THE IMPACT OF WORK ORIENTATION
ON CAREER, COMPASSION, AND CREATIVITY

by

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Abstract

Employees can espouse one of three work orientations: They may see their work as a *job*, as a necessity to support meaningful life experiences, as a *career*, a channel for advancement, or as a *calling*, a fulfilling vocation that provides personal, moral, and social significance. To date, little research has systematically compared behaviors associated with the three work orientations or sought to explain their underlying mechanisms. In this three-paper dissertation, I consider the impact of one or more work orientation on three types of employee behaviors. Study 1 is a qualitative study of 50 employees with a calling orientation that outlines how these individuals negotiate the challenges of their work. In study 2, a two-period survey of 182 social-service employees, I provide evidence that only the calling orientation is associated with greater compassionate action (kindness, help) towards coworkers because such employees operate at a higher cognitive construal level. Finally, the results of study 3, a cross-sectional survey of 283 employees across nine organizations, indicate a significant relationship between the job and career orientation and the two regulatory foci (promotion- and prevention focus), but do not support the baseline hypothesis that such regulatory foci would impact subsequent creative behavior. Theoretical and practical implications are discussed.
Preface

Study one (Chapter 2) is based on work conducted with Dr. Sally Maitlis, and was approved by UBC’s behavioural ethics board under application H11-01372. I identified and designed the research program and collected, analyzed, and theorized around the primary data as part of my final class paper in Dr. Maitlis’ COMM 623 seminar (Qualitative Research Methods). Subsequently, I conducted all recruitment, data collection, and primary coding and contributed equally to higher order coding, theorizing and the write-up. A version of this study has been conditionally accepted for publication: Schabram, K. & Maitlis, S. Negotiating the challenges of a calling: Emotion and enacted sensemaking in animal shelter work. *Academy of Management Journal*.

All aspects of studies two and three (Chapters 3 and 4) – identification and design of the research program including model construction and theorizing, data collection, and data analysis – were conducted primarily by me. These studies were approved by UBC’s behavioural ethics board: H13-03187 (Chapter 3) and H14-02940 (Chapter 4).
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Dedication

To William, six seasons and a movie.
Chapter 1: Introduction

Work constitutes one of the central domains of life. Adults spend more of their waking time at work than on any other activity (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997), they define themselves by their work (Casey, 1995), see work as an important source of meaning (Baum & Stewart, 1990) and increasingly seek meaningfulness through work (Treadgold, 1999). Philosophers and historians have long considered how employees experience work (Pegis, 1944; Weber, 2002) and one relevant rubric has been provided by sociologist Bellah and colleagues (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985) in their influential *Habits of the Heart*: Work orientations incorporate both the meaning individuals make of their work (Rosso, Dekas, & Wrzesniewski, 2010; Wrzesniewski et al., 1997) and the purpose they seek to accomplish through their work (Fossen, Rita, & Vredenburgh, 2014; Scott Morton & Podolny, 2002; Staw, Bell, & Clausen, 1986). The work orientation typology, adapted into the psychology literature and the organizational cannon by Wrzesniewski and colleagues (Wrzesniewski, 2012; Wrzesniewski, Dutton, & Debebe, 2003; Wrzesniewski et al., 1997), identifies three distinct work orientations. Employees may see their work as a *job*, as a necessity to support meaningful life experiences, as a *career*, a means to move up in the world, or as a *calling*, a fulfilling vocation that provides personal, moral and social significance.

All three orientations are prevalent across modern workplaces. Janitors (Wrzesniewski & Dutton, 2001) and managers (Dobrow & Tosti-Kharas, 2011) alike can experience a calling orientation, while administrative secretaries in a university have been found to split equally into each of the three orientations (Wrzesniewski et al., 1997). However, work orientations can also offer insight into important professional and demographic distinctions. Certain professions or
occupations tend to skew towards one orientation, as is the case with social service professions that attract those with a calling orientation (Beukes & Botha, 2013). There also appear to be generational differences (Fossen et al., 2014) with millennials reporting a greater desire for meaningfulness and work/life balance (Twenge, 2010) – which we would associate with calling and job orientations respectively – while working adults report a reduced sense of calling as they age (Dobrow & Tosti-Kharas, 2011). In short, work orientations represent a prevalent and relevant measure to examine the enactment of work today.

1.1 Dissertation overview

While there is much interest in the concept of work orientations, the field is in its infancy and research to date has been both limited and skewed (Myers, 2013). First, research has largely considered only the focal individual’s experience (Rosso et al., 2010), examining how those who perceive themselves to have a particular work orientation judge, think, and feel about their work and their private life in relation to work. Empirical work has predominantly focused on attitudes, cognitions, and emotions as criterion variables. Although a drive for action has been posited as a defining feature of work orientations (Elangovan, Pinder, & McLean, 2010), we know little about the behaviour associated with the three work orientations. Second, research has offered preliminary indicators that work orientations may function as a Faustian bargain in which specific benefits derived from different orientations also come with associated expenses or sacrifices. Research has focused its attention on understanding employees’ individual outcomes, both good (Damon, Menon, & Cotton Bronk, 2003; Hill, Burrow, Brandenberger, Lapsley, & Quaranto, 2010; Wrzesniewski et al., 1997) and bad (Bunderson & Thompson, 2009; Elangovan et al., 2010; Kreiner, Hollensbe, & Sheep, 2006). Although we recognize that personally
significant work may come with benefits and costs for the individual, however, we tend to assume that these individuals will have an exclusively positive influence on the workplace. Meaningful work has been embraced by both industry (e.g. Monster.com’s “your calling is calling”) and predicted as enhancing performance by theorists (Dobrow, 2012; Organ & Ryan, 1995; Wrzesniewski, 2003), but empirical work is needed to test this assumption and establish whether work orientations may also prompt costly or challenging behaviours. Finally, research has largely focused on the calling orientation to the exclusion of employees who experience a career or job orientation. As a consequence, our ability to compare or contrast the three orientations is quite limited. Further, we do not know whether it is the specific nature of the calling orientation or the strength of an individual’s work orientation (regardless of which type) that predict specific outcomes.

These gaps represent exciting opportunities, which the three studies proposed in this dissertation begin to tackle. The research question driving all three studies in this dissertation is: How are work orientations enacted? Each study will build on established theory to investigate the influence of one or more work orientations on behavioural outcome variables. In so doing, I also address two of the general limitations of past research: the argument that many assumptions about work orientations lack empirical support (Pratt, Pradies, & Lepisto, 2013) and the accusations that the field is largely atheoretical (Rosso et al., 2010) and in need of insight into the mechanisms through which work orientations operate (Ranganathan, 2013).

Study one is a qualitative examination of how those who espouse a calling orientation negotiate the challenges of their calling. The study relies on sensemaking theory (Weick, 1995) to clarify the underlying elements of the calling and to incorporate the cognitive experience of having a calling with the emotional and enacted aspects. Through 50 interviews with animal
shelter employees, I examine the significant heterogeneity across individuals’ actions and their underlying understandings and emotions. Specifically, I focus on how individuals shape their calling experience in the face of adversity and how they navigate their tenure paths.

Studies two and three expand beyond the calling orientation to integrate and/or contrast all three orientations. In study two, I predict that all three work orientations can be associated with an intensity of purpose and examine the influence of such a sense of purpose on compassionate action towards coworkers. I focus on compassionate action because the calling orientation has been paradoxically associated with both increased and decreased compassion; Callings can predict a desire to serve others (Elangovan et al., 2010) or to pursue work in prosocial sectors (Raatikainen, 1997; Robertson, 2013; Serow, 1994), but also with strained relationships (Cardador & Caza, 2012; Bunderson & Thompson, 2009), conflict with clients (Robertson, 2013) and reduced altruism towards coworkers (Cohen & Kol, 2004). I base my arguments on construal level theory (Trope & Liberman, 2011) which posits that individuals can focus their attention either on why they want to accomplish something – in this case their personally meaningful purpose – or how they want to accomplish something and that this focus determines what actions they take at work. I posit that the intensity of purpose associated with each of the three work orientations will lead individuals to focus on temporally and hypothetically distant aspirations and therefore to construe work at a higher or more abstract level (i.e. focus on why). I then test competing hypothesis for whether such a high construal level will enhance or diminish compassion towards coworkers, arguing that it might diminish compassion by focusing the focal employee’s attention away from present-moment experiences or enhance it by identifying compassion as one tool to pursue their purpose.
Study three considers the discrete influence of each work orientations on creativity, the intentional introduction and application of ideas or processes which are novel and of value to a particular work domain (Shalley, Zhou, & Oldham, 2004; West & Farr, 1989). I propose that the three work orientations differ in the extent to which they prompt creative action, because they map onto differences in individuals’ desire for change or preference for the status quo. I base my arguments on regulatory focus theory (Higgins, 1996, 1997), which suggests that individuals have a tendency to either approach desirable ends (promotion focused) or to avoid undesirable ends (prevention focused). I suggest that those with a job orientation take a transactional view of work and are likely to hold an exclusive prevention focus. Those with a calling orientation see their work as a means to make a positive difference in the world and are therefore likely to take an exclusive promotion focus. Those with a career orientation, who frame work as a channel for personal success and advancement, and are likely to take a mixed prevention/promotion focus at work. As a consequence, I predict that those with a calling orientation will be most likely to implement creative ideas while those with a job orientation will be least likely.

1.2 Literature review

In the following sections, I first define the concept of work orientation and outline the three distinct orientations. Second, I review the bulk of research on work orientations, namely studies that consider the attitudes and cognitions, both positive and negative, associated with each type of work orientation. Finally, I report on the limited number of studies that have examined behavioural outcomes associated to the three work orientations.
1.2.1 Defining work orientations

Work orientation refers to the meaning individuals make of their work (Rosso et al., 2010; Wrzesniewski et al., 1997) and the purpose individuals pursue through their work. A work orientation is constructed at work (Wrzesniewski, 2003) and derived from a variety of factors including relatively stable individual traits (Kohn & Schooler, 1982; Schneider, 1987; Staw & Ross, 1985), occupational opportunities (Berg, Grant, & Johnson, 2010; Dobrow, 2012), and the features of one’s workplace (Hackman & Oldham, 1980). Individuals’ dispositional factors and personal values predict the role they expect work to play in their lives and the type of purpose they seek to accomplish through their work (Fossen et al., 2014; Scott Morton & Podolny, 2002; Staw et al., 1986). Researchers suggest that these individual aspects of work orientation might be inherited from one’s parents (Baker & Dekas, 2009) or developed through early socialization (Roberson, 1990). While individuals differ in their preferences for specific incentives or work environments (Malka & Chatman, 2003), their economics of choice are also constrained by such factors as job availability, personal skills, and financial obligations. Individuals may be passionate about specific domains, such as the arts, but be subject to different opportunities when it comes to pursuing this passion through work. Finally, once on the job, work orientation is shaped by an evaluation of the objective characteristics of the work. Organizational practices can influence the meaningfulness of one’s work in two ways: Through the roles and tasks assigned to individuals and through their social context (Pratt & Ashforth, 2003). The latter indicates that the community or culture of one’s workplace shapes one’s experience of work (Pratt et al., 2013). Because the underlying factors of work orientation – individual traits, opportunities and the workplace – are relatively stable, one’s work orientation is also relatively static though it may evolve over the course of one’s life (Dobrow & Tosti-Kharas, 2011).
Work orientations were devised as a three-part typology—the job, career and calling distinction that will be discussed in detail below—with the expectation that employees fall clearly into one of the three types (Bellah et al., 1985; Davidson & Caddell, 1994). Although this distinction remains in place, scholarship complicating the understanding of each orientation as well as their interplay is on-going. First, in some empirical studies, the three have been found to be interconnected, with the job and calling orientations falling on opposite ends of a spectrum, orthogonal to the career orientation (Wrzesniewski et al., 1997). Second, the debate about what defines the calling orientation continues (Wrzesniewski, 2012). A wide body of work has sought to define key features of a calling (Dik & Duffy, 2009; Novak, 1996; Weiss, Skelley, Haughey, & Hall, 2003), but theory has yet to settle on the psychological, behavioural, and emotional dimensions or the connections among them. For example, scholars currently differ in whether the psychological experience of the calling (Baumeister, 1991; Duffy & Sedlacek, 2007; Norton, 1976) or the course of action it engenders (Elangovan et al., 2010; Grant, 2007; Raatikainen, 1997) are the orientation’s defining feature. This debate has implications for the other two orientations. Third, there is a call for research considering not only the type of work orientation an individual holds but the strength of that orientation as falling on a continuum (Dobrow, 2012) and the relative salience of different orientations (Cardador, 2008; Tosti, 2008). For example, Cardador (2008) found that while employees identified a dominant orientation, they could express aspects of the other two. This suggests that the relative strength of an orientation may be as relevant for predicting subsequent outcomes as its defining nature. Finally, researchers suggest that passion (Perttula & Cardon, 2011) and fulfillment (Wrzesniewski, 2003) are defining aspects of meaningful work but differ in whether they perceive only the calling to be meaningful or whether job and career orientations can also provide meaningfulness. Having established that
these concepts are still somewhat fluid, allow me to outline how this dissertation will define each of the three orientations.

**Job orientation.** Those with a job orientation focus on the tangible rewards they receive from working. They see the purpose of work as acquiring the resources needed to enjoy time away from the job. The pursuit of intrinsic rewards from their work such as fulfillment or enjoyment (Wrzesniewski et al., 1997) is therefore secondary, because these can be found in private activities such as family and leisure time afforded through work. Work, therefore, is primarily a means to an end.

**Career orientation.** Individuals with a career orientation see work as a channel for advancement. Wrzesniewski (2002) observed that “the overarching goal of those who view their work as a career is to maximize their income, social status, power and prestige within their occupation” (2002: 232). Such gains, in turn, represent an important source of self-esteem for the individual (Bellah et al., 1985). Though work is a means to an end, those with a career orientation exhibit a deeper personal investment in their work than those with a job orientation.

**Calling orientation.** The calling orientation is defined by the intrinsic value and sense of fulfillment it provides to individuals (Wrzesniewski, Rozin, & Bennett, 2003). Intrinsic value is derived from the fact that these individuals truly enjoy and feel passionate about their work. Rather than merely a means to income or advancement, work is also seen as morally inseparable from the rest of their life (Bellah et al., 1985). Thus, fulfillment is frequently derived through the prosocial purpose of the work. By making the world a better place, through perfecting a craft or helping others, work connects the individual to their community and fellow workers (Bellah et al., 1985).
To be clear, this dissertation distinguishes calling orientation from a sense of calling. The latter construct, frequently cited in the religion and spirituality literature, described the calling as a passionate summons (Hall, Oates, Anderson, & Willingham, 2012; Oates, Hall, & Anderson, 2005) but does not require callings to be constructed in the work domain (Wrzesniewski, 2003). An individual may identify themselves as having both a sense of calling and a calling orientation, such as when they find enjoyment and fulfillment in an occupation that they see themselves to be called to, but this must not be the case. For instance, the individual who feels that he has a gift and passion for the arts, but who works in a call center to support his family, would be classified as having a job orientation because he treats work as a mean to an end, and not a calling orientation, despite his passion for the arts. In the remainder of this paper, the terms calling and calling orientation will be used synonymously.

1.2.2 Experienced work orientations

Few papers have directly contrasted the subjective experience of the three orientations. Theoretical work suggests that the three work orientations differ in the nature of the psychological contract they generate (Thompson & Bunderson, 2003) and the degree to which they draw attention to subjective or objective markers of career success (Hall & Chandler, 2005; Heslin, 2005). A limited number of empirical studies have indicated that they differ in terms of feelings of work satisfaction (Wrzesniewski et al., 1997) and sense of employment security (Fossen et al., 2014). To date, however, the majority of work has examined the orientations separately. Though there is little overlap in the outcomes that have been considered, research on all three orientations has suggested that the pursuit of a work orientation encompasses both benefits and associated costs to the individual. As I outline below, no one work orientation appears to promote exclusively beneficial outcomes to the individual and all three come with
their own challenges. I begin with the calling orientation, which has significantly more academic attention than its counterparts.

**Calling.** Both secular and religious examination (Steger, Pickering, Shin, & Dik, 2010; Walker, Jones, Wuensch, Aziz, & Cope, 2008) have portrayed the calling orientation as a deeply personal pursuit with high overlap between individuals’ personal and occupational identities (Kreiner et al., 2006). By pursuing a personal purpose through their work (Hall & Chandler, 2005) these employees can experience fulfillment (Berg et al., 2010; Dobrow, 2004), transcendence (Bunderson & Thompson, 2009), self-actualization (Baumeister, 1991), passion (Dobrow & Tosti-Kharas, 2011), and happiness (Novak, 1996). While at work, employees with a calling orientation report engagement (May, Gilson, & Harter, 2004), enthusiasm (Peterson, Park, Hall, & Seligman, 2009), optimism (Duffy & Raque-Bogdan, 2010; Wright & Cropanzano, 2004), and attachment (Cardador, Dane, & Pratt, 2011). Beyond work, the calling orientation also predicts benefits to well-being including greater life satisfaction (Wrzesniewski, 2002), zest (Peterson et al., 2009), reduced stress (Treadgold, 1999) improved health (Pratt & Ashforth, 2003; A. Wrzesniewski et al., 2003) and greater work-life balance (Finegold & Mohrman, 2001). Not surprisingly, those with a calling report fewer sick days (Wrzesniewski et al., 1997; Wrzesniewski, Tosti, & Landman, 2006) and do not look forward to retirement (Wrzesniewski et al., 2006).

The calling orientation has been posited as a stable path (Twenge & King, 2005) and an antidote to the restless striving associated with other orientations (Bellah et al., 1985). Recent research, however, has brought this assumption into question, pointing to the dark side of the calling experience. Those who manage to find an occupation that matches their calling can experience an insatiable hunger to fulfil their purpose (Hirschi, 2011), chronic dissatisfaction
with unachievable goals (Elangovan et al., 2010), and depressed levels of job satisfaction (Hirschi & Herrmann, 2012). These individuals are also sensitive to ideological breaches (Heslin, 2005), prone to feeling that their chosen occupation violates ideological principles (Cha & Edmondson, 2006; Thompson & Bunderson, 2003), and at risk for a sense that they have lost themselves in their work (Kreiner et al., 2006). Broadly speaking, some calling experiences can leave individuals vulnerable to burnout (Vinje & Mittelmark, 2007) and perceived conflict with others (Cardador et al., 2011; Thompson & Bunderson, 2003).

**Career.** Like their counterparts with a calling orientation, those with a career orientation experience a high degree of overlap between their personal and occupational identities (Stryker & Serpe, 1994). The work sphere is an important source of self-esteem for these individuals who measure their worth through advancement. When their work allows them to achieve advancement (Fried, Grant, Levi, Hadani, & Slowik, 2007), they experience feelings of pride and success (Hall, 2002; Korman, Wittig-Berman, & Lang, 1981). They are deeply engaged in their work, committed to their employer, and derive greater satisfaction from their toil (Steger & Dik, 2009). They also report a positive view of their workplace and high well-being at work (Hyvönen, Feldt, Salmela-Aro, Kinnunen, & Mäkikangas, 2009).

But, it is also those with a career orientation about whom Bellah and colleagues (1985) raised the greatest concerns. The authors described these employees as extreme “individualist” (Bellah et al., 1985) who believe that success is entirely determined by their individual actions and that the fruits of their labor should be theirs alone. Framing their work through a brutally competitive world view and harboring a preoccupation with being a “loser in the race” (Bellah et al., 1985), these individuals are described as prone to experience frustration (Fried et al., 2007), anxiety and depression (Bellah et al., 1985) and personal alienation (Burke, 1999). The latter can
be self-inflicted as they may limit interactions with coworkers who do not advance their purpose (Garson, 1975). Wanting to advance (Fried et al., 2007) also leaves them vulnerable to “move up and away” (Bledstein, 1978: 176) from others. Finally, theorists have argued that such alienation may bleed into the private sphere. Bellah and colleagues (1985) suggested that while career oriented individuals may cloak their efforts in the rhetoric of providing for their family or improving their home life, this motivation does not account for the countless hours they spend at work to achieve ever greater personal success. They suggest that those with a career orientation can lose themselves in their work (Bellah et al., 1985), though empirical evidence does not yet support this claim.

**Job.** Least is known about the job orientation and what little insight has been gained has focused exclusively on the downside of holding a job orientation. Employees with a job orientation have reported lower job and life satisfaction than their counterparts (Wrzesniewski et al., 1997). They also indicate a low involvement in, and commitment to, work (Grawitch, Barber, & Kruger, 2010) as well as low perceptions of job security (Fossen et al., 2014). Finally, the goals associated with a job orientation, that is a focus on financial gain, are unlikely to promote above average occupational well-being and average work engagement (Hyvönen et al., 2010).

### 1.2.3 The behavioural outcomes of work orientations

Few studies have examined the behavioural outcomes of work orientations and even fewer have considered all three orientations simultaneously. We do know that the three orientations predict absenteeism (Wrzesniewski et al., 1997), rated highest amongst those with a job orientation and lowest amongst those with a calling orientation. Similarly, research has shown that work orientation predicts a preference for challenging work (Fossen et al., 2014), with those with a job orientation avoiding challenge, those with a calling seeking it out, and
those with a career orientation falling in the middle. Finally, researchers have shown that work orientation predicts the extent to which employees prefer group work (Cullen, unpublished manuscript) and engage in bargaining behaviour (Ranganathan, 2013). Beyond these limited examinations, however, researchers have studied each orientation in isolation and thereby examined outcomes with limited overlap.

**Calling.** The calling orientation is largely associated with constructive actions and meta-competencies such as adaptive skills (Hall & Chandler, 2005; Weiss, Skelley, Haughey, & Hall, 2003) and specialization in one’s domain (Bellah et al., 1985). As a consequence, these individuals are predicted to be highly productive (Wrzesniewski, 2003) and capable of ‘weathering the storm’ in times of challenge (Hall & Chandler, 2005). Those with a calling report low absenteeism (Wrzesniewski et al., 1997) and are unlikely to quit their job (Grawitch et al., 2010). They prioritize spending their work time on gaining work-relevant knowledge (Raatikainen, 1997) or practicing their skills (Dobrow, 2004; Harzer & Ruch, 2012), and are likely to job-craft, especially to provide help and mentoring to others (Wrzesniewski & Dutton, 2001).

Some studies, however, have incorporated some of the potentially detrimental actions associated with the calling orientation. Research suggests that entry into work can be difficult for those with a calling orientation. When individuals feel called towards occupations with limited employment opportunities, they may struggle to break into this line of work (Bunderson & Thompson, 2009; Dobrow & Tosti-Kharas, 2011) and may persist in the face of negative career advice (Dobrow & Tosti-Kharas, 2012). Once at work, these employees willingly engage in tasks that support their moral beliefs (Serow, 1994) but may refuse to participate in those that violate them (Bunderson & Thompson, 2009; Robertson, 2013). Further, they work hard in service of
others (Dobrow, 2006) such as patients (Raatikainen, 1997), client (Robertson, 2013), pupils (Serow, 1994) or discerning customers (Ranganathan, 2013) and are seen as effective team members (Steger & Dik, 2009) who enjoy socializing with others in their profession (Dobrow, 2006). But, they can also readily develop unhealthy relationships with coworkers (Cardador & Caza, 2012), report difficulty getting along with clients (Robertson, 2013) and experience exploitation by management (Bunderson & Thompson, 2009). Most egregiously, Cohen and Kol (2004) found that the calling orientation had a negative influence on citizenship behaviour, altruistic intention, and general compliance at work.

**Career and job orientation.** Few behavioural outcomes have been studied under the purview of job or career orientation research. We know that both report higher absenteeism than their called counterparts (Wrzesniewski et al., 1997), a potential indicator of their performance. Both also appear to engage in some job crafting, defined as changing the cognitive, task, and/or relational boundaries of one’s work (Wrzesniewski & Dutton, 2001), though of a more limited nature. Those with a career orientation may change the dimensions of their own work to promote personal advancement (Ros, Schwartz, & Surkiss, 1999) or may pursue agentic goals such as improving their reputation or interacting with powerful colleagues. In contrast, those with a job orientation, who see their work as a necessity, have thus far been predicted to engage in extra-role activities such as job crafting only in those limited instances that are sure to maximize their income (Wrzesniewski & Dutton, 2001). Relatedly, they may engage in unique economic behaviours: When interacting with clients, these individuals treat the selling process as engaging in shorter transactions, bargaining more and focus solely on customers willingness to pay (Ranganathan, 2013) rather than promoting an appreciation of their craft.
Having outlined the definitions of all three work orientations as well as their subjective and objective experiences, I now proceed to the empirical studies comprising this dissertation (chapters two through four). The chapters share much overlap in content and approach, as outlined in the dissertation overview section, but each chapter can also be read as a stand-alone study with its own theory, methods and discussion sections.
Chapter 2: Negotiating the challenges of a calling

Interest in callings has increased over the last two decades (Bellah et al., 1985; Wrzesniewski et al., 1997), as more people seek work that satisfies their core values (Briscoe & Hall, 2006; Hall & Mirvis, 2004). Indeed, the pursuit of meaningful, purpose-led work has been encouraged by industry (e.g. Monster.com’s “your calling is calling”), business leaders (“this was my calling” – Paul Allen of Microsoft) and popular writing (Hurst, 2014). A calling has been defined as a meaningful beckoning toward activities that are morally, socially, and personally significant, involving work that is an end in itself (Wrzesniewski, 2012). It has been argued that any kind of work can be a calling, but organizational research on callings has focused on prosocial kinds of occupations including nurses (Cardador et al., 2011; Raatikainen, 1997), teachers (Serow, 1994), zookeepers (Bunderson & Thompson, 2009) and musicians (Dobrow, 2012; Dobrow & Tosti-Kharas, 2011).

An important but overlooked issue in the study of callings concerns the challenges people face in pursuing a calling and how they negotiate those challenges. Although the work of a calling, like all kinds of work, brings with it demands that interfere with or constrain the ability of individuals to realize their aims, research has tended to emphasize the positive side of callings. Recently, however, scholars have begun to document the challenges that those who are called may face and the sacrifices they may accept (Cardador & Caza, 2012; Dobrow, 2012). While nearly all work involves obstacles and constraints, the experience of confronting challenges in a calling may be felt particularly intensely. This is because callings involve work that matters a great deal to people and is rooted in their values, and so likely to evoke strong emotions when events or situations interfere with the realization of those values (Maitlis & Ozcelik, 2004).
Moreover, because callings are concerned with doing meaningful work, aspects of the work or setting that are at odds with individuals’ core beliefs may significantly affect their ability to carry on, instead requiring them to negotiate new working arrangements or make new sets of meanings about their work and their relationship to it (Wrzesniewski et al., 2003). Callings are thus contexts in which the challenges of work are intensely felt and actively interpreted.

The literature on callings suggests that people with a calling face challenges in their work with steadfastness and persistence (Levoy, 1998; Novak, 1996), guided by an inner “compass” (Bogart, 1994; Dik & Duffy, 2009) or sense of destiny (Duffy & Sedlacek, 2007). Such an image of “the called”, however, may be unrealistically heroic, and is certainly unlikely to describe everyone’s experience. Studies of work outside of callings show individuals have a wide variety of responses to workplace challenges, ranging from passive acceptance, withdrawal, and sabotage to job crafting and creative problem solving (Chang, Rosen, & Levy, 2009; Shoss, Witt, & Vera, 2012). Moreover, research on life narratives as well as longitudinal studies of commitment, burnout, and growth find that people respond differently to challenges over time (Maslach, Schaufeli, & Leiter, 2001; Sonenshein, Dutton, Grant, Spreitzer, & Sutcliffe, 2013). So, despite significant evidence that people respond to workplace challenges differently from one another and differently over time, we know little about how individuals negotiate the challenges of a calling, and in particular how this process might be vary across people and how it might evolve over time.

To explore this issue, we draw on in-depth interviews with 50 animal shelter workers, individuals who describe their work as a calling and whose work fits the scholarly definition of one. From an inductive analysis of these interviews, we identify three different “calling paths” that unfold over three phases. By calling path, we mean the set of experiences common to a
group of individuals pursuing a calling, starting from their entry into that calling. Each phase of a
path begins with a new set of challenges that prompt a pattern of emotional responses and
sensemaking activities. While all of our study participants enter animal shelter work with similar
passion and purpose, and face the same kinds of challenges, individuals on different paths
interpret challenges differently, have different emotional responses to them, and negotiate them
through different kinds of enacted sensemaking. In this process, they develop different accounts
of themselves and their guiding purpose through which they interpret future challenges. The
result is increasing variation between the three calling paths over time, culminating in different
outcomes. We do not claim that each of the three paths perfectly captures the experiences of
every individual on that path, or that the three paths represent the universe of possible calling
experiences, but rather that they reflect the prototypical set of the responses to challenges, over
time, of most individuals on that path in our study. Based on these findings, we develop a model
that describes and explains the recursive process through which individuals negotiate the
challenges of a calling.

Our study makes four main contributions to the literature. First, we find that despite
beginning shelter work in comparable roles and encountering similar challenges, participants
negotiated three distinctly different calling paths over time. This provides an important stimulus
to current research on callings, which has focused on callings as a unitary phenomenon: from our
study we can see that callings can take multiple forms, with distinctly different dynamics and
outcomes for the individuals and organizations involved. It also contributes to the broader
literature on work orientations, which has distinguished callings from jobs and careers, but given
less consideration to variation within callings (Bellah et al., 1985; Wrzesniewski et al., 1997).

Second, we resolve an important theoretical and practical paradox regarding the
resilience of those who pursue callings. On one hand, existing literature suggests that because of their strength of purpose, conviction, and passion, those who are called may be particularly well-equipped to weather the obstacles they meet in service of their duty (Duffy & Sedlacek, 2007; Levoy, 1998; Novak, 1996). On the other hand, it suggests we might expect the called, with their strong identification with work, high investment in and expectations of work, and deep devotion to it, to be especially vulnerable to challenges that impede their progress (Bunderson & Thompson, 2009; Cardador & Caza, 2012; Hirschi, 2011). Our findings show both possibilities are real, and help explain when and why they are likely to manifest. In brief, we show that early differences in individuals’ responses to challenges, rooted in initial differences in their accounts of self, become amplified over time through cycles of emotion and enacted sensemaking, leading workers to enact callings that build trajectories of thriving or burnout. These findings extend previous writing on the important role challenges play in the development of a calling (Bunderson & Thompson, 2009; Dobrow, 2012), and provide significant evidence of the processes through which more and less healthy calling paths are constructed (Cardador & Caza, 2012).

Third, our study contributes to the broader literature on employee responses to challenges in the workplace, and particularly research on adaptive and proactive behaviour in organizations (Griffin, Neal, & Parker, 2007; Pulakos, Arad, Donovan, & Plamondon, 2000). Although this stream of research has identified several ways in which employees deal with challenges, less well understood is how these processes play out over an individual’s occupational tenure. Our study shows that the ways in which individuals address challenges change over time, and offers a model of how this occurs, highlighting the importance of interpretation, emotion, and sensemaking in this process. While we believe that each of these elements may be particularly
important in the context of callings, the core mechanisms through which calling paths unfold may also underpin the paths of those who see work as a career or a job.

Our fourth contribution is to the literature on sensemaking, which has recently begun to acknowledge its emotional and embodied nature, but which is still largely dominated by more cognitive and discursive studies (Maitlis & Christianson, 2014). By exploring sensemaking as an action-oriented process, and especially with our focus on enactment, the present study adds to sensemaking research by showing how people facing challenges in organizations can act their way into new understandings. These findings show the importance of enactment in employees’ day-to-day routines and practices, providing a much needed addition to enactment research, which has thus far tended to focus on organizational crises and other extraordinary situations (Weick, 1988; Whiteman & Cooper, 2011).

2.1 Negotiating challenges in a calling

People inevitably encounter challenges in their work. Following from Berg, Dutton & Wrzesniewski (2013: 159), we define challenges as “perceived problems or constraints that limit opportunities to take action”. These include role ambiguity or conflict, a lack of resources, organizational politics, and other obstacles that make it harder for individuals to achieve important work goals (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Podsakoff, LePine, & LePine, 2007; Van den Broeck, De Cuyper, De Witte, & Vansteenkiste, 2010). In this section, we review research that has examined how individuals deal with challenges that hinder their work efforts. First, we consider the different kinds of response found across an array of occupations as well as over time. We then examine what is known about how people respond to challenges within the context of a calling, including a consideration of the distinctive
characteristics of callings that might affect the experience of, and response to, challenges encountered in that work.

2.1.1 Responding to challenges at work

*Responding negatively to challenges.* Research suggests that encountering hindrances at work can trigger responses that are problematic for individuals and for their organizations. When employees interpret challenges as hindering them from achieving their goals or as impeding their growth, they can react with strong negative emotions, such as anger, anxiety, and fear (Dong, Seo, & Bartol, 2014; Porath & Pearson, 2012). Psychological research shows that such intense feelings are common responses to perceived threats and harms, and are associated with certain action tendencies, such as fighting for anger, and avoiding or escaping for anxiety and fear (Lazarus, 1991). In studies of organizations, individuals’ negative emotional reactions to challenges have been linked to counterproductive work behaviours such as coming in late and leaving early, sabotaging equipment, and abusing coworkers (Robinson & Bennett, 1995; Spector et al., 2006).

Other research has explored the impact of workplace challenges on employees’ work-related attitudes, specifically linking these to employee withdrawal and turnover. When individuals encounter situations or events they feel impede their work goals, they experience lower job satisfaction and organizational commitment, which lead to withdrawal behaviours, intention to quit, and turnover (Podsakoff et al., 2007; Webster, Beehr, & Love, 2011). Thus when employees find themselves working in highly political environments (Chang et al., 2009), for abusive bosses (Tepper, 2000), or in jobs with role overload or conflict (Vandenberghe, Panaccio, Bentein, Mignonac, & Roussel, 2011), they tend to feel less satisfied, less committed, and are more likely to leave the organization. These processes can unfold over extended periods
of time, or take the form of a negative “shock” or “jarring event” (Lee & Mitchell, 1994), prompting previously satisfied employees to question their fit and future with the organization, and leading them to reduce their effort, increase absenteeism, or quit (Holtom, Burton, & Crossley, 2012).

**Responding adaptively and proactively to challenges.** While much of the literature is dominated by studies of problematic responses to workplace challenges, other important research reveals a range of constructive employee responses. These include a variety of “problem-focused coping” strategies (Lazarus & Folkman, 1984) directed at managing, reducing, or removing the problem. One such response that has received considerable attention in organizational research is “voice” (Hirschman, 1970), in which employees express challenging but constructive views about work-related issues (Tangirala & Ramanujam, 2008). Studies find that speaking up after mistreatment is better than remaining silent for employees’ psychological and physical health (Cortina & Magley, 2003), and appraisals of their job performance (Whiting, Podsakoff, & Pierce, 2008). For groups and organizations, employee voice has repeatedly been shown to be highly beneficial for decision making, learning, and innovation (Detert & Burris, 2007; Van Dyne & LePine, 1998), as well as for employee retention (Spencer, 1986).

In a separate but related stream of research, studies of adaptivity and proactivity at work highlight a range of positive responses to challenging circumstances. Adaptive behaviours involve accommodating challenges by adapting to new task, interpersonal, or organizational demands (Griffin, Parker, & Mason, 2010; Pulakos et al., 2000), while proactive behaviours involve self-initiated efforts to change oneself, one’s job, or the organizational environment (Griffin et al., 2007). These kinds of responses can lead to greater engagement (Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012), job satisfaction (Tims, Bakker, & Derks,
2013), and job performance (Leana, Appelbaum, & Shevchuk, 2009). They have also been found to enable task performance (Shoss et al., 2012), newcomer adjustment (Kammeyer-Mueller & Wanberg, 2003), and organizational performance (Crossley, Cooper, & Wernsing, 2013). One practice that has gained increasing prominence in this literature is “job crafting”, which involves changing the task, relational, or cognitive boundaries of work (Wrzesniewski & Dutton, 2001). By altering the emphasis or nature of certain tasks, the amount or kind of interaction with coworkers, and the way different tasks or relationships are framed, individuals can craft their work roles and identities in empowering ways, and increase the meaningfulness of their work (Berg et al., 2013).

Responding to challenges over time. Significant variation has also been identified in how people experience and respond to such challenges over time. The way they do this can establish patterns that may escalate over periods of a few weeks, months, or even years, as evidenced in writing on burnout and thriving in organizations. Burnout is a “psychological syndrome in response to chronic interpersonal stressors on the job” (Maslach et al., 2001: 397) involving “a slow process of progressive loss of energy and enthusiasm” (Bakker, Demerouti, & Sanz-Vergel, 2014: 390). Although there is some disagreement about the precise sequence through which burnout unfolds (Toppinen-Tanner, Kalimo, & Mutanen, 2002), a number of studies have found evidence for a gradual progression from exhaustion due to the demands of the job, to cynicism about the job and feelings of depersonalization towards others at work, which ultimately leads to lower efficacy in doing the job, and poorer job performance (Bakker, Schaufeli, Sixma, Bosveld, & Van Dierendonck, 2000; Toppinen-Tanner et al., 2002). Burnout is widely understood as a cumulative condition that builds over time as individuals struggling to cope with workplace challenges experience increasing difficulty partly through their very efforts to cope.
In contrast, thriving is a form of growth in which individuals experience vitality and learning, providing a sense of progress in their self-development (Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005). The relatively little research on thriving in the workplace shows that employees grow as they engage in agentic work behaviours, enabled by resources like positive meaning and high quality connections that are developed in the doing of work (Spreitzer et al., 2005). Recent studies support the existence of key pathways in this model, showing how, over time, individuals construct positively self-reinforcing paths through their approach to work (Niessen, Sonnentag, & Sach, 2012; Porath, Spreitzer, Gibson, & Garnett, 2012).

**Summary.** These literatures show evidence of considerable variation in individuals’ responses to challenges at work, which derives partly from variation in the way that they interpret the challenges they face and understand the possible responses available to them (Crawford et al., 2010; Dong et al., 2014; Tangirala & Ramanujam, 2008). Interpreting challenges as impediments to important goals can trigger strong negative emotions and prompt a range of negative job attitudes and behaviours. At the same time, individuals can respond to challenges by constructively modifying aspects of their work (Berg et al., 2013; Griffin et al., 2010). Further, research on responses to challenges over time shows that how individuals respond, emotionally and behaviourally, may shape their contexts and the challenges they face in unintended ways and with unexpected consequences (Maslach et al., 2001).

### 2.1.2 Responding to challenges in callings

Although organizational research has emphasized the positive nature of pursuing a calling, recent studies suggest that callings are not without their challenges. The calling experience has been associated with passion (Dobrow & Tosti-Kharas, 2011), enjoyment (Wrzesniewski et al., 1997) happiness (Seligman, 2002), satisfaction (Peterson, Park, Hall,
Seligman, 2009), engagement (Harzer & Ruch, 2012), and fulfillment (Berg, Grant, & Johnson, 2010). But recent writing has highlighted difficulties that include compassion fatigue (Abendroth & Flannery, 2006), feelings of ideological violation (Thompson & Bunderson, 2003), and poor employment prospects (Dobrow & Tosti-Kharas, 2011). Those who are called may sacrifice their well-being and personal time for the cause (Serow, 1994), perhaps because work viewed as a calling is seen as a duty and destiny (Bunderson & Thompson, 2009), and as an expression of one’s purpose (Hall & Chandler, 2005). Indeed, it has been suggested that, especially for the strongly called, the experience of challenges may be intensified by high standards and an insatiable hunger to fulfil a purpose (Cardador & Caza, 2012; Hirschi, 2011). Callings are thus permeated with passion and meaning (Dobrow, 2006; Wrzesniewski, 2012), and this may have important implications for how challenges are experienced, especially over time.

What we know about callings suggests three sets of dynamics around individuals’ responses to challenges in the context of callings. The first concerns the emotional impact of challenges on individuals who relate to their work as a calling. Because those who feel called engage very intensely in their work (Curlin, Dugdale, Lantos, & Chin, 2007; Peterson et al., 2009), caring a great deal about it and driven by a strong sense of purpose and meaningfulness (Hall & Chandler, 2005), they may also have especially intense emotional reactions to the problems they encounter. However, in callings, as in work more generally, people are unlikely to respond in the same emotional way to challenges, suggesting the importance of attending to differences in responses to challenges in callings.

Second, the centrality of a calling to an individual’s identity and sense of purpose may make challenges in the workplace especially powerful sensemaking triggers (Maitlis, 2009). Sensemaking occurs when people confront events or issues that are surprising or confusing,
leading them to ask, “What’s the story?” (Weick, Sutcliffe, & Obstfeld, 2005: 410). To work this out, they attend to and bracket cues in the environment, “creating intersubjective meaning through cycles of interpretation and action” (Maitlis & Christianson, 2014: 67). Because a sense of calling is often rooted in strong ideological beliefs, individuals may experience confusion and a painful tension between deeply held values and the realities of the work (Bunderson & Thompson, 2009; Thompson & Bunderson, 2003). We might therefore expect to see sensemaking play an important role in responding to challenges in a calling, and to differ significantly across individuals.

A third dynamic concerns how individuals respond to challenges in callings over time, with the temporal dynamics generally associated with work playing out even more strongly in the context of callings. It is possible that the intense engagement, personal and social significance, and meaningfulness associated with callings may facilitate unusually resourceful ways of responding to challenges, repeatedly adapting to accommodate or proactively altering task or organizational demands (Griffin et al., 2007, 2010; Pulakos et al., 2000). Alternatively, the intense passion of the called and their belief that this is their unique purpose may blind individuals to personal limitations regarding their ability to succeed in their chosen calling (Dobrow, 2012; Dobrow & Tosti-Kharas, 2011), driving them to overinvest, and potentially damage their health and relationships (Cardador & Caza, 2012; Wrzesniewski, 2012). Such contrasting images lead us to explore the unfolding trajectories of individuals’ responses to challenges in a calling.

2.1.3 Research question

Looking across the literatures on responses to challenges at work and in callings leads to the question that guides our study, and suggests key sensitizing concepts to frame our analysis.
Research has shown that challenges in all kinds of work provoke a variety of responses, and that such responses vary across individuals and over time. The nature of callings may exacerbate these dynamics, provoking even stronger positive and negative responses to challenges, and fueling their cumulative effects over time. Thus our research question is: how do the ways that individuals negotiate the challenges of a calling vary across individuals and over time?

Our analysis is guided by two key concepts that may be particularly important to answer this question: emotion and enacted sensemaking. Variations in emotional responses to challenges may be especially great for those who are called to their work: in some cases the importance of the work appears to fuel highly emotional reactions, while in others the called seem exceptionally able to absorb challenges without any strong emotional reaction. This brings our attention to the role of emotion in how individuals negotiate the challenges of a calling.

Similarly, the literatures on challenges at work and on callings both suggest that responses to challenges in the context of a calling may depend significantly on the sense people make of those challenges and of themselves in their calling work. Sensemaking research suggests this would involve not only interpreting information, but also taking actions that generate meaning and enact the environment individuals are trying to understand (Weick, 1988, 1995). Enacted sensemaking is thus the second sensitizing concept that guides our study; throughout the paper we use the terms ‘enacted sensemaking’ and ‘sensemaking’ interchangeably.

2.2 Methods

2.2.1 Research context

We chose to study employees of animal shelters, which are animal welfare organizations that promote the prevention of cruelty toward animals and offer temporary housing and care to
stray, lost, or abandoned animals, usually cats and dogs. Animal shelters, an umbrella terms that includes shelters and rehabilitation centers (both of domestic pets and wildlife), societies for the Prevention of Cruelty (SPCAs), humane societies, education centers, and clinics, employed nearly 200,000 “non-farm animal caretakers” in the United States in 2012, with significant growth projected over the next decade (Bureau of Labour Statistics, 2014). Many organizations perform several of these functions but, with the exception of a few regional networks (e.g. the Royal SPCA in the UK), animal welfare organizations are not regulated or funded by central agencies. Operations can have rigid or fluid structures and mandates: The one unifying definition of animal welfare organizations is that their primary stakeholder is the non-human animal (in contrast to the animal control sector whose mandate it is to protect humans from animals)

Entry-level positions focus on the care of animals (e.g., feeding, administering medication) and maintenance of the premises (e.g., cage cleaning, custodial work). The majority of shelter employees work in these positions, spending the opening and closing portions of their shifts feeding, cleaning, and tending to the animals and the middle portion of their shift assisting in the clinic (e.g. with treatment and euthanasia) or in tangential tasks (e.g. cleaning up the storage room). Horizontal movement and promotion typically occurs from within and is fairly easy. Because turnover is high, most employees who have remained in a shelter for several months can and do request transfer into other departments, with most employees moving toward roles that involve interaction with the public (e.g., intake counter, phone reception), and some advancing into specialized or administrative positions (e.g., fundraising, operations management, cruelty investigations). In this sense, shelters function on a job rotation model with movement into others departments being fairly easy and common, but all departments functioning as distinct units with limited cross-training during a given shift. All shelter positions, from kennel
employees to upper level management, encompass both ‘bright spots’ (e.g. adoptions, interaction with animals, fundraising success respectively) and difficulties (e.g. euthanasia, interaction with difficult clients, stone-walling by legislatures respectively).

Animal shelter work is an occupation in which the process under study – how individuals negotiate the challenges of a calling – is “transparently observable” (Eisenhardt, 1989: 537). First, it attracts those with a calling for prosocial work, and the limited economic incentives and room for advancement tend to discourage those who see work only as job or career (Wrzesniewski et al., 1997). Second, significant challenges are inherent to the work and the sector. Animal control work is a “dirty work” profession (Ashforth, Kreiner, Clark, & Fugate, 2007), in which the labor is physically and emotionally demanding, and workers are often stigmatized as “dog catchers” or “animal rights nuts”. The sector is characterized by resource constraints, extensive bureaucratic and legal restrictions, and a grim reality of short lives and suffering for the great majority of domesticated animals (Fraser, 2009). In addition to offering a transparent case, we chose to study animal shelter work because of the first author’s personal experience of it, allowing us to draw on insider knowledge that enabled a more nuanced understanding of our participants’ experiences (e.g. Declerck, 2005; Dobrow, 2012).

2.2.2 Data collection

Sample. We theoretically sampled for animal shelter employees with a calling for that work using two main strategies. First, drawing from 11 geographically dispersed branches of two of North America’s largest humane societies on the East (N=19) and West (N=14) coasts, we used snowball sampling, starting with contacts of the first author, and explaining our interest in talking to those who had found the work meaningful and fulfilling. From these sites we interviewed current employees, former workers who had left the shelter but stayed in touch with
those still in it, and subsequently, to gain insight into workers who stayed longer in shelter work, those with at least five years’ tenure. Second, to broaden our sample and reduce potential sampling bias, we posted a recruitment call on two online communities for those involved in animal rescue (petfinder.org and pets.craigslist.org) and the mailing list of one of our universities’ animal science departments (N=17); the call specified our interest in animal welfare workers who found their work deeply and personally fulfilling. In total, we recruited individuals from a variety of private, public and non-profit animal shelters, all with the primary mandate to prevent and reduce cruelty towards animals, but with varying degrees of organizational resource constraints based on regional differences. We interviewed 21 individuals who at the time worked in animal welfare and 29 who had previously, but no longer did. Table 2.1 provides the demographic characteristics of our sample. ANOVA and Chi Square analyses on age, F(1,48)= 1.01, p>.10, education, $\chi^2(3)= 3.08$, p>.10, volunteer experience, $\chi^2(1)= .24$, p>.10, and gender, $\chi^2(1)= 2.61$, p>.10, revealed no significant demographic differences among those recruited by different methods. The sample was 86% female, with a mean age of 35 (SD= 9.54) and mean tenure in a shelter of 5.46 years (SD= 4.98).

**Interviews.** Interviews lasted between 45 minutes and two hours and were conducted by the first author using a narrative protocol that followed interviewees through their shelter work history (see Appendix for interview protocol). The interviewee guided the narrative throughout, with the interviewer prompting for more information after particularly important or incomplete responses. This kind of “life story” interview provides rich descriptive data (Polkinghorne, 1997) that, through the narrative, allows the researcher to learn how individuals change (McAdams, 1993). All interviews were recorded and transcribed, resulting in 907 single-spaced pages of data.
2.2.3 Data analysis

Our data analysis involved four main tasks: (1) examining whether participants met our sampling criteria of having a calling and encountering challenges in their work; (2) identifying variation in responses to challenges across individuals; (3) identifying variation in responses to challenges over time; and (4) developing the theoretical model that explains the variation we identified. We present the details of our analytical steps for each task separately but, in reality, the second and third tasks, and to a lesser extent the fourth task, began separately but became interwoven throughout the analytical process.

(1) Having a calling and encountering challenges. We began by examining whether participants met our sampling criteria of 1) having a calling and 2) encountering challenges in their work. First, as regards having a calling, every participant described their work using at least three of four characteristics that have been identified in the literature as core elements of a calling: a passion for the work (Dobrow & Tosti-Kharas, 2011), enjoyment of the work (Wrzesniewski et al., 1997), a sense of obligation or moral duty (Bunderson & Thompson, 2009) and the need to make a prosocial difference (Elangovan et al., 2010). In addition, 14 participants used the term “calling” unprompted during their interview, and another 33 said they had a calling when asked at the conclusion of the interview (“Some have identified animal welfare as a calling, did/do you?”). The remaining three participants rejected the term because they felt it had a loaded or religious connotation, but still described their work using at least three of the calling characteristics above.

Second, we coded each transcript for references to challenges encountered at the shelter, based on a definition of challenges as “perceived problems or constraints that limit opportunities to take action” (Berg et al., 2013: 159). We counted as a challenge anything that participants saw
as constraining or making their work as animal shelter employees more difficult, but did not ask them to identify challenges that were specific to pursuing this calling. We noticed that participants had not generally expected such challenges, which often seemed to come as a shock. Using open coding (Corbin & Strauss, 1998), we kept a record of every kind of challenge that was mentioned, in the participants’ words (i.e., first order concepts) and then used constant comparative analysis to aggregate similar challenges into nine broader second order themes (see Table 2.2).

**(2) Identifying variation across individuals.** This part of the analysis had two main sub-tasks: establishing groups of individuals to compare, and describing the commonalties within those groups and the differences between them. Following an initial attempt to model the calling experience based on the commonalities across all participants, we received feedback in the review process that prompted the part of our current research question that focuses on variation across individuals. Our revised research question led us to explore the differences in the calling experiences of three sets of individuals: 1) those who ended up staying in the shelter; 2) those who had left the shelter but still worked with animals; 3) those who had left the shelter and no longer worked with animals. We first examined the challenges to see if different sets were associated with different kinds of challenges, but found that participants highlighted similar kinds of challenges. We then shifted our focus to how each set responded to challenges, seeking to identify common features, and differences between the sets.

As we worked through this analysis and began to find commonalties and differences, we found that the calling experiences of eleven of the 21 individuals still working at a shelter were more consistent with one or other of the leaver sets than with that of the ‘stayers’, and so we assigned them to the relevant set. (Our decision has since found support: in the four years since
we began our interviews, we have learned of six of these individuals who have left shelter work to pursue occupations consistent with others on the path to which we assigned them.)

The calling experience of the remaining ten participants (who were still in shelter work and not assigned to one of the leaver sets) seemed to be distinct from the rest of the participants. Coding these new transcripts revealed clear commonalities among them, and confirmed their distinctiveness as a group. We thus identified a third set of calling experiences, one that captured a pattern of negotiating challenges that was distinct from the two sets of individuals who had left or whom we expected to leave animal shelter work. To describe these sets of experiences in a way that reflected the process through which participants enacted their calling over time, we introduced the term ‘calling path’, which we defined as the set of experiences common to a group of individuals pursuing a calling, starting from their entry into that calling.

The second sub-task involved developing descriptions of the three calling paths in a way that captured the common elements in the experiences of those on each path and distinguished the paths from each other. We began by focusing on interviewees’ experiences of challenges and their responses to them, which interviewees typically described in terms of their understandings, feelings, and actions. After generating more than 295 first-order concepts capturing individuals’ responses to challenges, we grouped similar first-order concepts together, identifying second-order themes that more parsimoniously described the understandings, feelings, and actions we had coded (Gioia, Corley & Hamilton, 2013). In the process of analyzing variation participants’ understandings, feelings and actions, we found it useful to draw on ideas from the sensemaking literature. The challenges our participants encountered often prompted shock, surprise, and strong negative emotions, which suggested that they represented sensemaking triggers. We therefore returned to the transcripts and coded for sensemaking processes that were triggered by
workplace challenges, focusing initially on passages of transcripts that followed the description of challenges, and then broadening out to include other parts of the interview. Consistent with other studies of sensemaking (Maitlis, 2005; Stigliani & Ravasi, 2012), we went through each transcript, identifying any time a participant described ways of thinking (e.g., ‘realizing’, ‘reflecting’, or ‘coming to see’ something) and actions they took (e.g., ‘experimented’, ‘explored’, ‘tried out’, ‘observed’) that led to new accounts (previously coded as ‘understandings’). Sensitized by concepts from existing theory on callings and interpersonal sensemaking at work (Rosso et al., 2010; A. Wrzesniewski et al., 2003), we coded how participants’ accounts of themselves and their purpose changed in the course of sensemaking processes. We also coded participants’ emotional responses to the challenges they described. By the end of this process, we had sets of second order themes that captured the responses to challenges by individuals on each path, and which fed into a set of aggregate theoretical dimensions common to all three paths. Figure 2.1 illustrates the relationship between our first order concepts, second order themes, and the aggregate dimensions rooted in sensemaking theory (Gioia et al., 2013).

We chose labels for the three paths with the aim of describing how participants negotiated the challenges of their calling, as we outline at the start of the findings section.

(3) Identifying variation over time. Our interest in how responses to challenges vary over time emerged from the literature reviewed above and from our early coding of the interview data. As we coded, we noticed that individuals’ sensemaking and emotions in response to challenges changed over their tenure at the shelter. Some participants, for example, reported experimenting with tasks and relationships early in their tenure in ways they would avoid later on. To develop a systematic understanding of this variation over time, we used the analytic strategy of ‘temporal
bracketing’ (Langley, 1999) with which we parsed participants’ narratives into three phases. Key to defining relevant phases is establishing “continuity in the context and actions being pursued within them, but discontinuities at their frontiers” (Denis, Lamothe, & Langley, 2001: 815). In our case, we identified three phases, each of which began with individuals on each path encountering a new set of challenges to which they responded with distinct sets of emotions and sensemaking activities. For each phase we also identified participants’ accounts of their guiding purpose and of themselves, which also tended to differ by phase. Although not every participant on a path responded in exactly the same way in each phase, our coding led us to identify a set of commonalities in their emotional responses, enacted sensemaking activities, and accounts of self and purpose that generally characterized the way those on that path negotiated challenges in that phase. We labeled the three phases engaging, immersing, and resolving, to reflect participants’ primary focus in different periods of their time in shelter work. Phase 1 typically lasted from a few weeks to a year; phase 2 lasted several months to years; and the length of phase 3 varied depending on the path (weeks or months for those on the identity and contribution paths, several years for those on the practice path). There were two exceptions to this pattern, with two individuals on the contribution path spending several years in phase 1.

(4). Developing the theoretical model. The final phase of the data analysis process focused on developing a theoretical model that answered our research question of how individuals negotiate the challenges of a calling, by showing, “the dynamic relationships among the emergent concepts that describe or explain the phenomenon of interest and … mak[ing] clear all relevant data-to-theory connections” (Gioia et al., 2013: 22). This part of the analysis included two distinct, though practically interrelated, elements. The first was the identification of a sequence of events that seemed to be causally related, which involved interpretation of
challenges, cycles of emotional responding and enacted sensemaking, and the development of revised accounts of self and purpose. The second part of the analysis was the identification of mechanisms that linked and helped explain the connection between the key concepts, such as framing, enactment, and remembering. Here, the analytical emphasis was drawing on prior theory to posit potential mechanisms that were theoretically consistent with each other and with the general aims of the analysis. This involved an intensive recursive approach, moving back and forth between our data and existing theory. Our model is presented in Figure 2.1.

2.3 Findings

All the workers in our study entered their calling with a common love of animals and a desire to make a difference in animals’ lives. Once in the shelter, they encountered the same, wide-ranging kinds of challenges. Yet they responded to these challenges in different ways, over time negotiating what we have called three different “calling paths” (see Table 2.3 for an overview). Each path unfolded in three phases – engaging, immersing, and resolving – with individuals across the paths typically spending similar lengths of time in each. Most spent the briefest time in the first phase (often only a few weeks or months), an extended period in the second phase (generally several months or years), and, when reached, the longest time in the third phase. At the time of our interview, 31 of our participants were in the tempered phase, having been there for up to 12 years.

The path labels describe the different paths through the calling experience, rather than the individuals associated with those paths. We label the first path “identity-oriented” to describe how individuals on this path responded to challenges and enacted their calling as the continuous preservation of a sense of their special gifts in relationship to animals. Those on this path
ultimately left the shelter to pursue their calling through less difficult kinds of animal work. The second, “contribution-oriented”, path is associated with individuals who responded to challenges in ways that allowed them to use their skills to have a positive impact on the world, enacting their calling as a search to make a contribution. Individuals on this path ultimately moved out of animal welfare to do work they felt could offer a broader contribution to society. We label the third path, “practice oriented”, following from the community of practice literature (Lave & Wenger, 1991), because individuals on this path responded to challenges in ways that allowed them to learn the work of their calling, engaging in actions and developing relationships that led them to become skilled practitioners in animal welfare. These individuals remained at the shelter, building a community and a legacy for those who would follow.

Our findings describe the evolution of these paths over time and identify important characteristics that differentiate them, focusing on understanding how and why the paths evolved as they did, starting from similar beginnings but becoming increasingly divergent. In the rest of this section, we first describe the common challenges faced by individuals working in animal shelters and then describe each of the three calling paths.

2.3.1 Challenges of an animal welfare calling

Individuals on all three paths encountered a range of challenges. Initially, the most salient challenges included difficult working conditions, such as having “no cash register” [13C] and a “service weapon [that] was so dirty I wouldn’t touch it” [35I]; callous clients, because “the good pet owners don’t have a reason to come into the SPCA, right? Except for once every twenty years when they adopt a pet” [36P]; and a general lack of training and support in a “kind of sink or swim” [32P] climate. Most shocking early on were moral injustices committed against animals by the staff tasked to serve them, such as “euthanizing dogs that [they] didn’t think
should be euthanized” [19I]. As time passed, participants engaged in activities that often exposed them to a new wave of challenges, such as poor management, including executive directors who were “completely inept, incompetent” [17C] or who “didn’t have any experience, whatsoever, when it came to animals” [13C]; toxic coworker dynamics, including “cliques…you wouldn’t want to have anything to do with them and they wouldn’t want to have anything to do with you.” [25I]; and difficult external conditions, such as lack of funding, local legislation, and public apathy.

2.3.2 Identity-oriented calling path

The identity-oriented path was characterized by responses to the challenges of animal welfare work that, over time, served to sustain individuals’ accounts of themselves as uniquely suited to animal welfare work. Those on this path interpreted challenges as personal affronts, reacting with intensely negative emotions, and experimenting with ways of engaging in shelter work that preserved their sense of their gifts. Over time, this proved unsustainable and eventually they left the shelter. They pursued less painful occupations within the realm of animal welfare, where they felt a better fit between who they were and the work they were called to do. We present below each of the three phases that make up this path - engaging, immersing, resolving - drawing extensively on the words of the participants with whom it is associated.

Engaging. From an early age, those on this path believed in their special connection with animals. As one explained, “I just had a love of animals, always wanted to be with them” [11I]. Others spoke of their “gift” [18I] to help animals, noting, “it’s always been the way I am” [47I]. Wanting to “find something fulfilling” [39I], they applied to work in a shelter, which they saw as “a doggy orphanage” where they could “go and just take care of [pets] and then they all go to good homes” [15I]. They saw the work as “a dream come true” [21I], a very “personal job”
When they began paid employment at the shelter, both the nature and amount of work clashed with this idealistic vision. Participants were shocked, explaining, that it was “very, very, very, very different from what I'd expected” [21I] and that “I didn’t think it was going to be as physical, as demanding and I wouldn’t say degrading, but—” [11I]. In particular, the high volume and unfair nature of euthanasia were much “harder than anticipated” [14I]: “kittens were being, you know, put down…the sheer numbers” [30I]. Participants felt “very betrayed, very confused” [25I] and “intensely emotional about the animals” [39I]. Caught in such emotional turbulence and a context that made “no sense” [30I], they asked themselves, “why the hell am I here?” [47I].

Seeking to understand their situation and how to function within it, they engaged in sensemaking that was both action-led and reflective. Important in this process was experimenting with different tasks and departments. Some, such as intake and euthanasia, were particularly painful. As one participant recalls, “I sort of tended to avoid the cat area. I know that they get more cats in, and more cats are euthanized than are dogs, by volume. I knew if I saw it then I would be really upset” [29I]. In others, such as the foster and adoptions counters, they felt “really proud of myself… really fulfilled” [18I]. As a result, participants petitioned to be moved into “happy ending” departments. They explained, “when I was at reception…I’d get mad…ten people in a row, bad people, screaming and yelling…why bother?…I’d rather just be with the animals, they make me happy and I know I’m helping them” [47I], so “I just came out [and said] ‘I’d like to do adoption’” [11I]. There, they threw themselves into their work, proposing new ideas such as “a low cost spay/neuter clinic” [34I] or customized feeding charts, and had “wonderful experiences... finding a [lost] animal and their owner...it would feel great, you know”
Individuals also engaged in sensemaking about their coworkers. They observed coworkers who “hit dogs down there and rattle the cages” [21], or took “medicine and dog food...stealing from a homeless animal” [35], which they interpreted as indicators of coworker character. These accounts contrasted with the qualities they saw in themselves, motivating them to “advocate for what I believed in” [18]. It also made participants “very angry” [21], leading them to distance themselves from coworkers, and do “things without consulting with them” [6]. “I just literally try to ignore them. I just kind of walk in like ‘hi, hi, hi everybody’ and then I just don’t care” [47]. They also exported work and animals into their homes, explaining, “I’d rather treat them at home than have them sit in a shelter when I don’t trust the care that they’re going to get” [25].

**Immersing.** This phase began as individuals encountered new challenges through their work at the shelter, particularly in the form of criticism from managers and interference from coworkers. After moving into specialized departments, participants on this path were shocked to find that, “I was supposed to be the dog expert, but my boss was overriding my decision” [19] and “disregarding my evaluations” [7]. They were called into meetings to be told “no, what you’re doing is shit” [4] and “you need to know your place. You need to know that you can’t just come up with an idea and put it in action” [6]. Further, though they tried to distance themselves from coworkers, they still experienced frequent interference by other staff, “telling you that they don’t want you to do more than they do” [21].

These new challenges prompted a mix of emotions that drove individuals’ sensemaking about who they were and their purpose at the shelter. These included intense anger, often directed at management and staff, which challenged how they understood themselves: “I felt
really, really angry and I was not comfortable. I was okay being angry, but I wasn’t comfortable with hating another human being” [18I]. They also felt “disappointed” [14I] and “very hurt” [11I] by shelter life, and increasingly “kind of hopeless” [6I] about what they could achieve.

Reflecting on their experiences to this point, and the many “avenues I feel are losing battles” [50I], participants began to see themselves as “powerless” [7I] and “ineffectual and like everything I was trying to do was for nothing” [19I]. Emotionally, they “progressed into more of a grey area ... it just kind of got progressively worse and worse until I was stressed out and unhappy most of the time” [19I].

At the same time, believing they were the only ones really there for the animals, they became more determined, declaring “if I don’t do it, nobody will” [42I]. Their sense of themselves shifted from being uniquely gifted for animals toward being uniquely able to bear the burden of animal shelter work: “you know, some people can’t deal with it and I know I can, so I just have to go home and suck it up” [47I]. Participants accordingly pursued the difficult departments and painful tasks they had previously avoided. One explained, when dogs “were put down, then I felt a lot of, just responsible. And so then I’d be present there because I’d be the one closest to the dog and I wanted to help it go smoothly” [15I]. They also escalated their involvement at home, where they had “kittens in one room, a sick dog in the other...I didn’t have two separate lives. Animals were everywhere” [7I].

Over the early weeks and months of this phase, workers on the identity path thus came to see shelter work as fundamentally painful and constrained and themselves as uniquely capable of carrying the burden. These accounts remained unchanged for the many months and often years typical of this phase. In the later period, workers did not engage in much sensemaking, now familiar with the challenges of shelter life, and in many cases having actively worked to “get a
little bit desensitized [because] you cannot spend your, all the time crying” [7I]. As they continued to serve the animals, however, their dedication exacted a personal cost. Some “lost interest in normal activities, the hobbies and stuff” [14I], while others began “eating unhealthy and just sleeping more” [18I]. Further, despite “numbing out” [26I] intense emotions, many still felt “stressed out and unhappy most of the time” [21I].

**Resolving.** Earlier, individuals either did not see or ignored the toll their work was taking, but the final phase began when this became impossible, often when others started to indicate something was wrong. As one explained, “I started noticing my interactions with the dogs were different. Like I was burned out and they would react different to me. I had a lot more dogs kind of like nip at me and stuff like that, which never ever happened before …I didn’t feel like myself really any more or I felt like a very depressed version of myself” [18I]. Another explained, “I was having panic attacks really severely and couldn’t hardly leave the house and drive and stuff like that … everyone said, “Oh you need to leave this job” [15I].

The reactions of others prompted those on the identity path to question the value of their work: “you start thinking, ‘well okay, why am I doing this exactly? To help the animals. Do I help the animals? Okay, when? One out of 20? Am I satisfied with this?’” [7I]. They also began to doubt the uniqueness of what they brought to the shelter. Reflecting on how small their role had become, they observed that other staff “make you feel like they value you so much and then all of a sudden from one day to the next you realize, well wait a second, if I don’t do this thing or that thing, then they really don’t care” [21I]. This realization was amplified by seeing others treat them as “no more special than the person next door” [21I], threatening the core account of themselves as uniquely suited for animal welfare work that been preserved to this point.

Eventually, after numerous signals from others and reflection about themselves and their
experiences, individuals on this path began to see: “working in an animal shelter full time, I realized it like destroys you as a human” [34I] and came to believe, “if I stayed there, then I was just going to be a disgruntled shelter worker” [18I]. In short, participants constructed accounts of themselves as dedicated animal lovers and workers who could not viably remain in the shelter. As one explained, “I wasn’t willing to make the sacrifice to stay there for the animals… I felt really bad about it, but I thought at some point, it’s me or them. So I chose me” [4I]. Their departure was “pretty abrupt” [29I] and often the result of an anxiety attack [14I], physical breakdown [2I] or one last fight with a colleague [26I].

Those on this path thus left shelter work when the threat to their identity as uniquely able to do animal work became too great, but remained firm that “animal welfare is my passion and I think probably my calling” [18I]. As their purpose broadened to working for animals more generally (“I no longer had this, like ‘I want to save and change the world’ thing. It’s just I want to be with animals” [8I]), they sought work in animal-centric industries including grooming, training, or veterinary medicine. In these new settings, individuals recommitted to accepting only “happy” work and rejected tasks or hours that didn’t suit them. They expressed happiness that they could pursue work consistent with their identities as committed animal welfare “lifers” [2I], fulfilling a broader purpose of working for animals. The identity-oriented path thus describes an experience of animal shelter work as a calling in which individuals responded to challenges in ways that preserved their identities as uniquely suited to helping animals, even to the point where they left this particular kind of work to express what they saw as their distinctive gifts for working with animals in other contexts.

2.3.3 Contribution-oriented calling path

The contribution-oriented path was associated with individuals who responded to
challenges in ways that allowed them to have a positive impact on the world by applying valuable skills in a context where these were in short supply. Like those on the identity-oriented path, these individuals experienced shock and intense emotions at the many challenges they encountered, but their enacted sensemaking took a different form, both in process and content. Ultimately, however, despairing of the difference they could engender at the shelter, they left to seek opportunities to contribute to other service professions.

**Engaging.** Participants on the contribution path entered shelter work wanting to “make a positive impact” [38C] on a worthwhile cause, and believing they could do this through their distinctive professional skills (e.g., MBAs, veterinary training), which seemed to be lacking in animal welfare. These individuals looked forward to entering shelter positions where they could “bring my intelligence and passion forward and my critical thinking ability” [43C]. What they encountered on entering the shelter, however, was a complete “culture shock” [13C], including “how very little support anyone working there had from their superiors... how overworked every position was” [23C]. In particular, they recalled “I wasn’t prepared for the euthanasia…the sheer number of euthanasias of cats shocked me” [12C]. This shock provoked intense emotions, with workers frequently feeling “infuriated” [17C], “hurt” and “sad” [5C], and “emotionally drained” [13C]. Overwhelmed and confused by shelter practices – “every animal you had always the question mark, why?” [12C] – individuals on the contribution-oriented path tried “to figure out how do I move forward?” [40C]. Important to this sensemaking process was “asking questions: every time [an animal] goes, disappears...I really want to know what happened to them” [37C]. These individuals observed the dedication of coworkers but felt frustrated that they were “caring about the animals but acting very poorly at the same time - where they simply did not or could not improve their performance” [1C]. Participants constructed the challenges they faced as
threats to their guiding purpose and engaged in a variety of change efforts, using “every skill I’ve ever learned” in service of “finding the best way to help animals” [33C]. Whereas those on the identity path devoted themselves in this phase to working closely with the animals, individuals on this path pursued leadership positions, confident that everything “would be different if I ran the place [because] I would clean house” [31C]. Coming to understand the shelter differently (“ok, it’s not perfect now, but it can be” [3C]), and broadening their purpose to leading change in the shelter, they increasingly saw their potential contribution as “not just working with animals, but also getting people trained to be a part of it” [23C].

**Immersing.** The second phase for those on the contribution-oriented path began as they encountered new challenges often rooted in the high-impact roles they had sought out. Now higher up the organizational structure, they saw management “making less than ideal decisions with regards to the long-term health of the shelter” [1C]. Leading others also involved them more in shelter politics, with “so much passive aggressive stuff” [23C], often becoming the target themselves: employees “would like completely harass me…do anything possible to get me in trouble” including “blaming me for the death of an animal” [25C]. These challenges, upsetting in themselves, were also experienced as “a big slap in your face” [3C] because they prevented participants from effecting the kinds of change they believed leadership positions would facilitate. Those on this path felt many intense negative emotions, including “angry... the longer I was there the more I got to know and kind of seeing that all of my suggestions were getting stonewalled, just became increasingly frustrating” [13C]. Some also felt “a lot of bitterness” [23C], because I “realized that it wasn’t really like I thought it would be, that I can’t change much about it” [12C]. Trying to minimize what they felt, they worked to “protect yourself from this emotion” [10C] and “just push[ed] the emotion away” [17C]. Wanting to “show professional
behaviour” [9C], they also sought to conceal how they felt from others, commenting, “I have to wear a mask” [9C].

In the context of these feelings, participants began to reconsider their guiding purpose. Acknowledging the limitations imposed on them by the shelter (“I just have to stop and just do my job, as it were, and not grow my job” [38C]), but not yet considering leaving, some of them tried to shift “my own perception of the job” [9C]. Lowering their sights from change leadership roles, they instead engaged in tasks such as giving extra care to those animals most likely to be adopted and supporting their coworkers, providing a kind ear to those who were “complaining about something or voicing a frustration about something or even crying on my shoulder” [13C]. They also extended emotional support to clients, “hugging the person at the door, you know, as they were dropping [off] the animal” [20C]. Discovering through such efforts that they could still make a valuable contribution, they took satisfaction from the minor victories they achieved. As one explained, “every single day I could accomplish something. Just something small and nice... I really think that it’s small day-to-day things that you think about much more often” [3C].

Doing work that did not draw on their skills and perceiving their limited power to make change, they now engaged in sensemaking about who they could be at the shelter. They saw themselves as dedicated and conscientious, explaining, “I feel like I have to see something through until it’s…it’s finalized. Whether it’s the release of an animal or a euthanasia” [24C]. Working on a variety of smaller tasks, they thus took pride in being people who fulfilled their “responsibility to the animals” [C40]. As with the identity-oriented path, this latter part of the settling phase continued for many months and sometimes years, with these dedicated individuals finding ways to fulfil their modified purpose within the limitations of the shelter.

**Resolving.** Despite their efforts to work around the challenges of shelter life, over time
these employees began to see the shelter as deteriorating, observing the “bad financial situation” [5C] of a place where “the actual mission ultimately ended up being lost” [13C]. This sense of decline led them to weigh up the difference they were making. One observed that she was “just basically there to solve the little problems …I wasn’t doing anything that was pushing the shelter forward [12C]. In this context, small incidents prompted individuals to question what they were doing. In one case, it was being scrutinized by a new director and “realiz[ing] that I was going to not be able to work with her” [23C]. For others, it was more cumulative, as they noticed that they had not “come home in a long time with good news and excitement” [38C]. One way or another, they came to ask themselves, “why are you doing a job that you hate?” [38C].

As those on the contribution path worked to make sense of their situation, they developed new accounts of their purpose and themselves. Broadening their purpose to include having a bigger social impact and seeing themselves as unable to make a real difference in the shelter, they sought contexts outside animal welfare to make their contribution. One explained, “I’m not gaining anything...and I didn’t feel I was helping the animals – [this] only made it clearer that I had no reason to be there” [12C]. Concluding that “none of the other ways in which I could have stayed at the shelter would have had a positive long-term impact” [1C], participants gave their notice, now “trying to find which way I could make the biggest difference, with the common denominator being, you know, how can I use this drive to help?” [20C].

Some who had discovered a previously unknown pleasure in helping people turned to work as nurses, teachers, or social workers. Others addressed their concern for the plight of animals through biology degrees or work in environmental organizations, getting “involved with wildlife rehabilitation because I felt so passionate about how so much of our wildlife space is being consumed by building and our encroachment” [24C]. They saw these jobs as a natural
extension of their calling. The contribution-oriented path thus describes an experience of animal shelter work as a calling in which individuals responded to challenges in ways that allowed them to make a valuable contribution for as long as possible, ultimately leaving work with animals in order to make a difference elsewhere.

2.3.4 Practice-oriented calling path

The practice-oriented calling path was associated with individuals who responded to the challenges of animal welfare with less intense shock and negative emotion than those on other paths, and engaged in collaborative sensemaking with those around them. These individuals, while passionate to make a difference in animals’ lives and be a part of the animal welfare community, did not consider themselves to have unique gifts or skills for the work. With more modest aspirations, they interpreted the challenges they encountered as opportunities for mastery and gradually grew their responsibilities over time. They were still working in animal welfare at the time of the study, with no plans to leave.

Engaging. Helping animals “was always a passion” [45P] for individuals on the practice-oriented path. One remembered, “I watched the old SPCA commercials, with a little dog wandering the streets alone, and I was about eight years old then and I knew at that time that I want to work for the SPCA” [44P]. Coming in with a hope of “making myself more knowledgeable” [36P], these individuals entered the occupation with fewer expectations than their counterparts. They did not expect the shelter to be perfect, or see themselves as especially well-equipped to improve it.

Nevertheless, when they arrived, they were still “surprised by how little the organization had in place” [48P]. As one recalled, “I was a little taken aback by the set up…I wasn’t prepared for that kind of neglect and abuse” [45P]. Others described how the work “was really stressful”
[32P], explaining that they were “put into extraordinarily dangerous situations” despite “no training. You sort of sink or swim” [36P]. Interpreting challenges as reminders of what they were there for and how much they had to learn, however, individuals on this path did not react with strong, negative emotions. Rather, they approached these difficult situations as opportunities to practice new skills and build their capacity. As one participant explained, challenges “said to me…’you know, we’re a long ways away, but we’ll get there’” [28P].

As a result, participants were prompted to engage in less intense sensemaking than their counterparts, focusing mainly on understanding the challenges of shelter work and how to get better at it, rather than questioning their role or purpose in being there. As one explained, “I wasn’t confident enough to be like, “Hey, you know, we should be doing it this way.” I was just trying to figure stuff out” [32P]. They threw themselves into their work, “always on call” [45P] and brought home many foster animals. Because they did not consider themselves a uniquely good fit for shelter work, when they struggled to adapt quickly enough, they tended to blame themselves. They admitted “I was more hard on myself…instead of being more critical about the way things were” [32P]. Also in contrast to those on the other paths, they saw coworkers as valuable sources of insight and support, and frequently turned to them for assistance: “that’s been one of the highlights of my job, just sitting down and working with people who have that expertise” [48P]. For example, one individual who saw herself as quite competent in “animal management” turned to those who were “people managers” for support and “then together it is a really good match” [41P].

**Immersing.** The second phase began as they encountered additional challenges of shelter work. Having built their skills over the preceding phase, participants now felt “better qualified than, you know, somebody else. Yeah, because of my experience…I’m good at what I do” [32P].
But the same experiences that allowed them to become “more confident in my job” exposed them to previously unknown difficulties. As one explained, “I found myself working in a leadership role in an organization that had little to no interest in animals. Its goal was to scoop them up off the street and put them through a process, dead or alive, and move on and protect the health and safety of humans in the process” [28P]. Another described “so much infighting and conflict within the branch that I just think is such a waste of such precious energy and emotion” [45P]. They also experienced first-hand the effect of external pressures on their shelter. For example, they had been present for round-ups of “feral dogs in order to vaccinate them” and the devastating impact of a subsequent “viral outbreak” on the shelter population; they also better understood the “stereotype of a shelter” as a “dark, dirty, dingy place…that keeps people out” [28P] and adoption rates low despite their best efforts.

They were most shocked, however, by some of their coworkers’ behaviour. While they had initially assumed all staff were “working towards the same goal”, they now started to question the integrity of some, especially those “who are actually, just trying to, what’s the right way to put it, preserve their own turf” [48P]. A number described going on an emergency call and finding an escalated cruelty situation because other employees had not followed up. They felt “surprised that someone could just turn around and walk away from a situation that was obviously not ok” and found it “very depressing to know that things had been left the way that they were” [44P].

Individuals on the practice-oriented path now experienced some of the intense negative feelings that those on the other paths had had upon entry, describing the pain of “dealing with heartbreaking, kind of emotionally exhausting issues” [32P]. At the same time, however, because of the high turnover in the industry, these workers had started to see themselves as quite
“seasoned” [46P], with “something to offer the organization here that nobody else has” [48P]. Revising their accounts of themselves from student to skilled practitioner, they felt “motivated by suffering” [28P] to make things better. As one participant explained, “I feel really strong emotions in terms of my sadness and discouragement sometimes about these practices, but that generally leads me to a place of, you know, being motivated to try to change the problems” [48P].

In making sense of how to do this, and now more confident in the contribution they could make, they applied for leadership roles and positions in specialty departments such as cruelty investigations. Experiencing these expanded roles as “an amazing, rewarding, wonderful job” [44P], their guiding purpose broadened to helping more animals and coworkers. They developed staff, soliciting feedback from them, making sure they “always had a lot of input” [45P] and arriving at decisions through “compromise” [41P]. They also tended to “lead by example” [28P], although this often meant they worked more hours, for example doing “an unprecedented number of rescues and unprecedented number of cases” [28P]. Still, they reasoned that it was “worth that little piece of me that I have to give” [44P]. Even when not working, individuals on this path did not switch off, explaining, “you’re kind of physically wiped but your mind is still ruminating over and over” [32P]. To manage the strain, they engaged in mutual support with their coworkers, explaining, for example, “we see each other socially. It’s also really nice when we go to the workshops or the training, [to] get to vent and talk to each other…so I’m not by myself” [36P].

**Resolving.** Through their immersion in shelter work, individuals on the practice-oriented path continued to encounter new challenges that prompted them to ask questions and reflect. For many, this process began when they started to feel they had hit a ceiling in the shelter: “I had
been here for about 5 years, and there wasn’t really, there was no growth happening in our area. I started to feel anxious…I started to get impatient” [48P]. Although still making a difference through their work, they no longer experienced the personal challenge and learning that had always been so important, and felt increasingly negative about work: “it was frustration” [41C]” and “I was bored” [28P]. A sense that “things have sort of stagnated here” [48P] also made them question their capacity to continue in shelter work: “I felt I was wearing out, I didn’t know how much longer I was going to be able to continue to carry all of that stress” [45P].

They contemplated leaving because “I’m ready, I need a change, I need to take this work to the next level” [48P]. For some, being “head-hunted a couple of times” had “definitely given me reflection…to consider other opportunities” [46P]. Instead, however, these individuals found ways forward within the shelter, often raising their concerns with senior staff with whom they had built relationships over the years. Figuring out “how can I get them to see it my way?” [41P], they laid out ideas that would have “the potential to help all the shelters” [41P] or that could have a broader “impact for other animals that are in the same situation” [46P] in the community beyond their own shelter. As a result, they found themselves co-creating jobs that had “never existed, so everything I have been doing has been new, new to the organization” [48P], such as managing advocacy or cruelty investigation programs, or leading “education centers” [36P] or “annexes” [22P] that complemented shelters. These new initiatives led them to see themselves as empowered and to feel challenged once again. As one said, “I love to learn. I love to absorb anything and everything in the animal world, because it only makes me better at what I do” [28P]. As these employees moved ahead, they were keen to collaborate and delegate: “I also brought on interns, and they basically run my front counter” [36P]. They took pride in having “buil[t] a team” [28P] and seeing the “willingness and interest in the next generation” [48P].
While employees’ emotional experience in this phase included the pain of being “the unpopular person in the room” [49P] when doing advocacy work, and the loneliness of leadership roles, they were able to sustain work as a largely positive experience. They generally saw their accomplishments as “fulfilling and empowering” [46P], feeling that “we are seeing a change, we are being the change and we’re watching it happen and it is just awesome” [28P]. They also put limits around their work, recognizing that “if you incapacitate yourself with this compassionate fatigue, then how much are you going to help the animals?” [36P]: they felt “it’s ok to walk away sometimes, [when] it’s not a life or death situation, most times it can wait till tomorrow.” [44P].

These individuals intended to keep working for animals, asking themselves, “Shouldn’t I just be like retiring? Like should I just be like doing something else?” [41P], and concluding ‘no’. As one explained, “I can’t imagine life without the SPCA, it’s so ingrained in everything I do. [Leaving] would be worse than having a divorce, I think. I would grieve it like a loss” [46P]. The practice-oriented path thus describes an experience of animal shelter work as a calling in which individuals responded to challenges in ways that allowed them to learn the work of animal welfare and help grow a community of skilled practitioners.

2.4 Discussion

We found that individuals negotiated the challenges of animal shelter work through one of three paths, which were constructed as they repeatedly encountered challenges and responded to them through cycles of emotion and enacted sensemaking. Drawing on these findings, we first develop a general model of how challenges are negotiated in callings. We then use this model to explore two key differences in individuals’ calling experiences, first between those of individuals
on the practice path (who stayed in shelter work) and those on the identity and contribution paths (who ultimately left shelter work), and second, between the contribution and identity paths.

2.4.1 A process model of negotiating challenges in callings

Integrating findings from our study with research on sensemaking and emotion, we theorize a three-part process, beginning as individuals encounter and respond to challenges in the calling (see Figure 2.1). These three parts do not map directly on to the three phases around which the findings are organized, but instead capture key elements of the negotiation process as it unfolds both within and across the phases.

Interpreting challenges through accounts of self and purpose. Our study suggests that the challenges individuals face are rooted in the work of the calling (the tasks, relationships, and roles in which individuals are engaged) and its broader context (the organization and sector), but that their meaning and impact depend on how they are interpreted through individuals’ accounts of self and purpose. Consistent with previous research (Folkman & Lazarus, 1985; Van den Broeck et al., 2010), some participants in our study saw challenges as threats to who they were and the purpose they pursued, while others understood them as opportunities to develop themselves and their role. These interpretations in turn shaped both their emotional and sensemaking responses to the challenges. Our study extends previous research by specifying the individual level accounts that act as filters through which challenges are interpreted.

Recursive cycles of emotion and enacted sensemaking. In the second part of our model, individuals’ interpretations of challenges prompt recursive cycles of emotion and sensemaking. Individuals experience challenges as affective events (Weiss & Cropanzano, 1996), responding emotionally to them to the degree to which they affect the achievement of important goals (Lazarus, 1991; Van den Broeck et al., 2010). Challenges are also experienced as sources of
surprise or confusion, and thus act as sensemaking triggers (Weick, 1995). We find that sensemaking in response to the challenges of a calling is an active, social process in which individuals engage in a variety of behaviours that include talking with others, reflecting alone, and experimenting with different ways of working and relating. Through this process, they try out alternative ways of doing the calling, exploring how they can be themselves and fulfil their purpose in this calling context, and ‘trying on’ provisional accounts as they develop accounts that are consistent with the experience they are having.

The relationship between the emotional responses and sensemaking triggered by challenges is recursive, such that emotions that arise in response to challenges fuel sensemaking which in turn generates new emotions and so on. These new emotions may be amplifications of initial emotional responses to challenges (e.g., deepening frustration), or may be quite different (e.g., shifting from sorrow to pride). Consistent with research on the emotional impact of threats to identity (Williams, 2007) and to deeply-held beliefs or the achievement of important goals (Fox & Spector, 1999; Weiss & Cropanzano, 1996), we suggest that the recursive process is particularly intense when challenges are interpreted as threats to individuals’ accounts of self or their guiding purpose. It is not clear from our study, and perhaps not very useful to speculate, whether these recursive cycles begin with emotion or sensemaking. What is more important is the motivating effect of emotion on sensemaking. The sensemaking processes we studied were effortful and risky for individuals, as they experimented with new ways of working and relating to coworkers, and their emotional responses were key in energizing and directing those processes.

A further aspect of the recursive process is that sensemaking, through individuals’ actions, affects the work of the calling and sometimes its broader context, shaping the
organizations and networks in which their work and sensemaking efforts are embedded.

Sensemaking in the context of a calling is thus an example of enactment, in which acts taken to understand a situation both provide material for sensemaking and change the situation of which people seek to make sense (Weick, 1988). This dynamic shapes further sensemaking, as changes in the work and context generate new cues and lead to new challenges both within and across phases of the calling path.

**Developing new accounts of self and purpose.** The third part of our model captures how cycles of enacted sensemaking and emotion in response to challenges in a calling eventually culminate in new, plausible accounts of self and purpose (Maitlis, Vogus, & Lawrence, 2013), leading individuals’ emotions and sensemaking efforts to diminish. Employees tend to continue working in ways consistent with the new accounts until they encounter further challenges that disrupt and render these accounts implausible, and a new cycle of sensemaking and emotion begins. As accounts become revised through the recursive cycles, they continue to shape successive sets of challenges. Thus, individuals’ responses – both emotional and sensemaking – to these new events or situations are now framed by revised accounts of self and purpose, and incorporate cues and learning from earlier responses to prior challenges. Our findings suggest that these dynamics are likely to lead to divergent paths for different sets of individuals over time, as relatively small differences in their initial responses accumulate and become amplified to produce increasingly different accounts and calling experiences.

### 2.4.2 Negotiating challenges in a calling: Paths of burnout and thriving

Our theoretical model aims to provide a general understanding of how individuals in callings respond to challenges, synthesizing across the three paths we identified. We now draw on this model to explore the variation we found between the three paths, starting with differences
in the paths of those who ultimately left shelter work or remained in it.

Comparing the paths of those who stayed (practice path) and those who left (identity and contribution paths) finds that the practice path is characterized primarily by a pattern of thriving and growth, while both the identity and contribution paths are characterized by patterns of increasing emotional depletion and reduced sense of efficacy, at least until individuals leave the animal shelter. The latter two paths ultimately evolve into a form of burnout (Maslach et al., 2001), in which employees who have absorbed too much pain (Frost, 2003) become desensitized to the work they are doing, cynical that they can make a difference, and deeply exhausted. Understanding the dynamics that lead to these differences is important because although we know that the pursuit of callings has the potential to evolve in both healthy and unhealthy ways (Cardador & Caza, 2012), we have little evidence of how thriving and burnout trajectories evolve, and particularly the role of individuals’ efforts to negotiate challenges in these processes. Applying the general model to our findings, we see that many of the differences between the paths associated with thriving and with burnout can be explained by accounts of self and purpose that framed individuals’ interpretations of challenges throughout the calling experience, and two facets of the recursive sensemaking-emotion cycles – enactment and remembering.

**How accounts frame the interpretation of challenges.** The origins of the diverging paths can be seen in individuals’ responses to the first sets of challenges they encountered, which seemed to stem from different interpretations of those challenges rooted in accounts of self. While everyone we studied held similar accounts of purpose (to make a difference in animals’ lives), those on the practice path did not share with the others an account of themselves as having special gifts or distinctive skills for animal shelter work. This appeared to have a substantial impact when they met their first challenges.
We therefore identify framing as the first mechanism driving the variation we found between the paths of those who burned out and left, and those who thrived and stayed. Those on the identity and contribution paths interpreted the challenges they encountered through what we describe as a “performance” frame, an orientation towards work in which challenges are understood as obstacles preventing individuals from achieving their goals, in this case, performing their unique gifts or skills. Such an orientation is consistent with the concept of performance goals (DeShon & Gillespie, 2005; Dweck, 1986), which are associated with a motivation to demonstrate ability, and the idea of a fixed mindset (Dweck, 2012), which reflects a belief in ability as a fixed entity. In our study, this performance frame shaped not only individuals’ responses to initial challenges, but also their responses throughout the calling experience, as they repeatedly revised their core accounts in ways consistent with it. Interpreting challenges as impediments to their performance of self and purpose led participants on the identity and contribution paths to experience negative emotions and, over time, emotional, psychological, and physical depletion, and ultimately exit from the shelter.

In contrast, those on the practice path interpreted challenges through a “learning” frame akin to a growth mindset (Dweck, 1986), in which ability is understood as a malleable skill that can be developed over time. Within and across cycles, individuals interpreted challenges as opportunities to learn the work, and engaged in sensemaking that focused on learning and mastery. With little to prove, and accounts of self and purpose that were less susceptible to threat, they experienced fewer negative emotions than their counterparts, their sensemaking was open and collaborative, and their accounts gradually broadened over time as they felt increasingly empowered to make a greater impact at the shelter. These broadened accounts in turn sustained a learning frame and the growth-oriented interpretations they made of challenges.
that workers continued to encounter.

These differences have important implications for how we understand the dynamics of callings. In some sense, individuals on the identity and contribution paths represent classic images of the called – those who believe they have a unique gift for or set of skills and want to enact those gifts and skills toward a higher purpose (Bunderson & Thompson, 2009; Dobrow Riza & Heller, 2015). In contrast, individuals on the practice path shared with the others a passion to make a difference for animals, but had an initial understanding of themselves in relation to the work that was relatively humble, and a purpose that over time remained quite modest. Similarly, counter to the highly emotional experience of work that has been associated with pursuing a calling (Berg et al., 2010) and that we saw in those on the identity and contribution paths, individuals on the practice path negotiated their way through initial challenges with a relatively low level of emotional arousal. These contrasts suggest we should be cautious about applying our idealized images of callings to the lived experience of the called; a deeply emotional and personal attachment to a vocation may not always be the most durable basis for a long-term commitment.

*Enactment and remembering in recursive cycles of emotion and sensemaking.* The difference between the burnout and thriving paths is also linked to how the recursive cycles of emotion and sensemaking unfolded over time. Within and across the three phases of the calling paths, differences in individuals’ early responses accumulated and became amplified through two additional mechanisms. One of these is enactment (Weick, 1988) which, in our study, involved emotion-fuelled sensemaking shaping the tasks, relationships and roles that constituted individuals’ day-to-day lives in shelter work. Those on the identity and contribution paths responded to challenges with sensemaking that involved dramatic shifts in their tasks and
relationships, experimenting with the most rewarding and then most painful jobs, seeking promotions, bringing work home, and guiding coworkers they saw as less skilled. These actions repeatedly enacted an environment characterized by uncertainty, failure and, especially in the case of the identity path, isolation. These experiences amplified the anger and frustration they felt at not being able to work as they believed they could and should, and caused feelings of disappointment in themselves and the shelter. The combination of sustained hard work and growing discouragement became increasingly wearing, and over time enacted a trajectory of burnout. Participants on the practice path also enacted their work environment through their responses to challenges, but with different effects. These individuals experimented less and focused more directly on understanding how to master the job, appealing to others first to guide and then to join them. As their competence and confidence increased, those on this path engaged in new tasks and projects that led them to encounter new challenges, which they faced in the context of the strong relational environment they had enacted. Individuals on the practice path remained hopeful and responded by creating further opportunities for their own and others’ development. Feeling supported and empowered, and deriving fulfilment from enabling others, individuals on this path over time enacted a trajectory of thriving and growth.

The final mechanism involves individuals’ memories of their previous emotions and sensemaking activities. On all three paths, the emotions and sensemaking that occurred in the second and third phases seemed to be influenced not only by individuals’ interpretations of challenges and the work environments they enacted, but also by their memories of how they felt and the sensemaking activities they undertook earlier in the calling path. This idea is consistent with the psychological concepts of “somatic markers” (Damasio, 1994) and “affective residue” (Baumeister, Vohs, DeWall, & Zhang, 2007), which describe a kind of emotional memory that is
activated when people encounter a situation reminiscent of one that prompted a previous emotion. Our study extends this idea by suggesting that emotional memories associated with particular sensemaking efforts affect not only individuals’ future sensemaking, but also their emotional response to future challenges. Memories on the identity and contribution paths amplified individuals’ negative experiences, pushing them toward the emotional and physical exhaustion that characterize burnout. In parallel, remembering emotions such as hope and happiness helped individuals on the practice path sustain their energy in the face of subsequent frustrations, and continue to explore and invent new ways of doing their work and relating to others.

2.4.3 Understanding burnout in callings

Turning now to differences between the paths (identity and contribution) characterized by burnout and the eventual decision to leave, we see two forms of burnout, each with distinct dynamics and consequences. The identity path, we argue, is associated with a form of burnout in which individuals became “broken” by their experience of shelter work. These individuals, struggling to perform their identities in the face of repeated challenges, ended up damaging a core element of their account of self: their uniqueness for animal shelter work. Feeling broken, they left the shelter and to work with animals in ways that allowed them to rebuild those identities. In contrast, we argue that the burnout suffered by individuals on the contribution path is better described as an experience of feeling “defeated” – by a context that they could not change – in their repeated efforts to fulfil a guiding purpose. They ultimately found fulfilment by leaving the shelter to work for other social causes.

The difference between the identity and contribution paths began to emerge in individuals’ initial responses to the challenges they encountered. While those on both paths
experienced distress, those on the identity path interpreted the challenges as obstacles to their expression of who they were and, consistent with writing on identity threat (Lazarus & Folkman, 1984; Petriglieri, 2011), reacted with greater intensity, expressing significant anger about what they witnessed and making sense of it by focusing their efforts on a narrow element of shelter activities. In contrast, individuals on the contribution path interpreted challenges as obstacles that made it harder to fulfil their guiding purpose, a frustrating but less severe threat. Their initial emotional responses were negative but less intense than those of individuals on the identity path, and, rather than constructing a clearly bounded role in the shelter, their enacted sensemaking led them to expand their job role, pursuing a broader, change-focused purpose, and seeking new contexts in which they could better contribute.

The paths to broken and defeated forms of burnout continued through the recursive cycles of emotion and sensemaking. Hitting new obstacles despite the bounded roles they had enacted in phase 1 was very challenging for those on the identity path: struggling to sustain their accounts of self as uniquely suited for this work, they then enacted the very difficult and demanding roles of phase 2. They gradually progressed into burnout, becoming ‘broken’ as they realized they could not function in the shelter environment. The recursive cycles played out differently for those on the contribution path. After the frustrating challenges they encountered as they sought to lead change in phase 1, and seeking to have even some small impact, these individuals enacted more contained, less aspirational tasks. They still pushed themselves hard, however, overextending and ultimately burning out, an experience heightened by the realization that they could not properly fulfil their purpose. Retaining a sense of their own capabilities, they tended to blame their defeat on the stagnant shelter.

While the core symptoms of burnout are well-established (Bakker et al., 2014; Maslach et
al., 2001), the present study adds to our understanding by highlighting how the quality of burnout can differ depending on the meanings that individuals make of work stressors and of their responses to them. When these are closely tied to identity and purpose, as may be particularly common in callings, employees seem to experience burnout as more personally damaging and irrevocable, with important implications for their future behaviour.

2.5 Conclusion

To explore how individuals negotiate the challenges they encounter in a calling, we examined the experience of 50 animal shelter workers, identified three different paths through which they negotiated challenges, and developed a theoretical model of the process through which these paths evolved. Our study of course has limitations, some providing opportunities for future research. First, our sample was chosen to answer our research question and though it was diverse in age and education, participants were predominantly female and were all from North America. This limits our ability interpret the gender difference that we found between the three calling paths that suggests women may be more likely than men to navigate an identity-oriented path through their calling. Also, although our model may help explain the calling experience of those in a variety of female-dominated occupations (such as nursing, social work and teaching) future research could explore the transferability of our model to contexts with a different gender and/or cultural composition. Second, some of the conditions that shaped our participants’ experience may not be present in other callings, while others may exist that were not found in our study. For example, callings oriented towards the perfection of a craft, such as music, might provoke questions about personal abilities that were absent in our sample. The last decade of calling research has clearly shown that callings are not limited to fringe professions; we
encourage further exploration of the calling experience in different domains. Third, our research methodology is also subject to limitations. We conducted interviews at only one point in time, with current employees whose tenure ranged from six months to 22 years, and former employees who had left between one month and six years prior. Though our analysis did not reveal any systematic differences, participants’ accounts may have been influenced in part by their current levels of energy and satisfaction, deriving from their time at or time since leaving the shelter. We also acknowledge that retrospective accounts of experiences may differ in certain ways from stories gathered over individuals’ working lives. Although our methodology is consistent with many important studies of change processes (e.g. Creed, Dejordy, & Lok, 2010; Dutton & Dukerich, 1991), we encourage more longitudinal research on callings.

Despite its limitations, our study has significant implications for future research on callings, on responses to challenges at work, and on sensemaking in organizations. For research on callings, the first implication stems from the significant heterogeneity we identified across individuals’ calling experiences, despite similar initial work roles and comparable challenges. We do not claim that the three paths we found would be seen in every calling, or that they are the only three paths that those who are called might negotiate. However, finding three distinct paths in our data suggests the need for an important shift in callings research, toward a focus on exploring and explaining the multiple forms that callings can take, and an examination of the distinct sets of dynamics and outcomes associated with different calling paths for the individuals and organizations involved. To date, research on callings has been situated within the broader domain of research on work orientations (Bellah et al., 1985; Wrzesniewski et al., 1997) that distinguishes between three orientations: a calling, a job, and a career. Our study suggests that it may be important to move away from these contrasts, which imply a view of the calling as a
unitary category distinguishable from other work orientations. Instead, our study suggests at least three different ontologies of callings: calling as an identity, calling as a contribution, and calling as a practice. This finding may help begin to reconcile the many definitions and conceptualizations that abound in the literature (Wrzesniewski, 2012) and allow a better appreciation of how and why different people can enact what might appear to be the “same” calling in such different ways. Furthermore, it suggests there may be greater value in describing and explaining variation across the experience of those whose relationship to work fits with our understanding of a calling, than attempting to establish hard limits on what does and does not count as a calling.

The second implication of our study for research on callings concerns the resilience of those who pursue callings in the face of challenges. Our study documents the processes through which people who pursue callings will burn out and abandon that pursuit, providing an explanation of the differences between paths of burnout and thriving, and pointing to future directions that can extend these findings. The three calling paths found in the present study included one that we characterized as a thriving path, on which individuals negotiated the challenges of their calling by responding in adaptive and proactive ways that strengthened their work relationships and led them to stay in the shelter. We characterized the two other paths as culminating in burnout, with emotional depletion, exhaustion, and ultimately the departure from shelter work. We found that these differences were rooted in individuals’ responses to initial challenges, which stemmed from the accounts of self and related frames with which they entered shelter work, and then the amplifying effects of recursive cycles of emotion and sensemaking, which were fueled by enactment processes shaping their work environments, and the memories of previous emotions and sensemaking activities.
An important direction for future research on resilience in callings comes from our finding that the paths leading to burnout were associated with individuals whom we might see as the most classically “called” – those who understood themselves as distinctively suited to a calling, either because of their unique gifts or because of skills that they believed they could contribute. These individuals were the ones who proved most emotionally vulnerable to the challenges they faced. In contrast, those on the practice path, who did not construct themselves as especially suited, fared better, experiencing a growth path and an enduring commitment to shelter work. This paper thus extends recent writing on ‘healthy’ and ‘unhealthy’ callings (Cardador & Caza, 2012) by providing empirically grounded insights into the dynamics that might lead to such outcomes, and highlighting the importance of this issue for the study of callings. Our study also points to the potential for research that explores the benefits of humility and patience in callings, and that identifies the boundary conditions of our model, especially as regards the kinds of callings in which the dynamics may be similar or different. Animal shelter work may represent a calling that involves particularly demanding, difficult, and painful work. It is therefore possible that the accounts of self and purpose, and the dynamics of emotion and enacted sensemaking associated with burnout and thriving may be distinctly different in less demanding work environments.

Our third research implication is for the broader literature on employee responses to challenges at work. Research in this tradition has identified a broad range of responses, both productive and counterproductive, to which we have added a general model of how responses to workplace challenges evolve over time. Our model identifies the mechanisms through which responses to early challenges become amplified, leading to divergent paths of depletion or thriving. These findings have implications that go well beyond the realm of callings, and are
likely relevant for a wide variety of careers. In any career in which people repeatedly face unexpected challenges and related feelings such as frustration and disappointment, our study suggests that workers may find themselves in a recursive sensemaking process and develop new accounts which lead them to move ahead in their careers, or move out. Careers research might therefore be advanced by conceptualizing transitions within and between careers as unfolding through this kind of process, and integrating more directly the examination of core accounts, emotions, and enacted sensemaking in the evolution of careers. Doing so could help to bridge previous research that has tended to emphasize either individual identity change processes to accommodate new role demands (Ibarra, 1999) or contextual conditions that influence whether individuals remain in a job after a shock that prompts them to consider leaving (Holtom, Mitchell & Lee, 2008).

Our fourth contribution is to the sensemaking literature, where the focus has moved over time from a first cognitive and then discursive perspective, to a more recent interest in the embodied and sociomaterial nature of sensemaking (Maitlis & Christianson, 2014; Sandberg & Tsoukas, 2015). Despite this shift towards more action-oriented sensemaking processes, however, studies of enacted sensemaking, or enactment, as it is more widely known are still rare. In this paper, we respond to Sandberg and Tsoukas’ (2015: 22) call for work that “place[s] enactment at the center of sensemaking” by examining how individuals make sense of challenges in their workplace through actions they take in response to them, and showing how these actions shape both the context they are seeking to understand, and themselves and their purpose in that context. Our study contributes substantively to research on enactment by illustrating the potential to examine specific kinds of recursive processes in which enacted sensemaking affects specific facets of the work environment that both provoke further sensemaking and become important.
cues for further sensemaking. These findings highlight the importance of following enacted sensemaking over extended periods of time: the tendency in sensemaking research to look at relatively restricted timeframes (see Balogun & Johnson, 2004; Corley & Gioia, 2004 for some notable exceptions), may be an important reason that enactment has been overlooked as a key dimension of sensemaking. Moreover, showing the centrality of enactment in the context of callings illustrates the importance of attending to it even in contexts which, like callings, may be regarded as primarily psychological and emotional experiences (Berg et al., 2010; Peterson et al., 2009) and therefore, one might think, less likely to be driven by action-driven sensemaking.

2.5.1 Practical implications

Individuals with a calling represent an attractive group of job candidates to most organizations. Eager, hard-working and dedicated, it would seem that any company would benefit from their presence. Indeed, our study found that called employees went far beyond the call of duty: they put in unpaid hours, volunteered for the most difficult shifts, were diligent in their care, and brought new ideas to the organization. It also revealed, however, a tendency toward problematic behaviours for some who are called. In particular, individuals on the identity and contribution paths engaged in well-intentioned but often counterproductive behaviours when they encountered obstacles: they had conflict with coworkers, extracted care into their homes where it could be neither monitored nor regulated, and ruminated constantly, becoming emotionally and physically exhausted.

Our study thus suggests that organizations employing people who feel called could benefit from developing ways to support those individuals to deal constructively with challenges inherent to their work, and to do so in ways consistent with the path they are on. For those on the identity path, this might involve helping them calibrate their expectations for expressing this part
of themselves in their work, or access other aspects of their identity that could be more easily 
enacted in the calling context. For those on the contribution path, this might mean helping them 
to avoid a sense of defeat by providing a more realistic job preview of the work of a calling, 
highlighting the challenges they will likely encounter, and sharing ways that others have 
successfully negotiated them to have impact. Finally, helping those on the practice path might 
involve ensuring they are given the opportunity and support to grow, and that their learning and 
growth be recognized as sources of strength and resilience not only for them as individuals, but 
also for their organizations. This is especially true when those organizations deliver services that 
are demanding, emotionally taxing, and poorly rewarded in society at large – as is the case for 
many callings.
Chapter 3: The influence of purpose on compassionate action towards coworkers

The proclamation “I’m not here to make friends”, has long been a trope of reality television. When contestants pursue deeply personal aims on TV, whether to hone a skill about which they are passionate (Top Chef; Hell’s Kitchen), rise in their field (The Apprentice; Next Top Model) or move from amateur to paid professional (Top Fighter; Project Runway), the phrase offers a convenient short-hand to justify the failure to support others in the process. The idea of pursuing a deeply personal purpose through one’s work is, of course, not strictly the purview of television contestants. By pursuing their purpose, defined as a personal life aim that directs behaviour (McKnight & Kashdan, 2009), individual can imbue their professional life with personal significance (Pratt & Ashforth, 2003) and meaningfulness (Baumeister, 1991; Thoits, 2012).

The literature has focused its attention on understanding employees’ individual outcomes, both good and bad, when they pursue work imbued with purpose. Such employees report positive attitudes including satisfaction (Hill et al., 2010; Wrzesniewski et al., 1997), self-efficacy (DeWitz, Woolsey, & Walsh, 2009), enthusiasm (Bonebright, Clay, & Ankenmann, 2000), empowerment (Spreitzer, 1996), motivation (Hackman & Oldham, 1980) and feelings of success (Damon et al., 2003). But, they may also experience negative attitudes such as chronic dissatisfaction (Elangovan et al., 2010) and tension between their private and work identities (Kreiner et al., 2006). Similarly, purposeful work promotes positive behaviours such as job crafting (Berg et al., 2010; Wrzesniewski & Dutton, 2001), practice (Dobrow & Heller, 2012), greater personal adjustment (Molasso, 2006; Molcar & Stuemf Fig, 1988), and increasing amount
of times spent at work (Bunderson & Thompson, 2009; Wrzesniewski et al., 1997), but this can come at the expense of work-life conflict (Bunderson & Thompson, 2009), unhealthy relationships (Cardador & Caza, 2012) and burnout (Vinje & Mittelmark, 2007).

In short, the literature has gained a nuanced understanding of how perceptions of personal purpose shape how the individual perceives and treats their work. However, although we recognize that personally significant work comes with benefits and costs for the individual, we continue to assume that these individuals have an exclusively positive influence on the workplace. For this reason, purposeful work is embraced enthusiastically by business leaders (“If you seek to lead, invest at least 50% of your time in leading yourself, your own purpose”~ Dee Hock) without any evidence that those who see their work as having a meaningful purpose make for ‘better’ employees. Theorists have proposed that pursuing a personally significant purpose promotes higher performance (Dobrow, 2012; Wrzesniewski, 2003) in addition to greater amounts of citizenship behaviour (Organ & Ryan, 1995), but empirical evidence is needed to support these assumptions. Even if purpose has a positive impact on performance, we do not yet know if such a positive outcome also comes at a cost to the workplace.

In this paper, I posit competing arguments for whether a clear sense of purpose will enhance or deter employees’ compassionate action towards their coworkers. I base my arguments on construal-level theory (Trope & Liberman, 2010, 2011) which predicts a causal link between an individual’s cognitive representation of their work and their actions at work. I argue that because purpose represents a pursuit that is temporally and hypothetically quite distant, and because it directs individuals to focus on why instead of how they are doing their work, it coincides with a chronically high construal level (i.e. an abstract mindset). On the one hand, a high construal level may undermine compassionate action towards coworkers because it
prohibits the familiarity necessary to understand when coworkers are in pain as well as because it prevents the noticing of coworkers’ pain. On the other hand, a high construal level may promote compassionate action towards coworkers because responding to coworkers’ needs may be seen as congruent with, and important to, pursuing one’s purpose. Further, although I explore whether the intensity of purpose undermines or promotes compassionate action, I also propose that for those whose purpose is self-transcendental – as is the case for employees with a calling orientation (Wrzesniewski et al., 1997) who see their purpose as acting pro-socially (Elangovan et al., 2010) – responding to coworkers’ pain should be a consistently readily accessible behaviour. The model for this study is outlined in Figure 3.1.

This work has the potential to make several contributions to literature and practice. First, a persistent gap in research on purpose, and more broadly on meaningful work, is a lack of insight into its behavioural components. When studies have examined purpose, it has been either with a focus on the individuals’ lived experience, or on behaviour when purpose is in conflict with an organizations’ climate (e.g. Meyerson's (2003) work on tempered radicals). We know little about how those with a chronic sense of purpose act at work. Second, while research has largely studied one specific type of purpose at a time, my paper examines both the intensity of perceived purpose and different purposes at work. This can offer insight into whether the driving mechanism underlying work orientations is their intensity or their idiosyncratic nature. Third, this study considers whether work orientations could prompt paradoxically beneficial and costly consequences. In so doing, it speaks to the growing literature that examines the potential costs of constructs such as purpose, which the positive organizational scholarship (POS) discipline has framed as exclusively virtuous (Cameron, Dutton, & Quinn, 2003). At a time when organizations are enthusiastically seeking out those who describe themselves as having a sense of purpose, my
work will also offer managers and organizations a clearer picture of the potential trade-offs of hiring such employees.

3.1 Theory and hypotheses

I begin by describing what it means for employees to imbue their work with a sense of purpose. I then explain how a sense of purpose prompts employees to construe their actions at a higher construal level. Next, I outline competing arguments for how it might impact compassionate action towards coworkers. Finally, I examine how this relationship is mitigated when individuals pursue a calling, which represents a self-transcendent form of purpose.

3.1.1 Purpose and construal level

Purpose is defined as “a central, self-organizing life aim that organizes and stimulates goals, manages behaviours, and provides a sense of meaning” (McKnight & Kashdan, 2009: 242). A sense of purpose entails a unique type of pursuit that differs in three distinct ways from more minute objectives, such as goals (Locke & Latham, 1990) and projects (Little, 1983), and from more abstract objectives such as hopes and dreams (Staats & Stassen, 1985). First, purpose is central because it derives from self-reflection (Keyes, 2011). While goals may be imposed by others in the workplace such as a manager or client, purpose develops when individuals critically analyze their place in the world (Burrow & Hill, 2011; Ryff, 1989) and then envisage (Erikson, 1980) what they want to achieve (Keyes, 2011). Though the guidance or mere presence of others may offer insights, the individual alone must decide for themselves what they see as their purpose in life. Second, purpose is a life aim because it directs attention to distant future states (Nurmi, 1991). The same purpose can be pursued over extended life periods (Jung, 1933) in contrast to goals, which are time-bound, for example, when a manager sets daily or quarterly
goals (Locke & Latham, 1990). In fact, goals can and should be accomplished (Grant & Dweck, 2003; Locke & Latham, 1990; McClelland, 1967), while purpose is elusive and may never be achieved (Emmons, 1999). Purpose thus has greater temporal depth (Bateman & Barry, 2012). For instance, the oncologist who sees his purpose as finding a cure for cancer knows full well that this may not happen in her lifetime. Third, purpose is *self-organizing* because it stimulates action (McKnight & Kashdan, 2009). In contrast to hopes or dreams, which can remain ephemeral figments of the individuals’ imagination, purpose provides a framework for how the individual should act and to what activities they should commit their personal resources (Damon et al., 2003). Purpose moves control of behaviour from environmental to individual factors and motivates action (Argyris, Putnam, & Smith, 1985). The oncologist who wants to cure cancer is driven to conduct research and publish findings. Before considering the influence of purpose on performance, I briefly outline three important assumptions of this study: that purpose is idiosyncratic, value-neutral, and falls on a continuum of intensity.

First, purpose is idiosyncratic. The same work can be seen by two different individuals as personally significant or completely devoid of meaningfulness. Think of the example of a chef: one may see his work as imbued with purpose while another views it as a bothersome and meaningless drudgery. Understanding that purpose is idiosyncratic explains why it can be found in virtually any profession (Wrzesniewski et al., 1997) from those one would associate with a self-transcendental purpose such as teaching (Berg et al., 2010), nursing (Raatikainen, 1997) and the arts (Dobrow, 2012), to more transactional professions including among economists (Gandal, Roccas, Sagiv, & Wrzesniewski, 2005), insurance salesmen (May et al., 2004), managers in fortune 500 companies (Spreitzer, 1996) and janitors (Wrzesniewski et al., 2003). It is not the nature of work itself but the individuals’ evaluation of it that determines purpose.
Second, purpose is value-neutral because it is the pursuit of any aim deemed personally significant. Most people think of purpose as a POS construct high in virtue (Damon et al., 2003; Gestsdottir & Lerner, 2008) by driving individuals to make a prosocial difference (Elangoan et al., 2010), serve those in need (Raatikainen, 1997), or improve the world (Frankl, 1984; Grant, 2007). While purpose can be self-transcendental, however, this does not need to be the case. Self-oriented purposes such as the pursuit of life, liberty and happiness (Diener & Diener, 1996; Gable & Haidt, 2005) can be just as meaningful to the individual, particularly in western cultures where such aims are celebrated. Individuals can see their job as significant and meaningful because it earns them an income to support a family (Wrzesniewski et al., 1997) or because it allows them to perfect and advance in their craft (Dillenberg, 1975; Durkheim, 1997; Weber, 2002). To drive my point home, even the pursuit of ignoble aims can be personally significant, as would be the case in the classic example of the fascist dictator who pursues a purpose one would label as immoral (Damon & Bronk, 2007). Theorists have developed several frameworks that incorporate the value-neutral nature of deeply personal work, such as the work values framework (Bardi & Schwartz, 2003) or the tripartite models of work orientation (Wrzesniewski et al., 1997), which will be incorporated into the moderating hypothesis of this paper. In short, individual can feel personal significance and meaningfulness while pursuing very different purposes through their work.

Third, purpose varies in intensity. Wrzesniewski and colleagues (1997), found that most employees can readily identify which of three work orientations they hold. Some employees see their work as a job and their sole purpose as making the money necessary to support meaningful private pursuits. Others see work as a career, and their purpose as gaining status, or as a calling, and their purpose as making the world a better place. Based on their work, subsequent research
has often considered orientation towards work and by extension its associated purpose, as binary. For example, one either is or isn’t ‘called’; one either does or does not have a purpose. More recent work has complicated this assumption. While employees can generally identify their strongest orientation (Cardador, 2008; Cardador & Caza, 2012), orientations and purpose can vary in strength, falling on a continuum from weak to strong (Dobrow, 2012). Thus, for example, someone with a job orientation who sees their work as ‘just a job’ may hold down a minimum wage service job without much effort or complaint, while another, intent on maximizing his financial gain will try to shape their job to this effect (Wrzesniewski & Dutton, 2001). The latter would indicate a high intensity of purpose. Similarly, a nurse with a calling orientation may invest herself wholeheartedly into her daily efforts to alleviate suffering, but she may not share the intensity of purpose that drove Mother Theresa to Kolkata’s slums.

To understand how a sense of purpose influences an individual’s actions at work, I consider construal level theory (CLT) (Trope & Liberman, 2010, 2011). Construal level theory provides a framework that connects how actions are construed in the mind to subsequent behaviour. Similar to theories of categorization (Rosch, 1999) and concept formation (Medin & Smith, 1984), CLT suggests that individuals can construe actions in distinct and mutually exclusive ways. Novel to CLT is the concept of psychological distance, defined as the extent to which individuals construe thoughts – be they events, people, situations or, in the case of this paper, actions – in abstract terms. A focus on the abstract aspects of an idea, i.e. why something is happening, means it will be construed as psychologically distant; in contrast, focusing on the concrete details of an idea, i.e. how something is happening, means it will be construed as psychologically proximal (Freitas, Gollwitzer, & Trope, 2004). In other words, high level
construal and low level construal are distinguished by whether an individual thinks of the big picture meaning or the specific details of a situation.

Psychological distance falls on a continuum. Take for example a graduate student, working on her thesis. She may describe work on her dissertation as typing on a keyboard (a low level construal), finishing a chapter (a meso level construal), or as working towards a rewarding career (a high level construal). The first construal is psychologically very proximal because it focuses on how she does her work and frames her actions in concrete terms; the third construal is psychologically distant because it focuses on why she does her work and frames her actions in abstract terms. While psychological distance is continuous, however, the literature has consistently distinguished and operationalized studies between those who operate at a low and a high construal. Moving forward, in this paper I adapt the same binary categorization.

Researchers have identified four dimensions on which psychological distance can be examined: spatial, temporal, social, and hypothetical. These dimensions co-vary and speak to a universal manifestation of high or low construal (Fiedler, Jung, Wänke, & Alexopoulos, 2012), but it will be helpful to tease apart some aspects to outline the theoretical link between work orientation, construal level, and compassionate action. I will focus on the temporal and hypothetical dimensions in this section and the social dimension in the subsequent. Given that a sense of purpose is a concept not as obviously related to physical manifestations, the spatial dimensions, defined as the location of an object in physical space in relation to the target, will not be considered in this study.

Considerations of temporal and hypothetical distance both suggest that a strong sense of purpose would lead individuals to construe actions at a high level. First, temporal distance refers to distance in time. An action that is temporally near will occur relatively soon, whereas
something that is temporally distant is a long ways off. Because purpose is a life aim that directs attention to distant future states (Nurmi, 1991), I predict that it will prompt a high construal level (Waksal, Trope, Liberman, & Alony, 2006). Second, *hypothetical distance* refers to the likelihood of an event occurring (Armor & Sackett, 2006). A hypothetically close event is one that is highly probable, whereas a hypothetically distant event is one that is unlikely to occur or come to fruition (Waksal et al., 2006). Though purpose may link together a series of short-term goals that can be accomplished (e.g. for the graduate student finishing a data collection, graduating with a PhD, and landing her first job), purpose itself focuses on an elusive outcome that may, in fact, never be achieved (Emmons, 1999). For the graduate student, contributing to scholarship or becoming a fine scholar are elusive aims with no clear finish line; the same is true for the oncologist who is unlikely to cure cancer in her lifetime or the businessman for whom there is always another step up the career ladder. According to CLT, a focus on hypothetically distant events suggests that actions will be processed at a high construal level (Waksal et al., 2006). Thus, because purpose prompts a focus on outcomes that are both temporarily distant and unlikely to occur, it should prompt individuals to operate at a high construal level.

*H1: Intensity of purpose will be positively related to a high level of construal.*

CLT connects the level at which actions are construed to distinct behaviours. This is because the way in which individuals cognitively represent an action functions as an *intention* to initiate an action, a template for how to perform that action, and a criterion against which to assess how well that action has been performed. Far from new, this ideas has evolved out of previous work including ideomotor theory (James, 1890) and behaviour-attitude models (Ajzen & Fishbein, 1977), action-identification theory (Vallacher & Wegner, 2012) and has recently found support in neurocognitive evidence that perceptions and actions share common neural
pathways (Prinz, 1997). In the next section, I will outline competing hypothesis about how the imposition of a high construal level via a sense of purpose may influence compassionate behaviours at work.

3.1.2 Construal Level and compassionate action

Compassionate action is processual and relational (Kanov et al., 2004). Organizational scholars conceptualize compassion as a dynamic process (Kanov et al., 2004), as opposed to an individual personality trait (Carmel & Click, 1993), or a state of feeling compassion (Nussbaum, 1996). To be considered compassionate, individuals must act compassionately. The compassion process entails three steps (Clark, 1997), of which noticing is the crucial first, followed by empathizing and responding. Without noticing, there is no impulse for individuals’ to respond to coworkers’ needs and therefore no compassion (Kanov et al., 2004). Noticing requires an openness and receptivity to what is going on with coworkers, actively paying attention to others’ emotions, and reading subtle clues in one’s daily interaction to become aware of others’ needs (Frost, 2003). I outline competing ideas for how a high construal level may prevent or push employees to notice their coworkers need for compassion.

*Decreased compassionate action.* On the one hand, I predict that a high level of construal may undermine compassionate action by preventing individuals from noticing their coworkers’ pain. I offer two arguments for this assertion.

First, a high level of construal may prevent individuals from noticing relevant details in their vicinity. This is because the act of abstraction focuses on retaining central features and enhance paying attention more information about the general meaning and the valence of the action. As a consequence, high level representations tend to be simpler, less ambiguous, and coherent, schematic, more prototypical than low level representations (Fiske & Taylor, 1991;
Smith, 1998). And, such abstraction comes at a price. As individuals move to a higher level construal, they cease to focus on peripheral, secondary features that are less essential to the overall meaning of their situation (Trope & Liberman, 2011). They restrict attention (Trope, 1986, 1989) and stop considering cues inconsistent or incidental to their high construal. In short, a high construal influences how new information is processed and reacted to (Freitas et al., 2004).

The zero-sum principle of CTL indicates how a strong sense of purpose may prevent compassionate noticing. As individuals exert their energy to focus on psychologically distant events (their distant purpose), they cannot also focus their attention on psychologically close events (others’ potential pain). As a consequence, clarity of purpose may be, counter-intuitively, associated with ‘mindlessness’ (Vallacher & Wegner, 1987) or lack of thought (Langer, 1978) to present moment experiences. This mindlessness makes individuals blind to signals that would alert them to coworkers in need (Atkins & Parker, 2012; Miller, 2007). The graduate student, for example, may be so preoccupied with defending her thesis (a high level construal) that she does not notice her cohort-mate has been crying (a low level construal). Even in those instances in which employees may notice some signal from coworkers, they may deflect and discount these it in favor of their higher-level interpretation of the situation (Vallacher & Wegner, 2012).

While the preceding argument might suggest that a sense of purpose, via a high construal level, could prevent any attention to present-moment experiences, I offer a second argument more specific to compassionate behaviour. As previously alluded, CLT suggests a correlation between the four dimensions of psychological distance, such when distance on one of these levels increases, the other levels also increase (Fiedler et al., 2012). Research has shown that ideas that are construed at a high level tend to also be seen as temporally (Liberman, Trope,
McCrea, & Sherman, 2007; McCrea, Liberman, Trope, & Sherman, 2008), socially (Bar-Anan, Liberman, & Trope, 2006; Stephan, Liberman, & Trope, 2011), and physically distant (Bar-Anan et al., 2006). I have previously argued that a strong sense of purpose should be associated with temporal and hypothetical distance. This correlation argument would then suggest that purpose would also provoke social distance, defined as the measure of space between individuals as determined by feelings and interactions shared among these individuals. Indeed, empirical work has confirmed that when temporal distance is primed, individuals think of another person as more distant socially (Milkman, Akinola, & Chugh, 2012; Stephan et al., 2011).

Such social distance would prompt individuals to feel more distant from each other, insecure in their connection, and unable to relate (Liviatan, Trope, & Liberman, 2008; Matthews & Matlock, 2011). Thus, I predict that priming a high level of construal, a sense of purpose can harm the sense of familiarity between an individual and their coworkers. By focusing on their purpose, individuals do not develop a knowledge of their coworkers that would attune them to changes in their well-being (Benner, Tanner, & Chesla, 1992) or point out atypical behaviours (Madden, Duchon, Madden, & Plowman, 2012), such as when a usually social coworker withdraws from others’ company or shuts themselves in their office. Without such emotional familiarity (Madden et al., 2012), individuals cannot notice whether they appear to be having a particularly difficult week and need support. To sum, operating at a high level of construal can undermine individuals’ ability to notice others’ pain in the moment as well as to feel close enough to their coworkers to be qualified to notice their pain.

**H2a: Construal level will be negatively related to coworker compassionate action.**

**Increased compassionate action.** In contrast, CLT also supports competing arguments for a positive relationship between purpose and compassionate action. While it is true that a high
construal level can place ideas into a smaller number of abstract and broad categories (Liberman, Sagristano, & Trope, 2002), it is important to note, that higher level construals are not necessarily more equivocal or impoverished. Indeed, a more abstract conceptual representation may actually broaden perceptual attention (Förster, Friedman, & Liberman, 2004; Wakslak et al., 2006). This is because broad categories can incorporate more information. Take the graduate student, by describing her actions as finishing her dissertation instead of just typing on a keyboard she incorporates less detail, but conveys and conceives of more broad information about her actions. In particular, high-level construals allow individuals to convey and process more contextual information: Finishing one’s dissertation provides information about the students’ situation in life that ‘typing’ would not.

Thus, the process of abstraction involves not only a loss of specific, idiosyncratic, and incidental information, but also the consideration of new meaning and expansion of one’s mental horizon (Trope & Liberman, 2011). We know that such broadening can draw individuals attention to unique behavioural choices including those that may be more risky, hard to accomplish, or unusual. For example, research has shown that higher construal levels are associated with a focus on similarity, more inclusive categorization, and a broader conceptual scope (Förster, 2009). In empirical work in which higher construal were primed, individuals were more likely to find similarity between stimuli (Förster, 2009), to include more atypical exemplars into a single conceptual category (Friedman, Fishbach, Förster, & Werth, 2003), and to focus on more inclusive categorization (Liberman et al., 2002). Specific to compassion, studies have shown that individuals who represent events as more temporally distant can perceive greater similarity between social targets (Levy, Freitas, & Salovey, 2002). These studies
suggest that greater psychological distance may actually promote greater inclusivity in subsequent categorization (Rosch, 1999).

I predict that a more inclusive mental state may lead those with a strong sense of purpose to act more compassionately towards their coworkers. This is because compassionate action may be recognized as an indirect but effective means to pursue their purpose. Though compassionate action towards others is not a direct form of work performance, it has been linked to a range of positive employee attitudes such as commitment and behaviours including care-giving, giving emotional support, time and material goods (Dutton, Frost, Worline, Lilius, & Kanov, 2002; Lilius, Worline, Dutton, Kanov, & Maitlis, 2011) and contributes to an organization’s social and psychological core (Borman & Motowidlo, 1997). For example, compassion helps employees feel connected to others at work (Frost, 2003; Frost, Dutton, Worline, & Wilson, 2000) and less lonely (Kahn, 1993).

There are several reasons why offering their coworkers might be considered as an action congruent with pursuing one’s purpose. Individuals may see compassion as an intangible to be exchanged for something else (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Masterson, Lewis, Goldman, & Taylor, 2000; Wayne, Shore, & Liden, 1997). For example, they may see acting compassionately towards a coworker as a way to secure buy-in on an important future decision. Alternatively, they may see compassionate action itself as something to be exchanged in a reciprocal relationship (Gouldner, 1960) and assume that by acting compassionately towards a coworker, said coworker may support them later when they are in need. Most directly, they may recognize that by offering coworkers social support in the form of compassionate action, this will increase their unit’s performance towards a goal congruent with their purpose. These do not constitute the totality of reasons and there may be others. However,
these reasons do suggest that those operating at a high construal level may be more motivated to incorporate compassionate actions into their arsenal of behaviours to pursue their purpose.

*H2b: Construal level will be positively related to coworker compassionate action.*

### 3.1.3 The moderating influence of calling orientation

Until now, I have considered only the intensity of purpose. However, I posit that the content of this purpose, that is the motivation behind it, needs to be considered as well. As previously discussed, purpose can take many forms, including the pursuit of self-transcendental aims. Those with a calling orientation have such a self-transcendental purpose and see prosocial action as a prime directive of their work. I predict that having a calling orientation will temper the effect of construal level on compassionate behaviour. Specifically, calling orientation should have a positive influence on compassionate performance such that it would enhance a positive relationship or mitigate a negative relationship between high construal level and compassionate action. This prediction falls in line with other studies that demonstrate that high construal levels lead people to behave more in accordance with their values (Eyal & Liberman, 2012; Eyal, Liberman, & Trope, 2008; Eyal, Sagristano, Trope, Liberman, & Chaiken, 2009).

Acting compassionately fits under the umbrella of *why* these individuals perform their work and is therefore a readily accessible component of how they frame their actions at work. Thus, for example, while a nurse who sees his purpose as advancing in his career may not notice when his coworker is suffering, one whose purpose is to help other people (Colby, Sippola, & Phelps, 2001; Ruiz-Quintanilla & England, 1994), will notice and respond to their coworkers’ needs as readily as they would to any other targets such as patients or students.

Further, a compassionate response will be the case even for those whose calling orientation is not directly aimed at helping other people such as those who see their calling as
saving the environment or helping animals (Bunderson & Thompson, 2009). This is because these individuals must still pay attention to signals of distress in order to fulfill their purpose, which will prime them to notice signals of pain in non-targets (Bargh, 2006). The veterinarian who spends her day examining animals and being tuned in to their pain will be more likely to notice similar distress in colleagues. In short, I propose that because compassionate action fits the purpose of those with a calling orientation, cues of pain in coworkers will be readily noticed by them. Calling will therefore have a buffering effect on a negative relationship between construal level and compassion, or an exacerbating effect on the relationship positive relationship between construal level and compassion.

_H3a: If the relationship between construal level and compassion towards coworkers is negative, then calling orientation will moderate this relationship such that it will be weaker for those high in calling than those low in calling._

_H3b: If the relationship between construal level and compassion towards coworkers is positive, then calling orientation will moderate this relationship such that it will be stronger for those high in calling than those low in calling._

### 3.2 Method

#### 3.2.1 Sample and procedure

Data was collected at two points in time (February 2014 and February 2015) from one West Coast social service provider, chosen because the organization’s main mission is one of compassion and care and thus avoiding recruitment or cultural reasons that might reduce employee compassionate action. Employees were invited to two 30 minute online surveys, 12 months apart, to be completed at a time and location of their convenience. Participation was incented with the chance to win one of three $200 prizes. Employee responses at Time 1 and Time 2 were linked via the email address through which they were invited, which was then removed to protect confidentiality. Survey 1 included only self-rating and received 286
employee responses (62% response rate). For survey 2, 302 employees (51% response rate) participated. This survey involved self-ratings and also asked participants to provide compassionate action ratings of their coworkers. Following a randomized sampling procedure previously used in field studies (Bono & Judge, 2003; Erdogan, Liden, & Kraimer, 2006; González-Romá, Peiró, & Tordera, 2002; Tsui, Pearce, Porter, & Tripoli, 1997), each participant was asked to rate up to six of the coworkers in their unit on compassionate action. This ensured that employees were ratings coworkers with whom they had close interaction. I received compassionate action ratings for 398 focal employees from 52 units, ranging in size from 2 to 28 employees ($M = 12.69; SD = 7.06$); each focal employee was rated by one to six of their peers ($M = 2.38; SD = 1.21$).

For this study, I included only employees who had participated in both surveys, and for whom I had received a rating of their compassionate action by at least one coworker. As such, the final sample included 182 participants. Eighty-six percent of participants were female, average age was 40.01 ($SD = 11.28$) and average tenure was seven years ($SD = 6.86$). Sixteen percent of participants held a high school degree, 46% had completed some post-secondary education, 26% held bachelor’s degrees, and 12% held graduate degrees. Seventy-eight percent of participants were line employees, 17% were unionized.

Participants included in the final sample differed from the potential sample in terms of age ($F(1,404) = 9.93$, $p < .01$), tenure ($F(1,403) = 33.53$, $p < .01$) and union status ($\chi^2 (1) = 6.34$, $p < .05$). Specifically, participants were older, had longer tenure, and were less likely to be unionized ($M_{Age} = 41.15$, $M_{Tenure} = 8.02$, 18% unionized) than their counterparts ($M_{Age} = 37.47$, $M_{Tenure} = 4.39$, 28% unionized). This is a noted limitation of the data.
3.2.2 Measures

A Complete list of all measure items can be found in Appendix B.

Purpose. Since no established purpose at work scale could be located, and because the literature largely treats purpose as synonymous with the personal meaningfulness of work, intensity of purpose was operationalized using Kanungo’s (1982) seven item job involvement questionnaire (JIQ) adapted to the organizational context. A sample item is “most of my life goals are [organization]-oriented” and items are measured on a 5-point Likert scale (1=strongly disagree, 5=strongly agree). Cronbach’s alpha was .87.

In addition, I captured the three discrete work orientations (job, career, calling) using Gandal et al.’s (2005) short form of Wrzesniewski et al.’s (1997) work orientation scale. I did this to test my assumption that higher scores on any of the work orientations would be associated with a greater sense of purpose as well as to test the moderating hypothesis for calling. The scale includes three items capturing job orientation (“My primary reason for working is financial: to support my family and lifestyle”), three items capturing career orientation (e.g. “I view my job primarily as a stepping stone to other jobs”), and five items capturing calling orientation (e.g. “my work makes the world a better place”). Cronbach’s alphas were .71 for job orientation, .64 for career orientation, and .75 for calling orientation.

Construal level. I collected three potential alternative operationalizations of construal level. First, I generated an adapted version of Vallacher and Wegner’s (1989) Behaviour Identification Form (BIF) that applied to the present work context. To generate items, focus groups were held with 23 employees in four separate units of the organization. The 20 behaviours most frequently described by focus group participants and those overlapping with previous items in the BIF were selected. As before, each item represented an act followed by two
alternative identities, one at a lower and one at a higher level of identification. Respondents were asked to choose the alternative that best described the action for them. A sample adapted item was “Receiving donations: a) maintaining a budget for the [organization] or b) receiving a cheque (with the former reflecting high construal and the latter reflecting low construal). Participants’ construal level was defined as the ratio of high-level alternatives chosen on the BIF. Cronbach’s alpha was .85.

Second, following precedent in other studies of construal level (Woolley, 2009a, 2009b), a version of Saywer’s (1992) five item goal focus scale was collected with a modified prompt to capture construal level. Instead of asking individuals about the degree of certainty they had about each of five work goals (e.g. “my duties and responsibilities”), they were asked the extent to which they focused their attention on high-construal goal during a typical workday. The more frequently they focus on these goals, the higher their construal level. Items were measured on a 5-point Likert scale (1 = never, 5 = constantly). Cronbach’s alpha was .77.

Finally, I also captured mindfulness on work tasks using Van Dam and colleagues (2010) five item mindfulness scale (e.g. “I rush through activities without being really attentive to them [R]”), building on the link between ‘mindlessness’ (i.e. low mindfulness) and high construal level (Vallacher & Wegner, 1987), and the assumption that high mindfulness, which requires individuals to be available to present-moment experiences and processes, would be associated with low construal level. Items were measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Cronbach’s alpha was .87.

**Compassionate action.** I collected two types of compassionate action at work that capture different types of responses to a coworker’s suffering (Kanov et al., 2004): Help, which
represents compassionate action that seeks to alleviate the source of suffering, and kindness, which represents compassionate action that seeks to alleviate the experience of suffering.

I included Raes et al.’s (2011) four item kindness responding scale (“if [I/coworker X] see someone going through a difficult time, [I/they] try to be caring toward that person”) and Van Dyne and LePine (1998) five item helping scale (“[I/ coworker X] help[s] others who have heavy workloads”). Both were rated on a 5-point Likert scale (1=never, 5=all the time).

Compassionate ratings were collected from up to six coworkers of the focal individuals randomly selected from within their work unit. Collecting and then averaging a number of compassionate ratings for each focal individual provided me with more valid and less subjective data and prevented common method bias between the independent and dependent variables. As a precaution, I also collected self-ratings of both scales. Cronbach alpha for help was .88 (for other-rating) and .85 (for self-rating); Cronbach alpha for help was .75 (for other-rating) and .80 (for self-rating).

**Controls.** I controlled for participant gender (0= female, 1= male), age, tenure, and union status (1= unionized), each of which may influence both the purpose individuals pursue through their work and the extent to which others engage in care and compassion towards their coworkers (Eagly & Crowley, 1986; Gillen, Baltz, Gassel, Kirsch, & Vaccaro, 2002; Goetz, Keltner, & Simon-Thomas, 2010; Ray, Wong, White, & Heaslip, 2013). All controls were collected at Time 1.

**3.2.3 Analysis and results**

**Data screening.** I began by screening the data for missing values. I replaced items in Likert-type scales missing only one item with the scale mean. Three respondents who had left more than one item in a scale blank were excluded listwise. I examined all non-binary items for
skewness and kurtosis. Analysis indicated that two items were leptokurtic (tenure; calling5) because they fell above the acceptable value of 3.00 that would be expected for a normal curve (Sposito, Hand, & Skarpness, 1983). I noted these issues as potential limitations to the data.

Next, I examined the appropriateness of aggregating coworker-reports for the dependent variable of compassionate action. The median within-group interrater agreement values (rwg; James, Demaree, & Wolf, 1993) were .86 helping and .89 for kindness. This suggested strong coherence among raters. However, because in this study multiple coworkers were rating multiple targets (i.e. each individual was randomly assigned to rate up to six coworkers in their unit), I took the additional step of following recommendations by Bliese (2000), and estimated the ICC(1) and ICC(2) before aggregation of data. The ICC(1) represents the percentage of variance due to work unit variability and the ICC(2) represents the extent to which units could be differentiated on the basis of the dependent variable. ICC values that differ from zero are desirable and ICC(1) values close to .20 (Bliese, 2000) and ICC(2) values over .60 (Glick, 1985) are preferable. In this analysis, single measures ICC(1) values were .23 ($F[22, 92] = 2.46, p = .01$) for helping and .30 ($F[21, 88] = 3.10, p < .01$), both of which were significantly different from zero and exceeded .20. Single measures ICC(2) values were .37 for helping ($F[22, 88] = 4.00, p < .01$) and .58 for kindness ($F[21, 84] = 8.02, p < .01$) and also differed significantly from zero. I therefore felt comfortable aggregating coworker-ratings for helping and kindness and using these as other-rated dependent variables for focal individuals.

Finally, due to the nested nature of the data (i.e., employees nested within co-worker units), I needed to resolve whether multilevel modeling was necessary for analysis. Not dealing with potential nested effect would lead to two concerns: 1) the violation of the assumption of the independence of errors and 2) the assumption that effects are the same across units (Preacher,
Zyphur, & Zhang, 2010). A multilevel model is necessary when the null model (equivalent to a one-way random-effects ANOVA model) is significant. Results indicated that there were indeed significant differences between units for both dependent variables: aggregated helping \( (F[43, 104] = 1.71, p < .05) \) and aggregated kindness helping \( (F[43, 104] = 1.58, p < .05) \). I would therefore employ two-level analysis in MPLUS 7.4.

**Correlation analysis.** Table 3.1 presents the descriptive statistics and correlations for all study variables. Correlation analysis offered a number of insights.

First, I found that construal level captured at two points in time is highly correlated \( (r = .49, p < .01) \) suggesting that construal level may function as a stable construct at work. Second, I had predicted that all employees, irrespective of their work orientation, could imbue their work with a degree of purpose; that is, high scores on each of the three work orientations would reflect a high level of purpose. Although I found purpose to be positively related to the calling orientation \( (r = .48, p < .01) \), it was negatively related to the job orientation \( (r = -.34, p < .01) \) and had no relationship with the career orientation \( (r = -.02, p = ns) \). Based on these findings, I decided to proceed with a model that included all three work orientations, rather than the single measure of purpose. This new model with three independent variables (job, career, calling) necessitated the use of structural equation analysis to test my hypotheses. Using calling orientation as an independent variable also eliminated the need to test Hypothesis 3, in which calling had been hypothesized to be a moderator.

Third, correlation analysis clarified which of the three operationalizations of construal level – the BIF, goal-focus or mindfulness – would be most appropriate to test mediation. Only goal-focus was correlated with the work orientations. Further, only the goal-focus measure of
construal level was correlated with ratings of compassionate action. Thus, I decided to proceed to test a model using the goal-focus measure of construal level.

Finally, I noted significant correlations between two of the four proposed controls (gender and union-status) and the dependent variables. For this reason, both were included in all subsequent models.

**Confirmatory factor analysis.** I followed a two-stage modeling strategy (Anderson & Gerbing, 1988; Williams, Vandenberg, & Edwards, 2009), first assessing the fit of the null or measurement model before moving on to consideration of the structural model. I followed instructions outlined by Kelloway (2014) using MPLUS 7.4. All models were estimated using maximum likelihood estimation and were run using a fixed effects approach to clustering which resolves concerns about the non-independence of errors. I did this by building a two-level SEM model with all predictors at the within group level, or what Preacher and colleagues (2010) refer to as a 1-1-1-mediated model. Such a fixed effects approach required that I center the predictor variables: Given that I would not be testing any cross-level interactions, I grand-mean centered my predictors (Hofmann & Gavin, 1998).

The initial estimation of the complete model with 27 dependent variables (including the two controls union and gender) and six latent variables (job, career, calling, construal level, help, kindness) did not converge. In reviewing the within level estimated loadings, all observed variables appeared to load significantly on their latent factors and only their latent factors with the exception of the three career items. Of the three career-items, I first removed the one reverse-coded item (car2) with the lowest loading, as it is not uncommon for reverse-coded items to lead to problematic loadings. The issue persisted, however, suggested that career was not a valid
measure as the remaining two career items had low correlation \((r = .48)\). For this reason, I removed this measure in its entirety; once removed, the model converged.

The three absolute fit indices for this model– the \(\chi^2\) test of model fit (Bollen & Long, 1993), the root mean square error of approximation (RMSEA; Steiger, 1990) and the standardized root mean square residual (SRMR; Hu & Bentler, 1999) – were all adequate. Specifically, \(\chi^2 (509) = 1012.31\) was significant, though this is expected with samples approaching or exceeding 200 (Kelloway, 2014). The RMSEA = .07 met the requirement to fall below .10 for good fit (Steiger, 1990) though not below .06 which would indicate an excellent fit (Hu & Bentler, 1999). The SRMR = .07 met the requirement of falling below the recommended .08 (Hu & Bentler, 1999). Unfortunately, both indices of comparative fit – the comparative fit index (CFI; Bentler, 1990) and the Tucker-Lewis index (TLI; Tucker & Lewis, 1973) – did not exceed .90 as would be recommended for good fit (Hooper, Coughlan, & Mullen, 2008): CFI = .85 and TLI = .83.

To improve model fit, I reviewed the standardized factor loadings. Two observed variables (cal1, constr5) loaded less than .05 on their latent factors. Given that each of their respective latent factors would still retain at least two items (Cenfetelli, Benbasat, & Al-Natour, 2008), I decided to drop them from further analysis. This had only a negligible impact on the comparative fit indices: \(\chi^2 (421) = 874.62\), RMSEA = .08, SRMR = .07, CFI = .85, TLI = .84. I then reviewed the modification indices, and covaried eight observed variables within their latent variables. Building this covariance into the model, left me with a model with good fit: \(\chi^2 (413) = 688.44\), RMSEA = .06, SRMR = .06, CFI = .91, TLI = .90. The latent factor correlations can be found in Table 3.2. Factors loadings and \(R^2\) for all retained observed variables can be found in Table 3.3.
**Latent Variable Path Analysis.** Having established a good measurement model, I was able to proceed to latent variable path analysis. I ran three separate models: full mediation (as hypothesized), partial mediation, and no mediation. Fit indices for all models can be found in Table 3.4. The non-mediated model and fully mediated models are both nested within the partially mediated model. The non-mediated model provided the same level of fit for the data. Further, using a nested-model comparison calculator, I found no statistically significant difference between the partially and the fully mediated model, $\chi^2_{\text{Difference}}(4) = 6.56, p = ns$ For this reason, I chose to retain the most parsimonious model with the fewest factors (Kelloway, 2014): the fully mediated model. The standardized parameters for this model can be found in Figure 3.2.

Hypothesis 1 predicted that intensity of purpose would be positively related to higher construal level I found a significant positive relationship between one of the three work orientation, calling, and construal level ($\beta = .48, SE = .16, p < .01$). This offered partial supported for Hypothesis 1. Competing Hypotheses 2a/2b predicted either a positive or negative relationship between construal level and compassionate action. For each of the operationalization of compassionate action, help ($\beta = .25, SE = .07, p < .01$) and kindness ($\beta = .23, SE = .07, p < .01$) there was a significant positive relationship with higher construal level. This offers support for Hypothesis 2b.

**3.3 Discussion**

The preceding study was initially inspired by the conundrum that those who pursue meaningful work can sometimes appear so focused on their personally significant purpose that they do not seem to care about their coworkers and treat them with a lack of compassion. The
aims of this study were threefold: First, to confirm that each of the three types of meaningful work (job, career, calling) can be infused with a deep sense of personal purpose. Second, to determine whether a meaningful purpose affects how individuals frame their work; that is, whether they will pay more attention to abstract goals to the detriment of present-moment processes. Third, to test competing hypotheses for whether such cognitive framing would have a beneficial or deleterious influence on how these individuals treat their coworkers. The results of this study were mixed: I found positive relationships between intensity of purpose and high construal level (i.e. abstract thinking) as well as between high construal level and compassionate action towards coworkers. However, I found these relationships for only one of the three work orientations: the calling. I will begin by outlining potential explanations for each of these three relationships before moving on the theoretical implications of my research.

First, I did not find support for my baseline assumption, that all three work orientations would be associated with an increased intensity of purpose. I had suggested that purpose, a personal life aim that directs behavior (McKnight & Kashdan, 2009), is idiosyncratic and value-neutral and that each of the three work orientations could be experienced on a continuum of intensity of purpose. Specifically, I had argued that someone who wants to make the world a better place (calling) could experience their purpose as intensely as someone who wanted to join the highest echelons of their company (career) or someone who wanted to get rich to afford all their meaningful activities outside of work (job). My data did not support such an assumption. Instead, I found that only calling orientation was associated with a high intensity of purpose, that job orientation was actually associated with a low intensity of purpose, and that there was no significant relationship between career orientation and purpose. The fact that only the calling orientation was associated with purpose, might be explained because it is the only orientation
that describes work as a meaningful end in itself, defined by the intrinsic value and sense of fulfillment it provides to individuals (Wrzesniewski, Rozin, & Bennett, 2003). In contrast, both the job and career orientation generally frame work as means to acquire specific resources, whether those are income or status (Wrzesniewski, 2002). Framing work as a means to an end might prevent work from being associated with a personally meaningful purpose (Fried et al., 2007). Those with a career orientation may at least derive self-esteem from their pursuits (Bellah et al., 1985), and might therefore fluctuate in the level of construal at which they frame work. In contrast, the singular transactional nature of the job orientation (Thompson & Bunderson, 2003), could explain the significant negative relationship to purpose.

Second, I found evidence for the proposed positive relationship between sense of purpose and high construal level. I suggest that this is the case because purpose directs attention towards temporally (Nurmi, 1991) and hypothetically (Armor & Sackett, 2006) distant future states (i.e. the events that one wishes to accomplish). As psychological distance increases, abstraction occurs and individuals operate at a higher level construal (Fiedler et al., 2012). In short, I provide evidence that employees who imbue their work with purpose increase the psychological distance of their cognitive framework and thereby construe work at a higher level of abstraction.

Third, I tested the conundrum that initially inspired this study: How does operating at a high construal level impact compassionate action towards coworkers? I found evidence for a positive relationship, indicating that individuals who operate at a higher construal level are rated by their coworkers as engaging in greater compassionate action, including both help and kindness. Though contrary to my initial assumption that high construal level would act as a set of blinders, I had outlined a potential explanation for this in my hypothesizing. When individuals operate at a high construal they can incorporate a greater variety of actions into their arsenal to
pursue their purpose. This is because operating at a higher construal level draws individuals attention to the superordinate and abstract features of actions and thereby broadens their behavioral choices (Trope & Liberman, 2011). Thus, individuals operating at a high construal level may come to realize that compassionate action is an indirect but pragmatic way to accomplish outcomes associated with their purpose: by being kind and helpful to their coworkers these coworkers will feel supported and work harder towards mutual goals.

My work makes three primary contributions to the meaningful work literature. I offer empirical evidence for relevant distinctions between the job and calling orientations. Such distinctions have largely been theorized about in the abstract (Bellah et al., 1985; Wrzesniewski, 2002), but rarely been empirically tested because the literature has predominantly studied each orientation in isolation. By contrasting all three orientations in the same study, I was able to highlight consistent differences between the job and calling orientation on sense of purpose and construal level and corroborate prior findings that the two appear to fall on opposite ends of a variety of dimensions (Wrzesniewski et al., 1997).

I also found no empirical evidence tying the career orientation to either purpose or construal level. This highlights an important question about whether the three part typology of orientations is the most appropriate rubric of meaningful work. Indeed, this is not the first evidence to raise such concerns as indeed the very first study on all three work orientations found that only job and calling orientation fell on opposite ends of a dimension “having to do with work as fulfillment versus work as a boring necessity” (Wrzesniewski et al., 1997: 31) to which the career orientation was orthogonal. If all three orientations are to be retained, it is important to uncover at least one singular dimension onto which all three can be mapped. One potential option might be duty, defined as defined as “the tendency toward dependability and feelings of
responsibility for others” (Grant & Wrzesniewski, 2010: 112). Duty has been linked to the calling orientation, both in its traditional religious conceptualization (Weber, 2002) and more recently by Bunderson and Thompson (2009) who wrote that the calling is characterized by “unbending duty, personal sacrifice, and heightened vigilance, on the other” (p. 38). Imbuing one’s work with a personal purpose might represent a state that triggers a sense of moral obligation. Further, the lack of purpose for either the job or career orientation does not preclude either from being associated with duty: As I will outline in the next study (Chapter 4), those with a career orientation appear to describe work as a social exchange relationship characterized by mutual obligations, while the job orientation prompts obligations to adhere to agreed up on policies and responsibilities. Thus, the extent to which employees espouse a sense of duty at work might provide a dimension on which to organize orientation, ranging from the all-encumbering personal duty of the calling orientation to the strictly transactional duty of the job orientation.

Of course, alternatively, a more parsimonious model of meaningful work might be one that drops the career orientation and considers only job and calling, a decision that others in the field appear to have already made (Ranganathan, 2013). In study 1 (Chapter 2), I suggested that individuals who begin with the same calling orientation may find themselves on very different occupational trajectories, one of which (the contribution-path) is characterized by the desire to advance into positions of influence. Could it be that the career orientation, rather than serving as a distinct third orientation, reflects a personal difference more akin to ambition or drive that might moderate the job/calling orientation? It could be that employees see work either as a channel to produce necessary outcomes (job) or as a significant pursuit in its own right (calling)
but that the extent to which their work activities manifest in status advancement depends on the extent to which they also embrace the career orientation.

Third, the work orientations literature has been accused of being largely atheoretical (Rosso et al., 2010) and in need of insight into the mechanisms through which work orientations operate (Ranganathan, 2013). Herein, I have offered evidence that construal level theory may serve as a viable mechanisms. Indeed, construal level theory seems suited to explain the few previous behaviors that have been linked to work orientations. For example, previous research has found that the job orientation predicts high and the calling orientation low absenteeism (Wrzesniewski et al., 1997) and I suggests that construal level might be a parsimonious explanation for this difference in absenteeism. Let me explain how: We know that high construal level is associated with greater persistence (De Dreu, Giacomantonio, Shalvi, & Sligte, 2009) and self-control (Fujita, Trope, Liberman, & Levin-Sagi, 2006), both of which are needed for employees to attend work, when they are having a hard time or do not want to go. Thus, by virtue of predicting a higher construal level, the calling orientation might reduce absenteeism while the job orientation, by virtue of operating at a lower construal level, might increase it. To sum then, this study shows that at least two of the three work orientations fundamentally differ on how employees cognitively construe their workplace and that this difference in construal level is a good fit to explain other previously studied behaviors.

My work also offers some important insights for construal level theory. First construal-level theory was developed to explain temporary cognitive appraisals. They the theory explains that memories, predictions, aspirations and other mental constructions transcend the immediate experience by virtue of traversing various psychologically distances. The literature has begun to identify contextual factors that would predict at which psychological distance something is
construed. One such factor would be priming by the self or another: For example by actively thinking about one’s to-do list at work over the next week or being prompted by a supervisor to plan for one’s upcoming maternity leave, one is prompted to think about work at different levels of construal. Features of the action that requires consideration can also push individuals a different construal level: for example, Reyt and Wiesenfeld’s (2015) found that role integration requirements of the workplace predicted operating at a higher construal level. Conversely, researchers have suggested that tasks that are complex, unfamiliar, or time-consuming tend to be identified at a lower level (Vallacher & Wegner, 1987). The fact, however, that I found a strong positive correlation between construal level measured 12 months apart suggests that construal level is not idiosyncratic, but instead that it might constitute a more stable individual difference. My study suggests that employees may vary in their baseline inclination to focus more frequently on the abstract goals or why of their work than their counterparts and that it can be appropriate to draw important conclusions about employees’ actions based on how they construe their workplace. This suggests that there may be chronic individual differences that determine the construal level at which individuals approach specific thoughts. Metaphorically speaking, there may be a relatively stable individual ‘cruising altitude’ that anchors at which level thoughts are likely to be construed. Characterizing construal level as a trait or chronic state would corroborate assumptions made by action identification theorists (Vallacher & Wegner, 1987) that individuals are inclined to operate at the highest possible level of abstraction, as well as sensemaking theory assumptions that humans have a fundamental need to make meaning of their lives (Weick, 1995).

Building on the conceptualization of construal level as a chronic trait, I introduce sense of purpose as one potential antecedent. I suggest that when we focus on our purpose, we construe actions at a higher level. In this study I focused on purpose specifically associated with work, but
this relationship could possibly be extrapolated beyond work. It is possible that any activities associated with a sense of purpose – working out for the explicit purpose of getting in shape, joining a club with the purpose of making friends, or attending a class with the purpose of learning a new skill – will be construed at a higher level and that will predict subsequent behaviors.

My work also somewhat reframes the barrier between high and low construal level thinking. To date, construal level theory has assumed a zero-sum principle, positing that individuals can construe their actions at only one level at a time (Vallacher & Wegner, 2012): Individuals can focus on why they are acting (outcome) or how they are acting (process), but not both. To support this zero-sum principle, they have pointed to evidence from cognitive neuroscience that the brain includes separate process and outcome systems (Ungerleider & Haxby, 1994) and that individuals are unlikely to shift between subsystems (Kozhevnikov et al., 2005). While such a zero-sum principle may be appropriate when thinking of construal level as a primed state, where experimental subjects are assigned to either a high or low construal condition, it may be less applicable when thinking of construal level as a relatively stable trait, as it is examined in my study. After all, it is unlikely that individuals can navigate their world while construing it exclusively at a high or low level. My findings may suggest that low-level construal states may be nested within a high-level construal trait. Let me explain: As previously outlined, compassion theorists argue that compassion is a three step process that necessitates noticing and empathizing with others’ pain before one can respond. Noticing required paying attention to present-moment experiences (Freitas et al., 2004), a low construal action. Empathy requires reduced social distance, a low construal perception. And yet, I found a positive relationship between high construal and compassion. One potential way to reconcile these points is that
operating at a high construal level does not block out all low construal signals; instead, it might filter individuals’ attention towards low construal signals most congruent with their chronic high construal trait. Thus, employees who imbue work with a personal purpose might notice when their coworkers are in need of help or kindness because providing such compassionate actions makes their coworkers more productive in their mutual pursuits.

Finally, my work also contributes to the compassion literature. In recent years, compassion researchers have moved away from classifying compassion as an individual trait (Carmel & Click, 1993), or a state of feeling compassion (Nussbaum, 1996) and instead focused on describing compassion as the three-step process outlined earlier. As a consequence, research has largely focused on contextual factors, rather than individual differences, that might enable or disable compassion (Lilius et al., 2011; Madden et al., 2012). My findings suggest that we may want to revisit some unexplored individual differences, such as cognitive differences reflected in construal levels. Moreover, whereas some individual differences, such as work orientation, may not be directly related to compassionate action, they may lead to cognitive differences, such as construal level, that itself may facilitate compassion.

3.3.1 Limitations and future directions

The findings of this study should be considered in light of several important limitations. Participants were purposefully recruited from a compassionate industry, with fairly high ratings of compassionate action. This raised the statistical concern that, when I constraint variance, it increases the chances of a type II error by making it statistically harder to observe the potential relationship. In addition, it also raises the question of whether my model can be generalized to others beyond my unique sample, such as employees in other sectors. As outlined in the discussion, I propose that the positive link between construal level and compassion might be
explained by the fact that these employees have identified compassion as one tool by which to pursue their purpose. But would employees operating at a high construal level, whose purpose is not a compassionate one, still act compassionate towards coworkers or would they be more inclined to enact their purpose in other ways? Further, my sample was primarily female and non-unionized and positively skewed in terms of tenure. Again this might have influenced my outcomes and limited generalizability. For example, we know that, on average, women are more inclined to notice and engage in social support (Thoits, 2006), so they may be more prone to choose compassion as one tool by which to accomplish their compassionate purpose. Thus, it would be worthwhile to replicate this study with a different sample including, in particular, a context that might attract all three work orientations but does not entail work of a compassionate nature. For example, researchers could examine whether we would still find a link between construal level and compassion in male-dominated or high-skill professions likely to attract those with a calling (e.g. firemen, engineers) or indeed whether my findings would hold in professions unlikely to be dominated by the calling orientation.

There are several other methodological considerations. I collected 180 participants which would have sufficed for the ordinary least squares regression model I had originally planned; For structural equation modeling involving multilevel modeling and the inclusion of latent variables, however, a bare minimum of 200 participants would have been preferred (Hoelter, 1983). By virtue of its tripartite nature, future research on all three work orientations should certainly aim for a larger sample size.

I also encountered several limitations with the measures selected for this study. First, the career scale from Gandal and colleagues (2005) short-form proved problematic and, by virtue of being only three items, could not be reduced and had to be dropped entirely from analysis. Future
researchers might consider using Wrzesniewski and colleagues’ (Wrzesniewski et al., 1997) original long-form of the scale, particularly when anticipating SEM analysis and given the fact that the three item career scale would again have the lowest factor loadings in the final study of this dissertation (Chapter 4). Second, while I had to choose a proxy for purpose since no scale existed, a purpose scale will soon be published (Lepisto, Pratt & Dane, 2015, unpublished manuscript) and could warrant a second test of the link between work orientation and purpose. Finally, though I invested effort to develop an adapted version of the BIF as a potential measure of construal level in the workplace, it ultimately was not as strong a measure as the goal-focus scale previously employed in construal level research (Woolley, 2009a, 2009b). One explanation for this might be that I retained the binary structure of the BIF which limits variance. An adapted version of the BIF (Reyt & Wiesenfeld, 2015) that switched to a Likert-type format was recently published and might prove valuable for future work studying construal level at work.

Limitations aside, my study also offers a number of fruitful avenues for future research. First, as I previously outlined, there are multiple explanations for the link between construal level and compassionate action. Having established the link between the two, further research is now warranted to confirm my underlying explanations for this relationship. In a similar vein, construal level and compassionate behavior were captured at only one point in time. Given that construal level has conventionally been treated as a temporary state, a diary study or experiential data might be valuable to examine whether construal level is indeed a more stable trait or whether it fluctuates throughout the workday and how this would relate to different types of workplace actions.

Having established the link between construal level and compassionate action, it is also time to consider other behaviors that could be tied to the three work orientations via construal
level theory. Previous experiments have tied high construal level to persistence in the face of challenges (De Dreu et al., 2009), broader thinking (Vallacher & Wegner, 1989), creative problem-solving (Wakslak et al., 2006), and greater self-control in the present (Fujita et al., 2006). It is likely that such tendencies could also be exhibited in the work patterns of those with a calling orientation, by virtue of operating at a higher construal level. Given that there was a slightly stronger relationship between construal level and helping, a more concrete form of compassion than kindness, another natural extension would be to consider other concrete behaviors, such as general performance or organizational citizenship. Further, it would also be interesting to see how construal level maps onto more routine, tedious or disliked workplace actions? Might individuals operating at a high construal level forsake such tasks for these more obviously aligned with their higher sense of purpose?

Finally, this study relied on co-worker reports of compassionate action. Though coworkers are qualified to assess concrete actions, namely helping, this is more difficult in the case of kindness. Given that focal employees operating at a high construal level were ranked as higher in helping and kindness leaves the question of whether they actually engage in more of these actions or were better at impression management and giving the impression that they do. Collecting employee-ratings from other sources (i.e. their supervisors) could resolve this question.

3.3.2 Practical implications

The results of this study suggest a number of practical implications. Although we may intuitively characterize those who pursue a calling as more kind or caring towards others (Elangovan et al., 2010), I found no evidence for this claim. Among a sample of employees working in a social service organization, none of the three work orientations were directly
predictive of greater kindness toward, or helping of coworkers. This suggests that if employers want to hire individuals who are particularly kind or helpful (e.g. for care or service positions), screening for any work orientation may not be the most direct approach.

What I do offer evidence for, however, is the link between calling and job orientation and construal level. This suggests that employers seeking to fill positions which require concentration on how something is done (e.g. construction or graphic design) might want to consider those who espouse a job orientation or operate at a chronically low construal level, while positions that require a focus on distal outcomes or missions (e.g. project management or marketing) might prefer employees who espouse a calling orientation or operate at chronically high construal level. It is not lost on me that most of the examples in the latter category might include some leadership responsibilities, but it should be clear that the link between calling or construal level and leadership success has never been tested.

A final practical implication comes from my finding suggesting a potential causal relationship between a sense of purpose and a higher construal level. That is, if employers need employees to focus more on the distant purpose or mission of their work than present-moment process, perhaps they could encourage a higher construal level by infusing work tasks with a sense of personal purpose. For example, if organizations can tie work goals to donations to charity that employees care about, it may infuse work goals with personally relevant purpose and therefore lead to a higher sense of construal.

3.3.3 Conclusion

I began this study with the assumption that those who pursue a deeply meaningful purpose through their work are less likely to treat their coworkers with compassion, not because they are uncaring but because they may be overly focused on their distant goals to notice their
coworkers’ needs. I did find evidence that those with a calling orientation, who imbue their work with a personal purpose, are more focused on their distant goals than their counterparts with a job orientation, but learned that this distant focus actually enhances compassion towards coworkers. My insights have raised a number of questions about the nature of the three part work orientation typology as well as construal level theory that I hope future researchers will be inspired to tackle.
Chapter 4: Regulatory focus as a mediator of work orientation and creativity

Over the past two decades, scientists and practitioners have increasingly emphasized the importance of promoting creative ideas, defined as the intentional introduction and application of ideas or processes which are novel and of value to a particular work domain (Shalley et al., 2004; West & Farr, 1989). Creativity is perceived as a fuel for organizational gain (Florida, 2002), workplace enhancement (Ford & Gioia, 1995; Unsworth & Parker, 2003), competitive advantage (Gloor, 2005; Yuan & Woodman, 2010) and organizational survival (Amabile, 1996; Shalley et al., 2004). Though the definition of creativity highlights that it entails acts of promoting ideas, most studies have operationalized creativity as a final product (Amabile, 1983; Woodman, Sawyer, & Griffin, 1993) and examined the degree of creativity found in the output of the creative process (for reviews see Anderson, Potočnik, & Zhou, 2014; Zhou & Hoever, 2013). This state of affairs may be attributed, at least in part, to the ‘innovation maximization fallacy’ which suggests that “all creativity and innovation is good and the more, the better” (Anderson et al., forthcoming: 24). The fallacy promotes the implicit assumption among researchers that because all creativity is good, all employees will be motivated to promote ideas and we need only understand what makes some ideas more creative than others.

Creativity, however, depends initially on an individuals’ willingness to promote ideas by either sharing or implementing them. Creativity, therefore, is not an end-point, but rather a process (Drazin, Glynn, & Kazanjian, 1999) that requires an employee to pursue behaviours that deviate from the routine (Ford, 1996; Unsworth & Clegg, 2010). There are several plausible reasons why employees may not want to promote their creative ideas. Employees may prefer the...
status quo and might not want to propose new ideas that will create uncertainty and change in the workplace (George, 2007). Alternatively, idea selling is associated with a variety of risks. Even if employees want to present their ideas, they may worry that successful ideas might earn them the ire of coworkers who preferred the status quo (West & Richter, 2008). Or they may hesitate out of a fear that their ideas will be rejected (Mueller, Melwani, & Goncalo, 2012) or that they will be accepted, fail subsequently and thereby reflect poorly on them. In short, because creativity can be perceived as deviance from acceptable behaviours (Vadera, Pratt, & Mishra, 2013), it comes with many of the risks and challenges associated with more conventional forms of deviance (Mainemelis, 2010). As a consequence, the promotion of creative ideas requires courage and may be only engaged in when it is perceived to be personally “worthwhile” (Unsworth & Clegg, 2010) or is accompanied by significant incentives (Ford, 1996).

Our understanding of when employees will promote creative ideas is limited (Madjar, Greenberg, & Chen, 2011). Research has identified a small set of antecedents including personal initiative (Binnewies, Ohly, & Sonnentag, 2007) and willingness to take risks (Madjar et al., 2011). These studies have revealed that “starting the process of employee creativity [is] similar to starting most other forms of employee behaviour” (Madjar et al., 2011: 94), but have not considered inclinations that would lead employees to specifically chose creative action. More work is needed to unpack mechanisms that lead employees to promote creative ideas.

In this paper, I propose that employees’ work orientations may offer insight into employees’ willingness to promote creative ideas. Work orientation refers to an individual’s relationship to their work (Wrzesniewski et al., 1997) and the three work orientations (job, career, calling) incorporate the personal purpose individuals hope to achieve through their work and their evaluation and experience of work in light of this purpose. When Guildford called for
more creativity research in his landmark 1950 address, he explained that he viewed creativity as critical in the fulfillment of human purpose and potential; Theorists have also emphasized the interplay of self-actualization and creative behaviour (Dowd, 1989; Murphy, Dauw, Horton, & Fredian, 1976). Work orientations share this focus on human purpose and potential and may therefore be a fruitful avenue through which to examine creativity. Work orientations have also already been tied to other forms of proactive behaviour in the workplace including extra-work behaviour (Bunderson & Thompson, 2009) and job crafting (Wrzesniewski & Dutton, 2001). I propose that the two domains already share some overlap and are ripe for a more thorough investigation.

The hypotheses tying work orientation to the promotion of creative ideas in this study are based on regulatory focus theory (RFT) (Higgins, 1996, 1997). RFT suggests that individuals frame the world either through the lens of aspiration and a focus on the desirable end states they wish to pursue (promotion focused) or through the lens of obligation and the undesirable end states they wish to avoid (prevention focused). A promotion focus motivates individuals to change the status quo and tolerate risk in doing so, while a prevention focus inhibits such action tendencies. I predict that those with a job orientation, who take a transactional view of work as only a means to an end, are likely hold an exclusive prevention focus. Those with a calling orientation see their work as a means to make a positive difference in the world and are therefore likely to take an exclusive promotion focus. Those with a career orientation frame work as a channel for personal advancement but recognize that to advance they must follow the rules of their organization; thus, they are likely to take a mixed prevention/promotion focus at work. Because a promotion focus enhances the willingness to implement change and tolerate risk, I predict that those with a calling orientation will be most likely to promote creative ideas.
Because a prevention focus reduces the willingness to implement change and tolerate risk, those with a job orientation will be least likely to implement creative ideas. Finally, due to their mixed focus, those with a career orientation will fall in the middle in terms of creative behaviour. My proposed model can be seen in Figure 4.1.

This study makes contributions to both the creativity and work orientation literature. For the creativity literature, I identify a novel individual trait that can catalyze creative action, an understudied component of creativity research. For the work orientation literature, which has prioritized understanding the experience over the enactment of orientations, I examine a novel behavioral outcome, likely to be distinct for each of the three work orientations.

### 4.1 Theory and hypotheses

The psychology literature has a long tradition of models that distinguish between the basic human motivations to approach pleasure and avoid pain (Atkinson, 1964; Bandura, 1986; Carver & Scheier, 1981, 1990). Regulatory focus theory (RFT) (Higgins, 1996, 1997) defines these two qualitatively distinct motivations as a promotion focus or a prevention focus and suggests that they will influence employees’ behavioural tendencies at work (Higgins, Roney, Crowe, & Hymes, 1994; Higgins & Tykocinski, 1992). A promotion focus is triggered when individuals compare who they are to an ideal self (Higgins, 1987): a version of who they would like to become or the attributes they would like to espouse. A scholar with a promotion focus, for example, may desire to become a world-renowned expert or produce ground-breaking research. These personal hopes and aspirations (Festinger, 1942) put them in a promotion focused state, in which they frame situations in terms of whether or not they are likely to result in gains. In contrast, a prevention focus is triggered when individuals compare who they are to their ought
self, that is who they should be and the obligations and duties to which they ought to adhere (Freud, 1961; James, 1890). A scholar with a prevention focus, for example, might be scared of not properly analyzing data, not making tenure, or losing their standing in the academic community. These concerns put the individual in a prevention focused state in which subsequent situations are framed in terms of whether or not they will result in potential losses.

A variety of field studies have examined the influence of regulatory foci on workplace behaviour (for a review and meta-analysis see Lanaj, Chang, & Johnson, 2012). Regulatory foci have been linked to negotiation success (Appelt & Higgins, 2010), safety behaviours (Wallace & Chen, 2006) and citizenship (De Cremer, Mayer, van Dijke, Schouten, & Bardes, 2009; Wallace, Johnson, & Frazier, 2009), and impression management (Kacmar & Tucker, 2014). These studies generally support the idea that the prevention focus is associated with cautious and conservative actions while the promotion focus is associated with risky and innovative actions.

Researchers have also specifically linked regulatory foci to creative actions. Experimental work suggests that promotion focused individuals consistently out-perform their prevention focused counterparts on sorting tasks (Crowe & Higgins, 1997), exploratory behaviours (Liberman, Idson, Camacho, & Higgins, 1999), and creative generation tasks (Friedman & Förster, 2001). Further, in workplace surveys, promotion focused employees engaged in more creative behaviour (Cerne, Nerstad, Dysvik, & Škerlavaj, 2014; Neubert, Kacmar, Carlson, Chonko, & Roberts, 2008) and innovation (Wallace, Butts, Johnson, Stevens, & Smith, 2013) than their prevention focused counterparts.

While most studies have considered regulatory foci as antecedents, I consider them as a potential explanatory mechanism for the relationship between work orientation and creative behaviour. This framing can expand our understanding of when and why regulatory foci
influence creativity. In the next section, I outline how the two regulatory foci are triggered by different work orientations. In the subsequent section, I outline how these foci predict different creativity promotion at work.

4.1.1 Work orientations and regulatory foci

First formulated by Bellah et al. (1985), and later examined among employees by Wrzesniewski and colleagues (1997), there are three work orientations: the job, career, and calling orientation. Employees with a job orientation see work as a means for acquiring the resources needed to support activities outside the workplace such as childrearing, hobbies or volunteering. The primary purpose of those with a job orientation is to make an income and they do not specifically seek other rewards, such as fulfillment, from their work (Wrzesniewski et al., 1997). Individuals with a career orientation see work as a means to obtain power, status, income and prestige through the promotional opportunities afforded by professional advancement (Wrzesniewski, 2002). By virtue of its influence on their self-esteem, these individuals describe work as more personally meaningful than their job-oriented counterparts. Those with a calling orientation see work as a means to make a social contribution, for example helping others (Meglino & Korsgaard, 2004), supporting something greater than themselves (Frankl, 1984) or making a lasting contribution (Duffy & Sedlacek, 2007). For these individuals, work is highly meaningful for its own sake (Wrzesniewski, 2003).

**Job Orientation.** Those with a job orientation take a transactional view of work (Thompson & Bunderson, 2003): they agree to perform their specific work responsibilities in return for compensation and basic safeguards from their employer. Such tangible rewards are the primary outcomes these individuals expect from work. Their purpose is not framed around personal aspirations at work such as career advancement (Fried et al., 2007) or making a
difference (Duffy & Sedlacek, 2007), because they are more likely to seek out aspirational activities that bring passion and fulfilment in their private life, such as child-reading or volunteering. This means that these individuals imbue their work with a sense of obligation but not aspiration: in the work realm they focus on what they should do, not what they would like to do. A focus on the ought self and absence of the ideal self at work, will trigger an exclusively prevention focus.

H1a: A job orientation will be positively related to a prevention focus at work.

H1b: A job orientation will be negatively related to a promotion focus at work.

Calling Orientation. A defining feature of the calling orientation is a prosocial purpose (Elangovan et al., 2010). The specific nature of this purpose varies and can constitute helping others (Meglino & Korsgaard, 2004), supporting something greater than oneself (Frankl, 1984) or making a lasting contribution (Duffy & Sedlacek, 2007). Broadly speaking, however, all are driven by a desire to impact (Colby et al., 2001; Grant, 2007; Ruiz-Quintanilla & England, 1994) or change the world (Bateman & Crant, 1993; Crant, 2000) for the better. Indeed, we know that these aspirations are so important to those with a calling orientation that they are willing to violate organizational norms when in conflict (Bunderson & Thompson, 2009; Robertson, 2013). For example, Bunderson and Thompsons’ (2009) zookeepers refused to feed food they viewed as subpar to the animals they cared for despite instructions from management. These individuals approach their work from a desire to have a positive impact. Those with a calling orientation frame their workplace around who they would like to be and what they would like to accomplish and they are willing to subjugate how they ought to act or the obligations to which they ought to adhere to this ideal drive. Taken together, this means that those with a calling orientation hold an exclusive promotion focus at work.
**H2a:** A calling orientation will be positively related to a promotion focus at work.

**H2b:** A calling orientation will be negatively related to a prevention focus at work.

**Career Orientation.** The relationship between career orientation and regulatory focus is more complicated. Most research has predicted the promotion focused and prevention focused states to be mutually exclusive (Brockner & Higgins, 2001; Elliot & Thrash, 2002). Recent insights, however, suggest that both may be held simultaneously (Grant & Wrzesniewski, 2010), though we do not yet know when this is likely to occur. I predict that a career orientation may trigger such a mixed focus.

On the one hand, those with a career orientation are primarily motivated by their desire to advance in the organization (Fried et al., 2007). They view work predominantly as a means for personal advancement and success. This means that they are driven by a comparison of their present state to an ideal state of who they would like to become and so they frame their workplace through the lens of aspiration. On the other hand, advancement in western organizations is predominantly associated with adhering to prescribed job responsibilities (Tyler & Blader, 2005; Tyler & Boeckmann, 1997). Though anecdotal evidence points to exceptional individuals who can sometimes be propelled into higher levels of the organization by virtue of their radical acts, such advancement is extremely rare. Therefore, individuals with a career orientation know that they must adhere to the responsibilities and duties associated with their current position to earn a higher status. Framing their work experience around the ought self and what they should do will trigger a prevention focus. Taken together, the desire to advance and recognition that this requires adherence to rules indicate that those with a career orientation will hold a mixed regulatory focus with elements of both a promotion and a prevention focus.
**H3a:** A career orientation will be positive related to a prevention focus at work.

**H3b:** A career orientation will be positive related to a promotion focus at work.

Having outlined how work orientations predict different regulatory foci, let me now elucidate how these foci may enhance or inhibit creative behaviour at work.

### 4.1.2 Regulatory focus and creativity

The intentional introduction of creative ideas requires two steps. First, individuals must be dissatisfied enough with the status quo that they perceive the need for change (Farr & Ford, 1990). Second, individuals must be willing to accept the risk that proposing change entails (Axtell et al., 2000; Frese, Teng, & Wijnen, 1999). Individual’s regulatory focus will influence both their awareness of the need for change and their willingness to engage in change.

First, regulatory foci predict how much individuals conform to or wish to change present organizational conditions (Liberman et al., 1999). A prevention focus represents a commitment to the status quo (Crowe & Higgins, 1997; Jain, Lindsey, Agrawal, & Maheswaran, 2007), because it ensures against negative outcomes and losses (Zhang, Cornwell, & Higgins, 2014). By framing each situation as ripe with the potential for loss, those with a prevention focus exhibit a “better safe than sorry” attitude and prefer stable conditions, which provide explicit understandings of their duties and obligations (Higgins et al., 1994) and require less vigilance (Higgins & Spiegel, 2004). In contrast, those high in promotion focus, who frame situations around the potential for gain (Crowe & Higgins, 1997; Higgins et al., 1994), are more likely to see the need to disrupt the status quo. Empirical research has shown that they experience a greater aversion to stability and tradition values (Leikas, Lönnqvist, Verkasalo, & Lindeman, 2009), have a harder time resisting temptation (Freitas, Liberman, & Higgins, 2002) and do best on tasks that require elaboration (Zhu & Meyers-Levy, 2007) or “expanding the pie” (Galinsky,
Leonardelli, Okhuysen, & Mussweiler, 2005). As a consequence, I predict that those with a promotion focus will be more likely to see the need for change while those with a prevention focus prefer maintaining the status quo.

Regulatory foci also predict the degree of risk individuals tolerate in their action (Förster, Higgins, & Bianco, 2003; Higgins, 2002). Prevention focused individuals are risk-averse while promotion focused individuals are risk-seeking (Crowe & Higgins, 1997; Friedman & Förster, 2001; Higgins, 1997). This can be explained by the nature of goals each pursues. The ideal aspirations of those with a promotion focus represent maximum goals (Brendl & Higgins, 1996) that create a strategic inclination to insure for hits and against errors of omission. In other words, these individuals are more sensitive to positive gains and the possibility of missing out on such gains, than they are to losses (Brendl & Higgins, 1996). They have been classified as chronic thrill-seekers (Galinsky et al., 2005), and prefer to take a risk and engage in exploratory risk-seeking behaviour (Crowe & Higgins, 1997) than do nothing. In contrast, the obligations associated with a prevention focus function as minimum goals (Brendl & Higgins, 1996) which involve a strategic inclination to insure for correct rejections and protect against errors of commission. Prevention focused people see the world as zero sum game in which failure is a distinct and undesirable possibility (Molden, Lee, & Higgins, 2008) and they prefer to play it safe (Zhang & Mittal, 2007). Whenever possible, they prefer to act conservatively, or not to act at all to ensure safety (Wallace & Chen, 2006).

Regulatory-foci are known to predict individuals’ behaviours (Higgins, 1997, 1998). Individuals evaluate the actions they are currently engaging in or those they are considering engaging in against their regulatory foci. Actions that are congruent with their regulatory focus generate a sense of fit while those that are incongruent generate a lack of fit. A sense of fit is
associated with feelings of comfort, pleasure or positive affect while a lack of fit leads to feelings of discomfort, pain and negative affect. Their respective state will signal to the individual whether to approach or persist in the behaviour under consideration or whether to avoid and stop such behaviour.

A prevention focus prevents individuals from perceiving the need to change the status quo (Halvorson & Higgins, 2013). Even in those rare circumstances in which they recognize situational problems or short-comings, they would be inclined to play it safe (Kark & Van Dijk, 2007) and prefer self-handicapping (Hendrix & Hirt, 2009) because behaviours that risk personal exposure. As a consequence, those with a prevention focus will engage in little or no creative behaviour. In contrast, those with a promotion focus find the status quo unattractive and have a high tolerance for risk to achieve change and potential gain (Unsworth & Parker, 2003). As a consequence, a promotion focus would predict a high frequency of creative behaviour. Finally, those with a mixed focus are likely to take a balanced approach and engage only in creative behaviour that is likely to be favorably received in the organization (Hargadon, 2002), while avoiding that which violates organizational norms and creates an unfavorable impression on colleagues (Yuan & Woodman, 2010). These individuals are likely to engage in more creative behaviour than those with an exclusive prevention focus but less than those with an exclusive promotion focus.

H4a: A prevention focus will be negatively related to creative behaviour at work.

H4b: A promotion focus will be positively related to creative behaviour at work.

To sum, I predict that regulatory focus will mediate the relationship between work orientation and creative behaviour. As I have outlined in Hypotheses 1-3, I predict that each work orientation will be associated with a unique regulatory focus. The job orientation will
predict a prevention focus, the calling orientation will predict a promotion focus, and the career orientation will predict a mixed focus. As outlined in Hypothesis 4a/b, each unique regulatory focus will have an influence on the individuals’ willingness to act creatively with the promotion focus enhancing creative selling and the prevention focus reducing it.

**H5: Regulatory focus will mediate the relationship between work orientation and creative behaviour at work.**

4.2 Method

4.2.1 Sample and procedure

Data collection began with soliciting participation from a variety of Canadian organizations likely to a) employ those with all three types of work orientations and b) provide opportunities for employee creative behaviour at work. Sampling a large and diverse sample of employees and organizations would allow my results to have a large degree of external validity and generalizability. Between August and December 2015, I contacted the organizational representative (CEO for smaller organizations or head of HR for mid to large size organizations) of 82 Canadian organizations indexed on Canada’s Top 100 Employers index (2001-2014), a national competition organized in association with the Globe and Mail newspaper. Because Canada’s Top 100 Employers index is entirely comprised of self-nominating organizations, these organizations were also more likely to agree to participate in academic research. Representatives were asked to provide the email addresses of one organizational representative and a minimum of 10 subordinate-supervisor dyads for participation; Organizations providing a minimum of 30 subordinate-supervisor dyads were promised a personalized feedback report of results in return for participation.
Employees completed self-ratings of all variables. Organizational representatives completed ratings of one organizational control variable: organizational support for creativity. Supervisors were asked to complete ratings of their subordinates’ creativity (the dependent variable), for two reasons. First, supervisor-ratings are the most conventional approach in field studies of creativity (George & Zhou, 2002; Oldham & Cummings, 1996; Scott & Bruce, 1994; Zhou & George, 2001). Second, supervisors have the necessary advanced knowledge of their domain to appropriately judge whether a behaviour counts as creativity as opposed to other non-creative forms of proactivity (Amabile, 1996).

Nine organizational representatives (11% response rate) agreed to participate. Organizations ranged in size from 15 to 1100 employees ($M = 219.11; SD = 338.67$) and – with the exception of one outlier founded in 1890 – were founded between 1983 and 2010 ($M = 34.44; SD = 34.94$). These organizations comprised five industries: education (1), financial services (1), professional, scientific and technical services (5), information technology (1), and transportation (1).

Employee and supervisors were each emailed a personalized link to a one-time online survey that would allow me to match employee-ratings to their respective supervisors and organizations while protecting participant confidentiality. 283 employees (61% response rate) and 92 supervisors (82% response rate) participated. After removing incomplete responses and linking subordinates to their supervisors, I was left with 220 matched dyads across the nine organizations. Sixty-five percent of participating employees were male, average age was 39.10 ($SD = 11.04$) and average tenure in months was 87.33 ($SD = 82.30$). Four percent of participants held a high school degree, 30% had completed some post-secondary education, 46% held bachelor’s degrees, and 20% held graduate degrees.
Participants included in the final sample differed from the potential sample (those for whom I had only self- but not supervisor-ratings) in terms of age \( (F(1,275) = 9.73, p < .01) \) and gender \( (\chi^2 (1) = 10.81, p < .01) \), but not tenure \( (F(1,275) = 1.30, p = ns) \), or education \( (\chi^2 (3) = 4.69, p = ns) \). Specifically, participants were younger and predominantly male \( (M_{Age} = 39.11; 65\% \text{ male}) \) in contrast to their counterparts \( (M_{Age} = 44.17; 42\% \text{ male}) \). This suggested that supervisors were less likely to provide feedback on older or female employees, a noted limitation of the data.

4.2.2 Measures

A list of all complete measures can be found in Appendix C.

**Work orientation.** Work orientation was captured with Gandal et al.’s (2005) short form of Wrzesniewski et al.’s (1997) work orientation scale. The scale includes three items capturing career orientation (e.g. “I view my job primarily as a stepping stone to other jobs”), three items capturing job orientation (“My primary reason for working is financial: to support my family and lifestyle”) and five items capturing calling orientation (e.g. “My work makes the world a better place”) respectively. Items are measured on a 5-point Likert scale \( (1 = \text{strongly disagree}, 5 = \text{strongly agree}) \). Cronbach’s alphas were .73 for job orientation, .68 for career orientation, and .73 for calling orientation.

**Regulatory focus.** Regulatory focus was measured using Neubert and colleagues (Neubert et al., 2008) work regulatory focus (WRF) scale. The WRF scale contains two factors, each with nine items: a promotion focus scale (sample item “I focus on accomplishments”) and a prevention focus scale (sample item “I focus on following rules and regulations”). Both scales are measured on a 5-point Likert scale \( (1 = \text{never}, 5 = \text{constantly}) \). Cronbach’s alphas were .82 for promotion focus and .78 for prevention focus.
**Creativity.** Supervisors rated each employee using Farmer and colleagues (2003) employee creativity scale. This four item scale (e.g. “Seeks new ideas and ways to solve problems”) is rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Cronbach’s alpha was .92.

In addition, I captured employee self-ratings of creativity for two reasons: 1) this would serve as a backup, should I not find any significant relationship to supervisor-rated creativity and 2) employees could distinguish between creativity intended to make only incremental change and that associated with radical change (i.e. making a difference). Employees completed self-rating of Madjar et al. (2011) six item measure of creative. The scale includes three items for radical creativity (“I suggest radically new ways of doing my work”) and three items for incremental creativity (I am very good at adapting already existing ideas or projects”) and is captured on a 5-point Likert scale (1=strongly disagree, 5=strongly agree). Cronbach alpha’s were .73 for radical creativity and .68 for incremental creativity.

**Control variables.** At the individual level previous research has linked gender (Baer & Kaufman, 2008), age (Binnewies, Ohly, & Niessen, 2008), and tenure (Amabile, Barsade, Mueller, & Staw, 2005) to creative behaviour. All these variables may also have an influence on employee work orientation as indicated by the fact that they are tied to different occupational choices and careers that seek personal advancement versus prosocial purpose. In addition, the extent to which creativity is organizationally prescribed or viewed as constructive deviance (Vadera et al., 2013) was captured via organizational representatives’ ratings of Scott and Bruce’s (1994) organizational support for creativity scale. This measures was included to account for potential floors or ceilings in employees’ ability to act creative. This four item scale
(e.g. “creativity is encouraged in this company”) is rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Cronbach’s alpha was 71.

4.2.3 Data analysis

Data screening. I began by screening the data for missing values. I replaced items in Likert-type scales missing only one item (that is in which the responded had answered k-1 of k items in the scale) with the scale mean. Five participants with more than one item per scale missing were excluded listwise. I examined all Likert-type items for kurtosis and all items for skewness and kurtosis. No items fell outside the acceptable kurtosis range of -3.00/3.00 (Sposito et al., 1983). However, three items – prevention1, prevention7, and tenure- were positively skewed. I noted these items as potential limitations to the data.

Due to the nested nature of the data (i.e., employees nested within supervisors nested within organizations), I needed to confirm the use of multilevel analysis to avoid the potential violation of the independence assumption in ordinary least squares regression. A multilevel model is necessary when the null model (equivalent to a one-way random-effects ANOVA model) is significant. Analysis revealed significant level-two (supervisor) effects on job orientation ($F[71, 147] = 1.47, p < .05$), career orientation ($F[71, 146] = 1.74, p < .01$), calling ($F[71, 146] = 1.74, p < .01$) and supervisor-rated creativity ($F[71, 146] = 2.71, p < .001$) as well as level-three (organization) effects on career orientation ($F[8, 210] = 6.11, p < .01$), calling ($F[8, 210] = 2.81, p < .01$), prevention focus ($F[8, 210] = 5.45, p < .01$), promotion focus ($F[8, 210] = 2.01, p < .05$) and supervisor-rated creativity ($F[8, 209] = 5.23, p < .01$). This indicated the use of a 3-level design for subsequent data analysis. Complicating matters, however, the organizational-level sample size (i.e. nine organizations) was insufficient to estimate a three-level model. Therefore, I followed Muthén and Muthén’s (2015) suggestion, outlined by Liu and
colleagues (2015) and included the type complex rather than type three level syntax to account for organizational-level clustering. This estimator provides a robust estimation of standard errors (Rogers, 1994) and “has the ability to take account of the non-independence of observations resulting from cluster sampling and to correct the potential bias in estimation that may result from potential sampling differences” (Liu et al., 2015: 7).

**Correlation analysis.** Means, standard deviations, and correlations of all variables are presented in Table 4.1. Correlation analysis confirmed significant relationships between all three work orientations (job, career, calling) and the two regulatory foci serving as mediator (prevention- and promotion focus). Disconcerting, however, only career orientation correlated with supervisor-ratings of creativity.

**Confirmatory factor analysis.** I followed a two-stage modeling strategy (Anderson & Gerbing, 1988; Williams et al., 2009), first assessing the fit of the null or measurement model before moving on to consideration of the structural model. I followed instructions outlined by Kelloway (2014) using MPLUS 7.4.

All models were estimated using maximum likelihood estimation. The initial estimation of the complete model with 40 dependent variables (including the three observed controls gender, age and tenure) and seven latent variables (job, career, calling, promotion focus, prevention focus, creativity, and the fourth control variable organizational creativity support) did not have a very good fit. The chi square test of model fit $\chi^2(698) = 1413.06$ was high and significant ($p < .01$) (Bollen & Long, 1993) though this is likely to be expected with samples over 200 (Kelloway, 2014). The root mean square error of approximation RMSEA = .07 was an adequate fit because it fell below the .10 threshold (Steiger, 1990) but it was not below .06 for a great fit (Hu & Bentler, 1999). The standardized root mean square residual SRMR = .09 fell
above the recommended cut off of .08 or lower (Hu & Bentler, 1999). Further, the comparative fit index CFI = .77 and the Tucker-Lewis index TLI= .74 both failed to exceed the recommended .90 (Hooper et al., 2008).

In reviewing the factor loadings, I identified seven items (car2, cal1, prev2, prev3, prev4, prom3, ocrsup2) that loaded below .4 on their respective factors. Given that each of their respective latent factors would still retain at least two items (Cenfetelli et al., 2008), I decided to drop them from further analysis. This improved the model fit: $\chi^2(486) = 992.46$, RMSEA = .07, SRMR = .09, CFI = .81, TLI = .78, though fit was still not good. I then reviewed the modification indices and standardized residual errors and chose to co-vary eight observed items within their latent scales. Building this covariance into the model, allowed me to achieve good absolute fit: $\chi^2(478) = 864.32$, RMSEA = .06, SRMR = .08, though the comparative fit indices remained subpar for this final model: CFI = .86, TLI = .83, The latent factor correlations can be found in Table 4.2. Factors loadings and $R^2$ for all retained observed variables can be found in Table 4.3.

**Latent Variable Path Analysis.** I ran three separate models: full mediation, partial mediation, and no mediation. Fit indices for all models can be found in Table 4.4. The non-mediated model and fully mediated models are both nested within the partially mediated model. Using a nested-model comparison calculator, I found no statistically significant difference between the partially and the fully mediated model, $\chi^2_{\text{Difference}}(3) = 0.72$, $p = ns$ but a statistically significant difference between the partially mediated and the non-mediated model $\chi^2_{\text{Difference}}(1) = 14.17$, $p < .01$. In light of this difference, I chose to proceed with the model that was both more parsimonious and had the better fit: the non-mediated model. The standardized parameters for this model can be found in Figure 4.2.
Hypotheses 1a/b predicted a positive relationship between job orientation and prevention focus and a negative relationship between job orientation and promotion focus. The relationship between job orientation and prevention focus was indeed positive and significant ($\beta = .28$, $SE = .13$, $p < .05$), thus offering support for Hypothesis 1a. The relationship between job orientation and promotion focus was negative but non-significant ($\beta = - .20$, $SE = .13$, $p = ns$) and Hypothesis 1b was rejected.

Hypotheses 2a/b predicted a positive relationship between calling orientation and promotion focus and a negative relationship between calling orientation and prevention focus. The relationship between calling orientation and promotion focus was positive but not significant ($\beta = .12$, $SE = .10$, $p = ns$), thus rejecting Hypothesis 2a. The relationship between calling orientation and prevention focus was neither negative, nor significant ($\beta = .12$, $SE = .12$, $p = ns$) and Hypothesis 2b was rejected.

Hypotheses 3a/b predicted a positive relationship between career orientation and prevention focus and promotion focus. The relationship between career orientation and prevention focus was indeed positive and significant ($\beta = .43$, $SE = .11$, $p < .01$), thus offering support for Hypothesis 3a. Similarly, the relationship between career orientation and promotion focus was positive and significant ($\beta = .73$, $SE = .11$, $p < .01$) and Hypothesis 3b was supported.

Hypotheses 4a/b predicted a negative relationship between prevention focus and creativity and a positive relationship between promotion focus and creativity. The partially mediated and non-mediated models did not make a good fit for the data and a non-mediated model was retained because there was no significant relationship between creativity and either regulatory focus. Thus Hypotheses 4a/b were rejected. For this reason, Hypothesis 5 – predicting that regulatory focus would mediated the relationship between work orientation and creativity –
was rejected as well. Due to the lack of significant relationship between creativity and either regulatory focus there could be no significant indirect effect.

Posthoc analysis. I chose to re-analyze the data using a model with self-rated creativity in place of supervisor-rated creativity for two reasons. First, given that model fit was subpar for the supervisor-rated model, this model might produce better fit. Second, self-ratings distinguish between incremental and radical creativity and might therefore offer interesting insights not apparent in the supervisor-rated model which captured only general employee creativity. The initial estimation of the complete model with 42 dependent variables (including the three observed controls gender, age and tenure) and eight latent variables (job, career, calling, promotion focus, prevention focus, incremental creativity, radical creativity, and the fourth control variable organizational creativity support) did not have a good fit: $\chi^2(727) = 1459.23$, RMSEA = .07, SRMR = .09, CFI = .73, TLI = .69. To improve fit I removed items loading below .4 (ocrsup2, car2, cal1, prev2-4, prom3) which left at least two items per scale and improved fit: $\chi^2(508) = 979.98$, RMSEA = .07, SRMR = .08, CFI = .80, TLI = .76. To improve fit further I co-varied 10 items within their latent factors as suggested by the modification indices. This brought my final measurement model fit to $\chi^2(500) = 871.84$, RMSEA = .06, SRMR = .07, CFI = .84, TLI = .80. Though this model again reached only good absolute fit and not good comparative fit, I chose to proceed. Factors loadings can be found in Table 4.5, latent factor correlations can be found in Table 4.6.

For latent path analysis, I ran non-, partially- and fully-mediated models. Fit indices for all models can be found in Table 4.7. The non-mediated model and fully mediated models are both nested within the partially mediated model. Using a nested-model comparison calculator, I found no statistically significant difference between the partially and the fully mediated model,
\(\chi^2\text{Difference}(6) = 9.75, p = ns\) but a statistically significant difference between the partially mediated and the non-mediated model \(\chi^2\text{Difference}(1) = 16.13, p < .01\). This mirrored what I had found for the model using other-ratings of creativity and I again chose to proceed with the model that was both more parsimonious and had the better fit: the non-mediated model. The standardized parameters for this model can be found in Figure 4.3.

Results differed only slightly from the model using other ratings, with entirely different creativity measures. I found marginal support for Hypothesis 1b, that job orientation would have a negative relationship with promotion focus \((\beta = -.14, SE = .08, p < .10)\), but not for Hypothesis 1a, that job orientation would have a positive relationship to prevention focus \((\beta = .19, SE = .13, p = ns)\). As before, I found no support for Hypothesis 2a, that calling orientation would be positively related to promotion focus \((\beta = .08, SE = .08, p = ns)\) or Hypothesis 2b, that calling orientation would be negatively related to prevention focus \((\beta = .03, SE = .14, p = ns)\). I did again for support for both Hypothesis 3a, that career orientation would be positively related to prevention focus \((\beta = .42, SE = .10, p < .01)\) and Hypothesis 3b, that career orientation would be positively related to promotion focus \((\beta = .71, SE = .08, p < .01)\). Finally, as before, due to the lack of relationship between the two regulatory foci and either form of self-rated creativity, I found no evidence of mediation, thus Hypotheses 4 and 5 were not supported.

4.3 Discussion

This study was inspired by the insight that those with a calling orientation frequently express that they “want to make a difference”. Extrapolating from this idea, I developed a model for how a calling orientation, as well as the two other distinct work orientations – job and career – might differ in their propensity to promote creative ideas at work. I built my predictions on
regulatory focus theory (RFT) (Higgins, 1996, 1997), predicting that those with a calling orientation hold an exclusive promotion focus, those with a job hold an exclusive prevention focus, that those with a career orientation are likely to take a mixed prevention/promotion focus at work, and that these differences in regulatory foci can explain difference in creativity. My results provided mixed support for my predictions but, nonetheless, offer intriguing insights for both the literature on work orientations and regulatory focus theory.

My hypotheses tying career- and job-orientation to the two regulatory foci were largely supported. I found the strongest results for the career orientation which, as predicted, was tied to both a strong promotion- and prevention focus. I explain this by suggesting that those with a career orientation appear to find themselves having to strike a balance: They both wish to adhere to current standards and policies and prescribed job responsibilities (Tyler & Blader, 2005; Tyler & Boeckmann, 1997) in order to remain in good standing for potential future advancement, while also needing to take risks to warrant such advancement (Fried et al., 2007). I also found partial support for the positive relationship between job orientation and prevention focus and the negative relationship between job orientation and promotion focus. This confirms that for those with a job orientation, the main consideration appears to be to abide by the policies outlined by their employer in return for compensation and basic safeguards. For this reason, they espouse a prevention focus and are unlikely to imbue their work with a promotion focus or to attempt to exceed their current responsibilities for additional gains.

These insights appear to offer evidence for previous theorizing about the job and career orientation such as Bunderson and Thompson’s (2003) mapping of the two onto conformity types (Kelman, 1958) and social contracts (Graham & Organ, 1993). Specifically, the authors suggested that the job orientation, in contrast to career orientation, would be positively
associated with Kelman’s (1958) compliance type of conformity – wherein individuals publicly comply with policies out of fear of censure or punishment – and Graham and Organ’s (1993) transactional contract, which involves a quid pro quo economic relationship. Both of these assertions are supported by my finding that individuals with a job orientation focus only on complying with basic policies to avoid loss (prevention focus) but invest in no additional activities or risks to enhance their gains or expand the relationship (promotion focus). Similarly, Bunderson and Thompson (2003) predicted that the career orientation, but not job orientation, would map onto Kelman’s (1958) identification type of compliance – in which individuals are motivated to collaborate with an attractive other party – as well as Graham and Organ’s (1993) social exchange contract, which is based on a reciprocal social relationship in the pursuit of mutually advantageous goals. Both theoretical cousins imply a relationship in which the individual must be careful not to risk good relations (prevention focus) while also being motivated to increase the benefits derived by the relationship (promotion focus). Thus, my findings offer empirical support for prior theorizing about the job and career orientation that have thus far not been tested.

In contrast, I was surprised not to find any a link between calling orientation and either regulatory focus. Upon further thought, however this too may support Bunderson and Thompson’s (2003) prior predictions. Those with a calling orientation describe work as meaningful in and of itself and infuse it with personal aspirations and values (Fried et al., 2007). Bunderson and Thompson (2003) link the calling orientation to Kelman’s (1958) internalization influence type, wherein individuals have fully embraced a belief or behavior, and Graham and Organ’s (1993) covenental social contract that binds individuals to the organization through mutually shared values. In short, they predict that the relationship between those who espouse a
calling orientation and their organization is a deeply personal one. As such, it makes sense that the calling would not map onto regulatory focus theory, with its focus on self-interest and calculated risks, gains, and losses (Higgins, 1998). Indeed, one need only look to the preceding study (Chapter 3) to find a theory more suited to explaining the personal nature of calling at work: construal level theory.

Of course, the different relations between work orientations and regulatory focus theory further complicate our understanding of the tripartite typology of orientations. I am unable to provide empirical evidence that could map all three work orientations onto one dimension or a theory involving two underlying dimensions. Further, whereas preceding studies have highlighted a clear relationship between the calling and job orientation (Ranganathan, 2013; Wrzesniewski et al., 1997; Chapter 3 of this dissertation), suggesting that the career orientation is the one that stands apart from the other two, in this study, it is the job and career orientation that overlap on two dimensions, leaving calling out. This finding offers a surprising suggestion. To date, the calling orientation has been in favor as the most relevant of the three work orientations: it has received the vast majority of academic interest including multiple review pieces (Elangovan et al., 2010). Perhaps, however, it is its more unassuming counterpart, the job orientation, that can offer a more comprehensive insight into an individual’s relationship to and cognitive framing of their work. Not only has the job orientation consistently produced significant results across studies, it may also represent the most comprehensive single score. By surveying only an individuals’ job orientation, one could ascertain whether they perceive a personal or transactional relationship to their workplace as well as whether the transactional relationship is associated with a focus on gains or losses – something not possible with only the calling or the career orientation. This suggests that whatever combination of the three
orientations future researchers consider contrasting, the job orientation might need to be the first choice for inclusion.

Further, the relationship between the career orientation and both regulatory foci supports but also complicates recent findings by Grant and Wrzesniewski (2010) that individuals can experience regulatory foci simultaneously. On the one hand, by finding a significant positive relationship between career orientation and both regulatory foci, I support their claim that in contrast to traditional assumptions (Brockner & Higgins, 2001; Elliot & Thrash, 2002), gain/loss mindsets must not be mutually exclusive. On the other hand, Grant and Wrzesniewski (2010) found both regulatory foci to be triggered when individuals scored higher on other-orientation, which they defined as the extent to which individuals value and experience concern for the well-being of other people (Meglino & Korsgaard, 2004). At first, this would suggest that it should have been the calling orientation, rather than the career orientation, that should be predictive of both. However, a closer look at Grant and Wrzesniewski’s (2010) operationalizations may reconcile this concern: The authors operationalized other-orientation in multiple ways including prosocial motivation, agreeableness, defined as “the tendency to approach social interactions with a positive attitude” (p. 112), and duty, defined as “or the tendency toward dependability and feelings of responsibility for others” (p. 111) and also considered the other-directed anticipatory emotions of guilt and gratitude. The element that these operationalizations share in common with each other, as well as with the career orientation, is a preoccupation with how others’ will judge one’s actions, but not necessarily the type of selfless concern for others that the authors predicted. By combining the career orientation with their findings then, I propose that a propensity to focus on how others may esteem the self is what triggers individuals to engage in both prevention- and promotion focused thinking. This would further clarify why there was no
relationship between the calling orientation and either focus – because those with the calling orientation hold deeply personal beliefs about work that do not need to be validated by others – and a negative relationship between promotion focus and the job orientation – because those with a job orientation do not seek the approval of others at work but pursue meaningful relationships outside of work.

Beyond contributions to the work orientations literature, this study also offers some valuable insights into relationships that were expected to be readily-supported, foundational hypotheses of this paper. Foremost, I expected to find a clear relationship between construal level and creativity, but I did not find one despite using three separate, established operationalizations of creativity from two different sources. This not only contradicts extant theorizing about how each regulatory focus prevents or promotes behaviors to maintain the status quo or bring about change (Higgins, 1997; Higgins et al., 1994) but also contradicts other empirical studies that have specifically linked promotion focus to creativity (Friedman & Förster, 2001; Liberman et al., 1999). One explanation for this discrepancy between my findings and past research may be that the relationship between promotion focus and creativity has largely been studied in experimental settings, which may differ from workplace settings on the two notable conditions necessary for creativity: The desire to change the status quo and the willingness to accept risk necessary to do so.

First, the risks are significantly lower in laboratory experiments of creativity in which it is easy to embrace risk-seeking strategies (Crowe & Higgins, 1997; Friedman & Förster, 2001; Higgins, 1997) because the potential gain in rewards far outweighs the worst potential outcome of not earning a bonus reward. In the workplace, where creativity can be classified as a form of organizational deviance (Vadera et al., 2013), detrimental consequences can be severe and even
include job loss. It is likely then, that a promotion focus at work might be channeled into less risky behavioral outlets such as going above and beyond prescribed obligations via organizational citizenship behavior.

Second, I have classified promotion focus at work as a fairly stable trait, rather than a temporary state. This semi-permanent experience of promotion focus might be experienced less intensely or might be less energizing than what participants experience in a temporary laboratory setting. As such, it might not be enough to push individuals to overcome their complacency with the status quo (Crowe & Higgins, 1997; Jain et al., 2007). Again then, individuals might be likely to express their promotion focus through activities that don’t actively change the organizational status quo (such as organizational citizenship behavior), not because they are the safer choice, but because it is the more obvious one.

Finally, as I noted at the beginning of this discussion, this study was inspired by the frequent proclamation among those with a calling orientation, including those participants in the first study of this dissertation (Chapter 2), that they wish to make a difference in the world. I was surprised then to find that calling was associated with only self-rated radical creativity but not with self-rated incremental creativity or, more importantly, with the more objective measure: supervisor-rated creativity. A cynical interpretation of this might be that the aspiration to make a significant or ‘radical’ difference in the world is more likely than the actual execution. Indeed, this very much supports the findings of my interview study (Chapter 2) that but for a few called individuals on the practice path, the majority will find themselves frustrated by their inability to have any real impact at work and instead spend their days perfecting prescribed tasks. Given, however, that for the entire study sample I found no significant correlation between self-rated and supervisor-rated creativity, a more likely explanation is that employees and supervisors’
disagree on what constitutes creative behavior. It might be that what employees consider radically creative behavior might not be recognized by supervisors as relevant workplace behavior at all. Alternatively, employees might hide their radical activities in order to avoid being labeled as a deviant (Vadera et al., 2013). Given that most studies collect only self- or supervisor-ratings of creativity, with conventional recommendations advocating for supervisor-ratings (George & Zhou, 2002; Oldham & Cummings, 1996; Scott & Bruce, 1994; Zhou & George, 2001), that suggests that the literature might not be capturing interesting behaviors apparent only to the employee, or interesting discrepancies between employee and supervisor-perceptions.

4.3.1 Limitations and future directions

The findings of this study should be considered in light of several important limitations. First, potentially participating organizations were informed of the purpose of this study to study creativity and were therefore more likely to support creativity among employees. This restricts the variance in responses as can indeed be seen by the fairly high average self- and other-ratings of creativity, and thereby making it statistically harder to observe the potential relationship. It is possible that in a more diverse sample with greater variance, a relationship between regulatory foci and creativity might have been established.

Moreover, comparison of employees who were and were not rated by their supervisors indicated that supervisors were less likely to rate older employees or women. This suggests that findings using supervisor ratings of creativity may not be as applicable to younger or female employees. In reviewing self-ratings of those included in the final sample to the potential sample, however, I found no significant differences on self-rated measures of the independent variables, mediators, or dependent variables. Thus, the relationship outlined in the self-rated model would
likely have generalized over the entire potential sample. Thus, the only relationships that could have been potentially swayed by the inclusion of the entire potential sample would have been the direct effects of work orientations and of regulatory foci on creativity.

There were also several issues with my operationalizations. Though I exceed the n = 200 minimum suggested for SEM research (Hoelter, 1983), I did not collect enough clusters at level three (the organizational level) to allow for three-level analysis and instead had to rely on the sandwich method which accounts for non-independence but does not specify the level at which non-independence occurs. Thus, I could not draw any conclusions about the impact of organizational culture which, as I outline below, might be a potential moderator for the relationship between regulatory foci and creativity. More disconcerting was the fact that both the model using supervisor-ratings or creativity, nor the model using self-ratings of creativity achieved only good absolute fit indices, but not comparative fit indices. Though I had every intention of testing exactly the model proposed during this dissertation defense, this does suggest that another model may be a more appropriate fit and that further exploration with other measures of the mediator and dependent variable (beyond the scope of this dissertation) might be fruitful.

Beyond such limitations, this study does propose a number of exciting avenues for future research. I would suggest exploring potential moderators that might need to be present to find a significant relationship between regulatory foci and creativity to occur. In the discussion, I have identified two such conditions: 1) individuals’ recognition that there is a need for the status quo to change and 2) individuals’ willingness to engage in risk-taking behavior. The former could be captured by individual differences such as satisfaction with the workplace while the latter could be captured via organizational climate factors such as psychological safety or individual
differences such as risk-seeking propensity. The lack of relationship between regulatory focus theory and creativity also opens the door to examining other outcomes that could be linked to work orientations via regulatory focus. Reviewing recent studies on regulatory foci suggest that these might include entrepreneurial tendencies (Brockner, Higgins, & Low, 2004) – a literature previously linked to work orientations (Dempsey & Sanders, 2010) –, leadership processes (Kark & Van Dijk, 2007), and organizational citizenship behavior (Dewett & Denisi, 2007). Finally, as previously outlined, this study should serve as a reminder that the job and career orientation are interesting in their own right and not only in contrast to the calling orientation. Both appear to promote different relationships to the workplace that share common transactional, pragmatic or calculated elements. As such a natural extension of the two might be to explore how they impact employees decision-making or resource-allocation at work.

4.3.2 Practical implications

The preceding study offers managers important insights in the preferences of employees with a job and career orientation. Both the job and career orientation were positively related to prevention focus. This suggests that both groups are likely to frame situations as ripe with the potential for loss, may exhibit a “better safe than sorry” attitude, may prefer stable workplace conditions, and are likely to appreciate explicit explanations of their duties and obligations (Higgins et al., 1994). Human resources policies that fit such an prevention focus, for example piece-rate wages, are likely to be welcome by these employees. Indeed, those with a job orientation, who hold an exclusive prevention focus may be so inclined to play it safe (Kark & Van Dijk, 2007) that they prefer self-handicapping (Hendrix & Hirt, 2009) over risking personal exposure. This might suggest that they might make excellent choices to place on occupational safety boards or to serve as compliance officers.
In contrast, the career orientation also had a positive relationship to promotion focus. As we know, employees with such a focus do best on tasks that require elaboration (Zhu & Meyers-Levy, 2007) or “expanding the pie” (Galinsky et al., 2005) and may engage in in exploratory risk-seeking behavior (Crowe & Higgins, 1997). Providing these employees with opportunities to maximize their gains (e.g. overtime opportunities, intra-departmental competitions, stock options) may be an essential tool to keeping them motivated and committed to their present workplace.

It is always risky to draw conclusions from the absence of significant relationships. Nonetheless, employers may at least speculate about the implications that the calling orientation was not significantly associated with either regulatory focus. While these null findings offer no insights into the relationship that those with a calling do have to their organization, they do at least suggest that the relationship is never of a strictly transactional nature. In short, individuals with a calling orientation are unlikely to think of the workplace in terms of potential gains or losses and this is something employers might want to be aware of. It suggests that employing such individuals might entail more complexity than the strict transactional contract possible with those with a job or career orientation. Indeed, if employers are looking to maintain an arm-length economic relationship with their employees, they might wish to avoid such called employees in favor of those with a job or career orientation.

4.3.3 Conclusion

The preceding study of creativity was initially inspired by hearing those with a calling orientation espouse a strong desire to make a difference. Surprisingly then, the primary insights garnered from this study speak to the two other work orientations and the explanatory mechanism sought to link calling to creativity. I find that only the job and career orientation,
likely because of their transactional view of the workplace, map onto both regulatory foci but that the two differ in the extent to which individuals associate their work with a promotion focus. Further, I highlight that at least in this sample, a promotion focus did not automatically predict creative action and that other conditions may need to be fulfilled for this to be the case. The mixed results of this study raise a number of significant questions about the study of work orientations, regulatory foci and creativity that I hope will inspire further research.
### Table 2.1: Participant demographics

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<th>Education</th>
<th>Tenure (years)</th>
<th>Left?</th>
<th>Occupation at time of interview*</th>
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<td>Own physical and emotional deterioration</td>
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Table 2.3: Three calling paths by phase

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<td><strong>Identity-oriented</strong></td>
<td><strong>Contribution-oriented</strong></td>
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<td></td>
<td>To make a difference in animals’ lives</td>
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<td><strong>Initial account of self</strong></td>
<td>Have passion and a unique gift for animals</td>
<td>Have passion for animals and valuable skills for shelter</td>
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<tr>
<td><strong>Challenges</strong></td>
<td>Difficult working conditions. Lack of training and support. Callous clients. Moral injustices</td>
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<tr>
<td><strong>Emotional response</strong></td>
<td>Sorrow. Frustration.</td>
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<tr>
<td></td>
<td>Intense anger</td>
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<tr>
<td><strong>Enacted sensemaking</strong></td>
<td><em>Put in extra effort. Work overtime. Bring work home</em></td>
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<tr>
<td></td>
<td>Voice concerns. Promote new projects/ideas. Experiment with tasks/departments</td>
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<tr>
<td></td>
<td>- Experiment with ways of relating to coworkers</td>
<td>- Experiment with promotions and leadership</td>
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<tr>
<td></td>
<td>- Refuse tasks</td>
<td>- Ask questions</td>
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<tr>
<td><strong>Subsequent account of purpose</strong></td>
<td>Creating happy endings in animal welfare</td>
<td>Leading change in the shelter</td>
</tr>
<tr>
<td><strong>Subsequent account of self</strong></td>
<td>Have passion and unique gift for animals</td>
<td>Have passion for animals and valuable skills for shelter</td>
</tr>
</tbody>
</table>

**Phase 2: Immersing**

<p>| Challenges | Poor management. Toxic coworker dynamics. Difficult external conditions | | |
| <strong>Emotional response</strong> | Many other negative emotions. Numbing, containing and concealing these emotions | | |
| | Disappointment | Frustration | Hope about future |
| <strong>Enacted sensemaking</strong> | <em>Escalate working from home/overtime &amp; fostering</em> | | |
| | - Seek out “worst” tasks | - Seek out small victories | - Step into high impact tasks |
| | - Keep quiet and focus on own work | - Stop trying to engender change | - Promote new projects/idea |
| | - Selectively support close allies | - Support others | - Work with, teach, and involve others |
| <strong>Account of purpose</strong> | Lessening the pain of suffering animals | Achieving small wins within shelter constraints | Helping more animals and coworkers |</p>
<table>
<thead>
<tr>
<th>Identity-oriented</th>
<th>Contribution-oriented</th>
<th>Practice-oriented</th>
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<td><strong>Powerless</strong></td>
<td><strong>Empowered</strong></td>
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<tr>
<td>Account of self</td>
<td>Have unique capacity to carry burden of shelter work</td>
<td>Responsible and dedicated</td>
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<td><strong>Phase 3: Resolving</strong></td>
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<tr>
<td>Challenges</td>
<td>Others bring attention to personal deterioration</td>
<td>Accumulating awareness of shelter deterioration and personal toll</td>
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<tr>
<td>Emotional response</td>
<td>Breaking down and burning out</td>
<td>Feeling defeated and burning out</td>
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<td><strong>Anxious</strong></td>
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<tr>
<td>Enacted sensemaking</td>
<td>Leave shelter</td>
<td>Consider outside opportunities</td>
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<tr>
<td>- Actively reflect on experience in shelter and treatment by others</td>
<td>- Actively reflect on experience in the shelter and lack of impact</td>
<td>- Discuss with higher-ups</td>
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<td>- Notice and interpret growing health and mental health problems</td>
<td>- Notice and interpret relative lack of progress in having positive impact at shelter</td>
<td>- Propose activities that have broader impact</td>
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<td>Working for animals</td>
<td>Making as big a contribution as possible to social causes</td>
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<td><strong>Account of self</strong></td>
<td>Committed to animal welfare but unable to express this in toxic shelter environment</td>
<td>Want to make a difference but unable to have an impact in stagnating animal shelters</td>
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### Table 3.1: Descriptive statistics and correlations

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*p < .10 *p < .05 **p < .01

### Table 3.2: Latent factor correlations in the measurement model

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*p < .10 *p < .05 **p < .01
### Table 3.3: Factor loadings in the measurement model

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### Table 3.4: Fit indices for all models

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<th>CFI</th>
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<td>.90</td>
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<td>.92</td>
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<td>.06</td>
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Table 4.1: Descriptive statistics and correlations for all variables

|                      | M   | SD  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| **Self-Ratings**     |     |     |      |      |      |      |      |      |      |      |      |      |      |
| 1. Gender            | 0.65| 0.48| 1.00 |      |      |      |      |      |      |      |      |      |      |
| 2. Age (years)       | 39.10| 11.04| .16* | 1.00 |      |      |      |      |      |      |      |      |      |
| 3. Tenure (months)   | 87.33| 82.30| -.04| -.60**| 1.00 |      |      |      |      |      |      |      |      |
| 4. Job               | 3.50| 0.91| -.02| -.04| .04  | 1.00 |      |      |      |      |      |      |      |
| 5. Career            | 3.17| 0.92| .10  | .51**| -.40**| .04  | 1.00 |      |      |      |      |      |      |
| 6. Calling           | 3.66| 0.67| .21**| 0.01| 0.01| -.31**| 0.08| 1.00 |      |      |      |      |      |
| 7. Prevention focus  | 3.91| 0.49| -.11| .19**| -.09| .15*| .28**| .16*| 1.00 |      |      |      |      |
| 8. Promotion focus   | 3.41| 0.61| -.01| .39**| -.26**| -.14*| .54**| .24**| .39**| 1.00 |      |      |      |
| 9. Radical Creativity| 3.47| 0.67| 0.09| -.03| -.11| -.12| 0.07| .22**| 0.10| .32**| 1.00 |      |      |
| 10. Incremental Creativity| 3.92| 0.50| 0.04| .16*| -.18**| -.05| 0.11| .15*| .24**| .32**| .44**| 1.00 |      |
| **Supervisor-Ratings** |     |     |      |      |      |      |      |      |      |      |      |      |      |
| 11. Creativity       | 3.10| 0.95| .20**| 0.10| -.14*| -.06| .14*| .04  | -.03| 0.11| 0.12| 0.09| 1.00 |
| **Org. Representative-Ratings** |     |     |      |      |      |      |      |      |      |      |      |      |      |
| 12. Org. Creativity Support| 3.83| 0.54| -.02| 0.03| -.01| 0.00| 0.01| -.08| 0.10| 0.08| 0.04| -.03| .14* |

*p < .10  *p < .05  **p < .01

Table 4.2: Latent factor correlations in the measurement model (supervisor-ratings)

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*p < .10  *p < .05  **p < .01
Table 4.3: Factor loadings on the measurement model (supervisor-ratings)

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### Table 4.4: Fit indices for all models (supervisor-ratings)

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### Table 4.5: Factor loadings on the measurement model (self-ratings)

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<td></td>
<td></td>
</tr>
<tr>
<td>JOB1</td>
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**Table 4.6: Latent factor correlations in the measurement model (self-ratings)**

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\( ^* p<.10 \quad ^{**} p<.05 \quad ^{***} p<.01 \)

**Table 4.7: Fit indices for all models (self-ratings)**

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Figures

Figure 2.1: Theoretical model of the calling experience
Figure 3.1: Initially proposed model

Figure 3.2: Non-mediated latent model

*p < .10  *p < .05  **p < .01  —Solid line indicates significant relationships
Figure 4.1: Initially proposed model

![Diagram of initially proposed model with nodes for Work Orientation and Regulatory Focus]

Figure 4.2: Non-mediated latent model (supervisor-ratings)

![Diagram of non-mediated latent model with nodes for Job, Career, Calling, Promotion Focus, Prevention Focus, Creative Behavior, and additional covariates with p-values indicated]

*p < .10  *p < .05  **p < .01 — Solid line indicates significant relationships
Figure 4.3: Non-mediated latent model (self-ratings)

*p < .10  *p < .05  **p < .01  — Solid line indicates significant relationships
References


Cullen, J. G. unpublished manuscript. *Beliefs about work and beliefs about groupwork: Exploring the relationship*. http://eprints.nuim.ie/4361/.


Garson, B. 1975. *All the livelong day: The meaning and demeaning of routine work*. Doubleday Garden City, NY.


Appendices

Appendix A: Chapter 2 interview protocol

1. **How did you come to work at the animal shelter?**
   - Ask about relationship to animals before work entry
   - Ask about how came to work at shelter
   - Learn about transition into working full-time

2. **Tenure at the animal shelter**
   - Start broad: can you walk me through your tenure at the SPCA.
   - Description of typical workday (if possible)?
   - Talk to me about your coworkers? Management? Customers?
   - Did work influence other areas of life?
   - What were your favourite/ least favourite aspects (of each job)?

3. **Departure (if applicable)?**
   - How did you leave the shelter?
   - What did you do after leaving the shelter?
   - Are you still involved with the shelter?
   - Are you still involved with other aspects of animal welfare (coworkers, animals, volunteering)?
   - Where do you see yourself in five/ten years?
   - Do you ever look back on the experience? If so, looking back, how do you feel about your experience?

4. **Meaningful work?**
   - Do you see animal welfare differently from when you started? How?
   - Some have identified animal welfare as deeply meaningful or as a calling, do/did you? (Do not define terms for them).

5. **Demographics**
   - Tenure? (how long did you work there)
   - Age at start of work at SPCA?
   - Did you volunteer pre-entry?
   - What did you do before the SPCA? Pre-entry work?
   - Level of education at entry? Today?
   - Time since departure (if applicable)

Is there anything else we did not talk about, but should have? Is there something else you would want me to understand about your experience?
Appendix B: Chapter 3 measures

Work Orientation Scale (Gandal et al., 2005)

Career
1. I view my work primarily as a stepping stone.
2. I don’t think success is measured by promotion.
3. I expect to be in a higher position in five years.

Job
1. My primary reason for working is financial: to support my family and lifestyle.
2. I should retire if I could.
3. I have no choice but to work.

Calling
1. I would work even if wouldn’t get paid.
2. I want to do the same work in future.
3. My work is important.
4. My work makes the world a better place.
5. Would choose the same profession again if I had the opportunity.

Work Involvement (Kanungo, 1982)
1. The most important things that happen to me involve the SPCA.
2. To me, my role at the SPCA is only a small part of who I am.
3. I am very much involved personally in the SPCA.
4. I live, eat and breathe the SPCA.
5. Most of my interests are centered around the SPCA.
6. Most of my personal life goals are SPCA-oriented.
7. I have very strong ties with the SPCA which would be difficult to break.

Adapted State Behavioural Identification Form
1. Making a list: A) Getting Organized or B) Writing things down
2. Reading: A) Following lines of print or B) Gaining knowledge
3. Washing towels: A) Removing odors from towels or B) Putting clothes in the machine
4. Holding a cat: A) Providing comfort or B) Picking up a cat
5. Measuring a room: A) Getting ready to renovate or B) Using a measuring tape
6. Cleaning the shelter: A) Showing the society's cleanliness or B) Mopping the floor
7. Painting a room: A) Applying brush strokes or B) Making the room look fresh
8. Receiving donations: A) Maintaining a budget for the shelter or B) Receiving a cheque
9. Feeding the animals: A) Filling a food bowl or B) Making the animals feel good
10. Locking the door: A) Putting a key in the lock or B) Securing the building
11. Participating in this survey: A) Influencing SPCA policy or B) Answering questions
12. Filling out an intake form: A) Influencing the animal's future or B) Marking up a sheet
13. Brushing an animal: A) Preventing fur tangles or B) Moving a brush around
14. Taking a test: A) Answering questions or B) Showing one's knowledge
15. Greeting a visitor: A) Saying hello or B) Showing customer service
16. Eating lunch: A) Getting nutrition or B) Chewing and swallowing
17. Growing a branch: A) Proposing new ideas or B) Improving the society's influence
18. Getting a dog a dental: A) Protecting their health or B) Going to the vet
19. Talking to a child: A) Preparing the next generation or B) Using simple words
20. Calling a colleague: A) Picking up the phone or B) Reaching out

**Goal Focus (Sawyer, 1992)**
1. How my work contributes to the broad mission of the SPCA.
2. My general duties and responsibilities.
3. The broad goals and objectives of my job.
4. The expected results of my work.
5. Whether aspects of my work will lead to a positive evaluation.

**Work Mindfulness (Van Dam et al., 2010)**
1. It seems I am “running no automatic”, without much awareness of what I’m doing.
2. I rush through activities without being really attentive to them.
3. I get so focused on the goal I want to achieve that I lose touch with what I’m doing right now to get there.
4. I do jobs or tasks automatically, without being aware of what I’m doing.
5. I find myself doing things without paying attention.

**Coworker Kindness (Raes et al., 2011)- Self and coworker rating**
1. If I[he/she] see someone at work going through a difficult time, I[he/she] try to act caring toward that person.
2. I[he/she] like to be there for other employees in times of difficulty.
3. My [his/her] heart goes out to other employees who are unhappy.
4. When other employees feel sadness, I [he/she] always try to comfort them.

**Helping coworkers (Van Dyne & LePine, 1998)- Self and coworker rating**
1. I [he/she] help orient new employees.
2. I [he/she] help others who have been absent and returned to work.
3. I [he/she] help others who had heavy workloads.
4. I [he/she] willingly help others who had work-related problems.
5. I [he/she] am ready to lend a helping hand to other employees around me.

**Trait Behavioural Identification Form (Vallacher & Wegner, 1989)**
1. Washing clothes: A) Removing odors from clothes or B) Putting clothes in the machine
2. Painting a room: A) Applying brush strokes or B) Making the room look fresh
3. Joining the Army: A) Helping the Nation’s defense or B) signing up
4. Paying the rent: A) Maintaining a place to live or B) Writing a check
5. Caring for houseplants: A) Watering plants or B) Making the room look nice
6. Voting: A) Influencing the election or B) Marking a ballot
7. Resisting temptation: A) Saying "no" or B) Showing moral courage
8. Eating: A) Getting nutrition or B) Chewing and swallowing
9. Having a cavity filled: A) Protecting your teeth or B) Going to the dentist
   Talking to a child: A) Teaching a child something or B) Using simple words
Appendix C: Chapter 4 measures

Work Orientation Scale (Gandal et al., 2005)

Career
4. I view my work primarily as a stepping stone.
5. I don’t think success is measured by promotion.
6. I expect to be in a higher position in five years.

Job
4. My primary reason for working is financial: to support my family and lifestyle.
5. I should retire if could.
6. I have no choice but to work.

Calling
6. I would work even if wouldn’t get paid.
7. I want to do the same work in future.
8. My work is important.
9. My work makes the world a better place.
10. Would choose the same profession again if I had the opportunity.

Regulatory Focus (Neubert et al., 2008)

Prevention Focus
1. I concentrate on completing my work tasks correctly to increase my job security.
2. At work I focus my attention on completing my assigned responsibilities.
3. Fulfilling my work duties is very important to me.
4. At work, I strive to live up to the responsibilities and duties given to me by others.
5. At work, I am often focused on accomplishing tasks that will support my need for security.
6. I do everything I can to avoid loss at work.
7. Job security is an important factor for me in any job search.
8. I focus my attention on avoiding failure at work.
9. I am very careful to avoid exposing myself to potential losses at work.

Promotion Focus
1. I take chances at work to maximize my goals for advancement.
2. I tend to take risks at work in order to achieve success.
3. If I had an opportunity to participate on a high-risk, high-reward project I would definitely take it.
4. If my job did not allow for advancement, I would likely find a new one.
5. A chance to grow is an important factor for me when looking for a job.
6. I focus on accomplishing job tasks that will further my advancement.
7. I spend a great deal of time envisioning how to fulfill my aspirations.
8. My work priorities are impacted by a clear picture of what I aspire to be.
9. At work, I am motivated by my hopes and aspirations.

Creativity (Madjar et al., 2011) - self-rating

Radical creativity
1. I am a good source of highly creative ideas.
2. I demonstrate originality in my work.
3. I suggest radically new ways for doing my work.

*Incremental creativity*

1. At work, I use previously existing ideas or procedures in a new way.
2. I am very good at adapting already existing ideas, procedures or products.
3. I can easily modify previously existing work processes to suit current needs.

*Creativity (Farmer et al., 2003)- supervisor-rating*

1. Tries new ideas or methods first.
2. Seeks new ideas and ways to solve problems.
3. Generates ground-breaking ideas related to the field.
4. Is a good role model for creativity.

*Support for creativity (Scott & Bruce, 1994)- organizational representative-rating*

1. Creativity is encouraged in this company.
2. Our ability to function creatively is respected by leadership.
3. The reward system here encourages innovation.
4. This company publicly recognizes those who are innovative.