, EX-2, Male</td>
<td>“You don't want an empire builder, you don't want somebody who's a careerist, you don't want somebody who thinks knowledge is power and should not be shared. You want people who are open, transparent and genuinely interested more in public good than in their...”</td>
</tr>
</tbody>
</table>
ORGANIZATIONAL STRESS, WELL-BEING AND STEWARDSHIP

own career.”

“And to do that it can't be about you, it has to be about the team, it has to be about the processes, it has to be about the attitudes and the culture of the organization.”

2) Sustainability of public service beyond one’s career

<table>
<thead>
<tr>
<th>Participant</th>
<th>Quote</th>
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<tbody>
<tr>
<td>Executive 1, EX-1, Male</td>
<td>“That's one of the problems I have on my team is I don't really have a successor. And I'm going to be gone in three years. That's something that we need to address.”</td>
</tr>
</tbody>
</table>
| Executive 5, EX-3-5, Female  | “I think my role is to be a good steward of this agency in terms of its management, and to prepare it for the future.”
|                              | “… but I think everybody's doing the best they can to build a foundation for the future.” |
| Executive 10, EX-2, Male      | “You're going to build an organization that is going to continue to stay good after you're gone.” |
| Executive 14, EX-3-5, Male    | “And it was some objectives in terms of sustainable development of Canadian forests. And I think that was an excellent example of stewardship. And for me, it's really an example on how things should be done.” |

3) Working with a collective orientation

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<tr>
<th>Participant</th>
<th>Quote</th>
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<tr>
<td>Executive 4, EX-1, Male</td>
<td>“But on top of that, you have, in our day and age, and for ages before, we need to have good management as well in place. Hence the combination of both.”</td>
</tr>
<tr>
<td>Executive 10, EX-2, Male</td>
<td>“I think there is a matter of having the right people on the team, in the key positions. I think there's a matter of rewarding it.”</td>
</tr>
<tr>
<td>Executive 12, EX-3-5, Male</td>
<td>“Stewardship in the sense of the governance”</td>
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and the leadership and kind of how we want to be as an organization. For me, it's a little bit, you know, the lead by doing, lead by example.”

“It is in a kind of franker way, it is about how we manage the issues that we confront. And I'm not talking about the subject files but, you know, the HR issues and all of that.”

Executive 15, EX-3-5, Female

“Yeah, we're there to enable people, facilitate their work, and also, the leadership that I'm looking at, it goes from the ‘I’ to the ‘we’ as you move to the different stages, and as you move, you know, to the post-conventional models, of course all of the lower levels of these stages are always with you. You don't lose it, you just add to them, right? So that perspective of where you are in the ‘I’ or the ‘we’ also helps, in terms of collaboration. Right? So, someone who's even though at the ‘I’ stage but is higher enough in the development stages will still understand the importance of ‘we’. And the ‘I’ in that ‘we’.”

4) Mission-focused management of resources

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<th>Participant</th>
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<tr>
<td>Executive 4, EX-1, Male</td>
<td>“And some stewardship from a managing budget and resources.”</td>
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<td>“Let's say in HR, in human resources, the role of steward is basically the role of ensuring that all the programs are well run and that we meet our clients' responsibility, versus the role of the more legislative hat, which ensures that everybody who follows the rules, regulations, and the law. On the stewardship, I would bring it more like how can we ensure that we meet the requirements of our client, and how do we put in place programs, mechanisms and service standards that help that.”</td>
</tr>
<tr>
<td>Executive 5, EX-3-5, Female</td>
<td>“I think my role is to be a good steward of this agency in terms of its management.”</td>
</tr>
<tr>
<td>Executive 6, EX-2, Male</td>
<td>“Our understanding of stewardship is we own”</td>
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assets, and it's our responsibility to maintain them in a condition that is acceptable.”

“That bridge is over 75 years old. It's a landmark. It's recognized by the Canadian Engineering Society as a unique and marvellous bridge. And it needed major renovation. And I happened to be responsible for the bridge at the time. And that's, you know, stewardship. Folks, we have this bridge. It's a landmark bridge. It's part of the Visitors' Trail and everything like that. NCC got all up in arms. And our people didn't want to invest in it because why do we have to invest in bridges? Once I convinced them that we needed to invest in the bridge I wanted to... it would have been a heck of a lot cheaper to tear down and build a brand-new, modern bridge, but it's a landmark. So then we had to explain to them why we needed to spend twice as much money to restore it, not tear it down. So that's stewardship.”

Executive 8, EX-1, Female

“Stewardship is sort of the oversight function... what kinds of good governance mechanisms you put in place to either manage money, manage people, resources, all of that side of things.”

Executive 12, EX-3-5, Male

“Good stewardship of our resources, of being prudent and proper in how we deal with the finite resources that we've got. . . It is in a kind of franker way, it is about how we manage the issues that we confront. And I'm not talking about the subject files but, you know, the HR issues and all of that.”

Executive 15, EX-3-5, Female

“Stewardship is to ensure that resources are utilized in accordance with established policies, practices and that we are able to demonstrate that we've made the best use possible of resources, I'm thinking of stewardship of resources in this case.”

Executive 13, EX-2, Female

“We also talk about stewardship of people and making sure that we are looking after our people.”
APPENDIX G. CONCEPT MAP OF BARRIERS TO STEWARDSHIP IN THE PUBLIC SERVICE

- Service over Self-Interest
- Sustainability of the Public Service beyond One’s Career
- Mission-Focused Management of Resources
- Top-down Decision Making
- Competition at Senior Levels
- Focus on Output over Well-being
- Lack of Risk-Taking
- Lack of resources
- Focus on Output over Well-being
- Promotion System
- Organizational Rigidity
- Territorial over Work
- Working with a Collective Orientation
APPENDIX H. CONCEPT MAP OF FACILITATORS OF STEWARDSHIP IN THE PUBLIC SERVICE

- Service over Self-Interest
- Being Open to Different Perspectives (organizational level)
- Sustainability of the Public Service beyond One’s Career
- Establishing Common-Ground
- Mission-Focused Management of Resources
- Transformational Leadership
- Building Personal Networks
- Recognition
- Clear Objectives
- Clear Significance
- Clear Roles and Accountabilities
- Encouraging Formal Networks
- Working with a Collective Orientation
- Integrating Different Perspectives and Ideas (interpersonal level)